

## **Guitar Player, June 1995:** THD Hot Plates Power Attenuators, by Terry Buddingh.

Rich harmonic density, extreme dynamic sensitivity, smooth creamy sustain—these are some of the characteristics that output-tube distortion and output-transformer saturation contribute to an amp's sound. Unfortunately, there's only one way to get an amp to hand over its tonal treasure—play it loud. In some environments, such as a home studio or small club, this simply isn't possible. What's needed is something that lets you really cook the output stage while reducing the level driving your speakers.

The THD Hot Plates (\$329 each; \$379 for the 2.7 $\Omega$  model) are power attenuators designed to perform just this function. Offered in 2 $\Omega$ , 2.7 $\Omega$ , 4 $\Omega$ , 8 $\Omega$ , and 16 $\Omega$  impedances, each Hot Plate has its own corresponding color and is designed to be used with tube amps not exceeding 185 watts RMS. Connected between your amp and speaker, the Hot Plate provides attenuation of 0dB to -16dB, in 4dB increments, and continuously variable attenuation from -16dB to zero output. Each is also equipped with a dummy load that permits operation without a speaker.

The THD's front panel sports bright and deep switches that are tailored to become more effective as attenuation is increased. This allows you to compensate for your ear's natural tendency to perceive less treble and bass as volume is reduced. A pair of lightbulbs visible through the front panel glow brighter as the device absorbs more power. They provide a means of monitoring the Hot Plate's operation and also reduce hiss and hum when the amp is idling by diverting some of the output through the bulbs. An input jack, two speaker outs, and an unbalanced 1/4" line-out jack are located on the back panel. There's also a knob that adjusts the line-out level from -40dB(V) to +10dB(V).

The Hot Plate's multi-finned, anodized-aluminum chassis houses an internal cooling fan powered by amplifier output. (The 2 $\Omega$  version does not have a fan since only 50-watt tube guitar amps use this output impedance.) Specially made resistors inlaid into the chassis/heat sink are permanently attached with thermally conductive ceramic cement. A large inductor, numerous high-quality capacitors, fan, load resistors, and pots, jacks, and switches are soldered to a glass-epoxy circuit board. Built to take mucho abuse, Hot Plates are the only power attenuators fine-tuned for each amplifier and speaker impedance.

For listening tests, we used various Strats and Les Pauls driving a '71 Marshall 100-watt Super Lead head and 4x12 Marshall cabinet, a '66 Marshall Plexi 50-watt head, and a '65 Fender Twin Reverb. The reactive nature of the Hot Plate gives it a smoother, more refined quality than simple resistive

attenuators can't match. Our tests also revealed the Hot Plate's ability to maintain the dynamic feel of a tube amp. The deep switch is an especially valuable feature; it really preserves fullness, body, and depth as you increase the attenuation. The -4dB and -8dB settings were especially impressive at reducing volume without sacrificing tone.

The Hot Plate also allows you to use your favorite amp like a giant stompbox. Running a dimed-out 100-watt Marshall head into an 8Ω Hot Plate set on load, we routed its line-out signal into a loop of a Digital Music GCX selector. Using Digital's Ground Control MIDI foot controller, we could send this searing low-level signal by itself, or mixed with other effects into the input of our Twin Reverb. An extremely wicked-sounding tube-overdrive stage indeed. Yow!

The THD Hot Plates are great-sounding, elegantly designed, and versatile tone tools. If you're a tube amp player who's ever wrestled with the problem of being too loud, we highly recommend THD's new power attenuators.