# Summit Audio TD-100 Instrument Preamplifier

by David Christopher, 06.01.2002

Summit Audio has spent the better part of 20 years building highly respected tube equipment for studios in need of both high-quality sound and high reliability. More recently, Summit has collaborated with Rupert Neve on the high-end Element 78 series.

Summit recently introduced the tube-based TD-100 instrument preamp. The TD-100 is designed to give your instruments the familiar warmth of Summit vacuum tube technology at an affordable entry point. Which instruments in particular? Well, that is the joy of discovery. The results of my research suggest that you might want to continue experimenting for yourself.

#### **Features**

The TD-100, which lists for \$495, is a model of simplicity in that there are only two knobs - loading (for adjusting the input impedance to the instrument you are using) and output gain.

In addition to the aforementioned knobs, the front panel also features ground lift, polarity and on/off switches, as well as a 1/4-inch input jack and a 1/4-inch direct output jack, which bypasses the preamp.

The back panel features balanced 1/4-inch TRS and XLR outputs, plus a headphone out which allows the TD-100 to be used as a practice amp, or the listener to hear the TD-100's sound uncolored by any further signal chain.

The input drives a 12AX7A/ECC83 vacuum tube, while the output utilizes a discrete transistor circuit. The half-rack TD-100 is built to Summit's high standard for rugged design, and includes an internal power supply and IEC A/C cable.

### In Use

I first tested the TD-100's performance on bass guitar in my home studio. I pulled out my trusty old Music Man, hooked up a set of headphones directly to the unit, adjusted the input impedance and listened



. The bass sounded warm and full and very useable for tracking.

Later, at another studio, I took out a junk Bradley bass that was hidden away in the closet. I had vivid memories of the lack of tone from this instrument and I decided to see if the Summit could make it sound better. It worked; after some additional experimenting with the impedance knob, I found a setting that spoke the misunderstood Bradley's language. All of a sudden, this downtrodden piece stored in the hell of disused instruments produced a full, round and very usable sound. But it was back to the closet for Bradley, since the TD-100 was going with me.

Next, I tested the TD-100 on a variety of guitars. Most guitarists will tell you that a "direct only" recording of a guitar - with no amp or microphone in sight - is far from ideal, though the Summit held a few surprises.

On one recording I was able to get a good rhythm guitar track with a Stratocaster using its neck pickup and running it direct to the TD-100. Think "All Star" by Smash Mouth. On another track, adjusting the input impedance allowed me to get a more Stevie Ray Vaughan-like tone, especially when I cranked the output gain.

The TD-100's only failing as a "direct-only" box occurred while recording a solo utilizing the bridge (treble) pickup. After trying several different guitars, I found this combination to be a bit too bright to be truly useful. The TD-100 is, however, a great tool for cutting dry, direct guitar signals to tape for "re-amping" at a later time. I also successfully used the unit to record an acoustic guitar using a dual mic/direct setup and mixing to taste. The direct sound from the TD-100 added an interesting flavor to the microphone sound and helped to solidify the midrange of the guitar track. A healthy combination of both signals made it in the final mix of the project.

## **Summary**

Summit has added a fine piece to its catalog. If you own a studio and need a reason to buy the TD-100, you need look no further than its abilities for bass tracking. It could save you and your customers' time and money finding the proper sound. Add in the preamp's ability to enhance the sound of other instruments and you have a valuable addition to your studio setup.

#### **REVIEW SETUP**

Cakewalk SONAR workstation, M Audio Delta 66 interface; Shure KSM-44 and Oktava MC-102 microphones; Mackie 1604 mixer; TASCAM DA-88 DTRS recorder; AKG K240 headphones; Fender Stratocaster, Hamer Archtop and Takemine guitars; Music Man Cutlass and Bradley basses.