

Danelectro Amplifiers

The Danelectro company, founded by Nathan Daniel and based in Red Bank, New Jersey, has been responsible for producing some of the most interesting guitars and amplifiers. Originally designed to be functional and low in price, they nevertheless manage to be uncommonly innovative and stylish. Surplus or very inexpensive materials were often used to construct instruments far greater than the sum of the parts—a distinction that ranks them among the best industrial designs of their era. Some Danelectro products were available by mail-order catalog from Sears under the Silvertone brand. In short, Nathan Daniel put music in the hands of many a great (but poor or isolated) picker.

In the course of my work as an amplifier serviceman, I have seen quite a few killer pieces. These are certainly in the top ranks.

THE TWIN TWELVE

This amp has a striking appearance. Viewed from the front, the major characteristics are two eccentric speaker holes in the baffle, metallic gold-painted grille cloth that resembles woven string in texture, and the words Danelectro and Twin Twelve embossed in a modernistic golden script. Constructed entirely of paper board, the cabinet is extremely light for an amp of this size. Not the choice for a rainy-day gig! The sound, however, is quite presentable.

Viewed from the rear, note the bizarre diagonal mounting of the electronics. This amp, like many of Danelectro's larger amps, has a dual power section—twin sets of power tubes driving twin output transformers and speakers. I imagine that this was a way for Danelectro to reduce the number of different components manufactured and stocked—the same output trannies could be used for a larger portion of the line. Whatever the motive was, it works just fine. Foot-switchable tremolo and two preamp channels with three inputs





clamshell-style to reveal eight 8" speakers. A very punchy sound indeed! The case can be separated, and four of the speakers are on a long cable to make a wide placement possible. Outfitted with four parallel 6V6s in the output section, this baby develops about 30 watts. This amp came to my shop with two breakout boxes mounted inside the cabinet, for the attachment of slave power amps and additional speakers. The master/slave setup was a

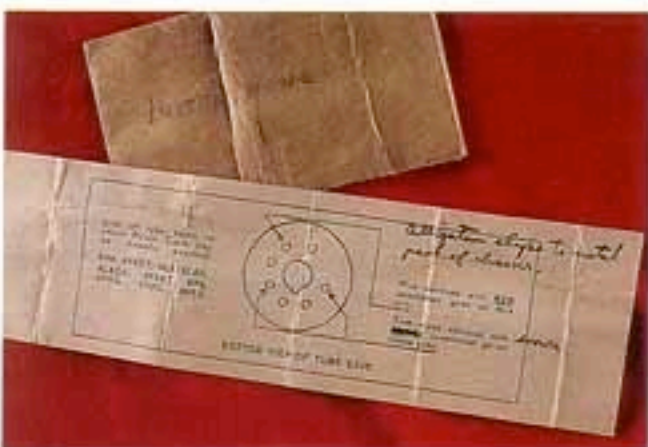
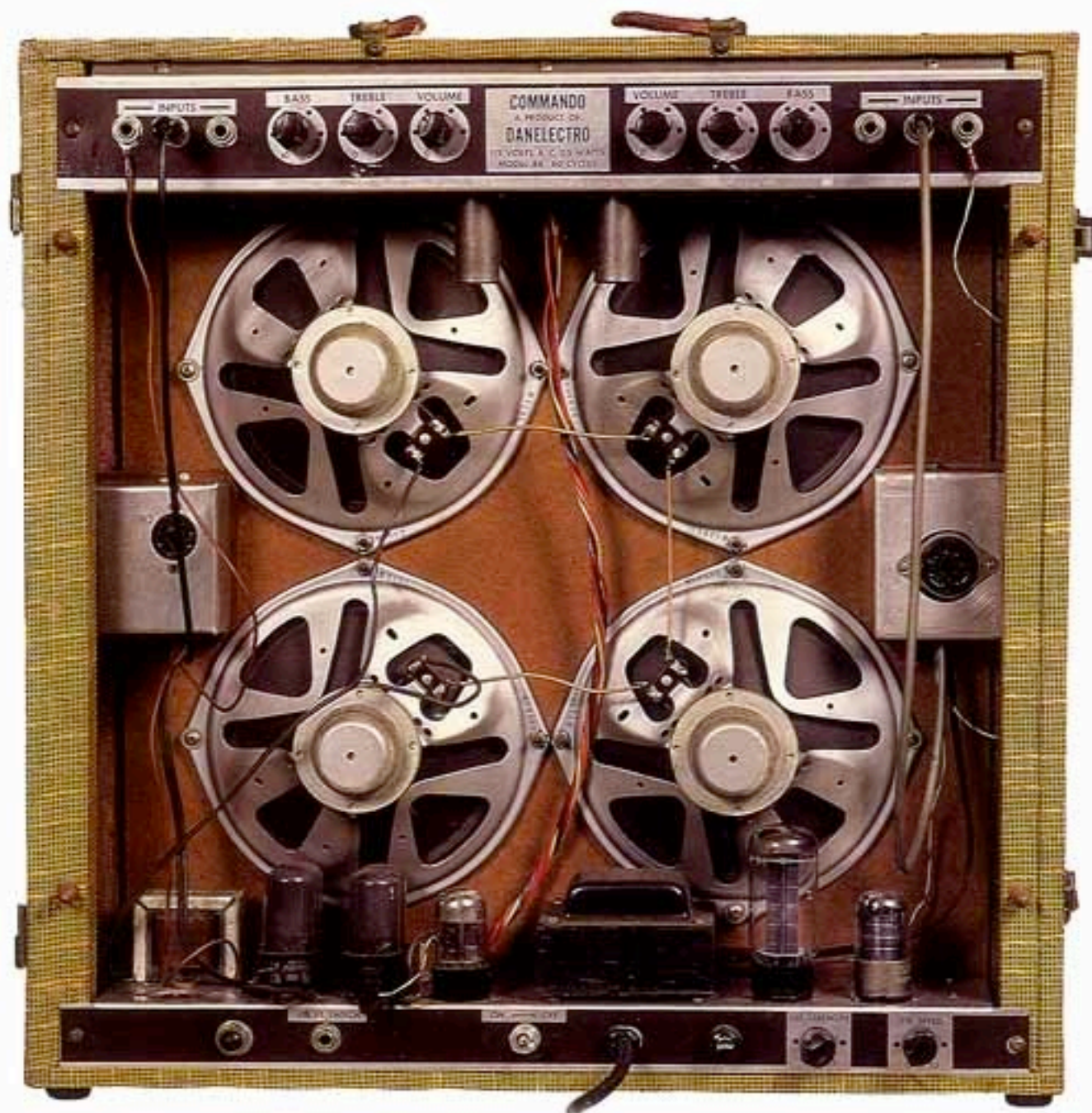
each are also featured. The two channels have separate Volume controls but share a bass and treble control. Most peculiar is a control marked amplification, the earliest example of a factory-installed master volume I have ever seen.

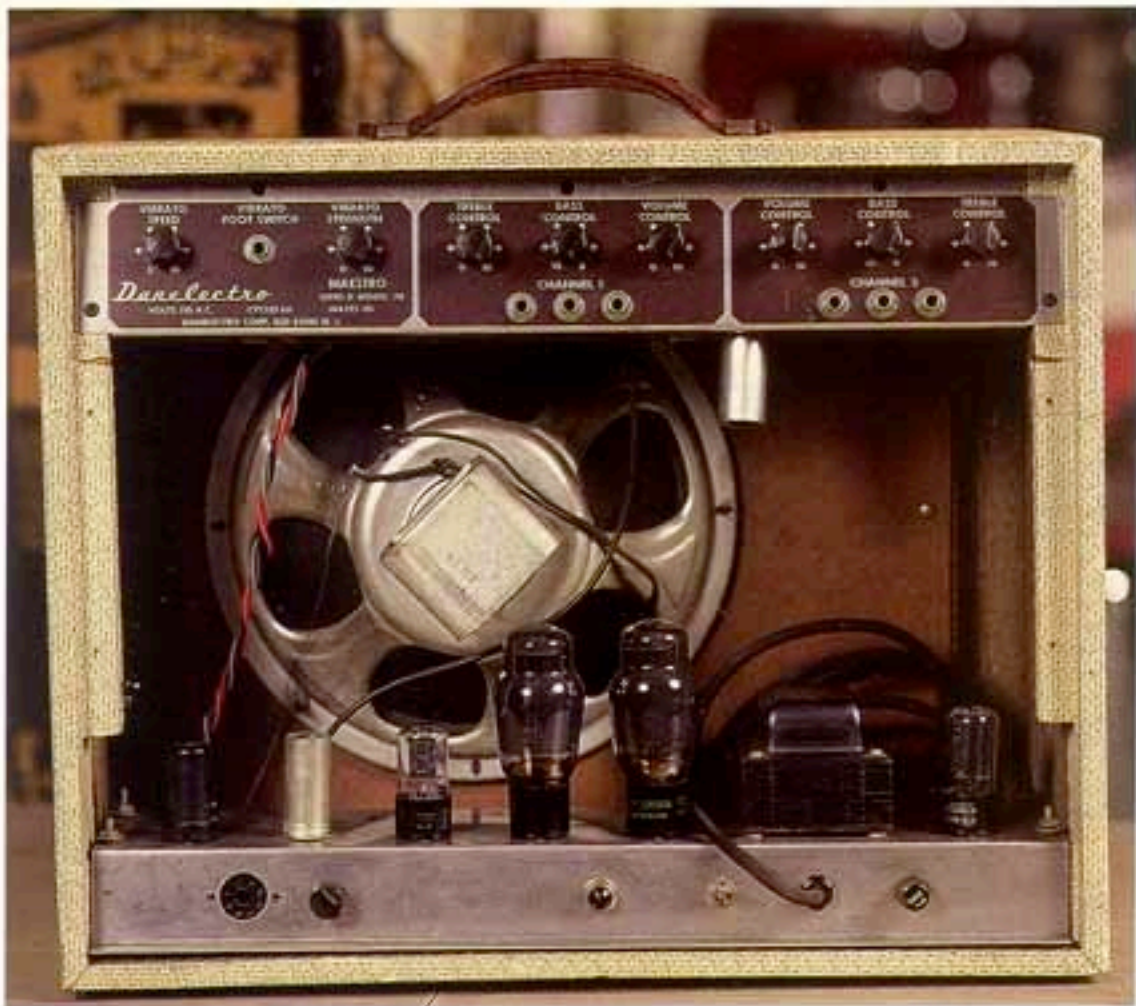
Because of the comparatively high power levels achievable, this was probably intended for gain matching with multiple instruments. Vibrato is also included in this top-of-the-line amplifier.

THE COMMANDO

This one sports the same snazzy gold grille cloth as the Twin Twelve. It opens

unique approach to the problem of achieving high power levels, and was no doubt one of the most powerful rigs available in the mid-1950s. The ubiquitous Vibrato is again seen on this amp.





THE MAESTRO

The Danelectro Maestro Model 78 falls into a category generally called the “hamper” amps, due to the basket-weave type vinyl covering. Many of these venerable models have crossed my workbench—they are somewhat more common than the others discussed here. Again we see the golden grille cloth. A beefy Utah Alnico 12" speaker is fitted. Like the Commando, a split chassis (preamp on one, power section on the other) is employed. The heaviest parts are thereby mounted in the bottom of the case—an excellent design for transport and physical stability over time. This also has the beneficial effect of separating the low-level signals from the transformers and high-



level signals, improving noise performance.

Mounted in the lower chassis we see an octal connector for the purpose of running a slave amp and additional speakers. On this model, this is stock rather than an add-on, as is the case in the Commando. Like the Twin Twelve, this amp is fitted with old-style ST (a.k.a. Coke bottle-shaped) 6L6 power tubes. Other familiar features include three inputs per channel, two separate bass and treble controls that cut/boost in opposite directions of rotation (!) and last, but never least, vibrato.

THE SPECIAL

“Special” is the legend emblazoned in the stylized winged graphic on this little hamper, and special it is. The brick red pseudo-basket weave covering is not a run-of-the-mill item. The speaker is a 12", but has a very small Alnico magnetic structure of a size typically seen on 8" speakers. A single channel with single tone control drives a power section of dual 6V6s, all mounted in a single chassis. This amp, like the Maestro described above, is missing the rear panel that covers the back of the speaker—a defect that does little to diminish its beauty.



These two hampers both have cabinets of Masonite with contoured corner joints of cardboard and glue, all very carefully crafted and pleasing to the eye. Masonite was apparently one of Nathan Daniel's favorite materials, probably because it was cheap

and easy to work with. It has proven to be very stable, and guitars and amps constructed of this material are quite easy to find in spite of age and use. Once again we see vibrato, but this time with a hardwired foot switch instead of a 1/4" female jack.

THE SERVICEMAN'S PERSPECTIVE

Internal components on Danelectro amplifiers were probably the least expensive available at the time of manufacture. I doubt if Mr. Daniel and Co. expected these amps to last as long as they have. The large electrolytic capacitors in the power supply are red Astrons made in the U.S.A., and proudly proclaim that they are "Guaranteed for One Year." In most cases, if the amps are used fairly frequently, they have lasted more like 30 years. The coupling caps vary from amp to amp (probably because of availability), but are usually yellow Astrons, waxed Cornell-Dubiliers or in later amps, turquoise-colored Sangamos imported from Japan. All of these types are either seriously out of spec or completely dogged at this late date.

The resistors are of molded plastic and carbon, and tend to be noisy and physically deteriorated after years of use. The resistors in the power supply are often of insufficient wattage to hold up under the stress of the voltages they are expected to drop. The designs, however, are sonically excellent, and most players instinctively like the sounds these amps produce. My approach in servicing these amps is to rebuild whatever systems require service with parts of the same values but higher quality. The one exception would be dropping resistors in the power supply,

in which I use the original resistance but increase the wattage to standard levels.

EPILOGUE

I hope you have enjoyed this little tour of these remarkable Danelectro amps. The full story of Nathan Daniel and his products and ideas are beyond the scope of this article, but I would like to refer the curious reader to a couple of further sources of information.

Blackie Pagano

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Dano & Silvertone Amps—an Overview,
Vintage Guitar Magazine, Nov. 1995, Vol. 10 No. 2



