Amplifier

**9505 trans•nova Amplifier**

**FEATURES**

**CIRCUITRY**
- All Discrete Circuitry
- JFET Front End
- trans•nova Amplifier Topology
- MOSFET Output Devices
- DIAMOND Driver Stage
- Internal Rail Fuses
- No Fan! Convection Cooled

**CONTROLS & INDICATORS**
- 5.25” Rack Mount (3-rack spaces)
- Stereo/Bridged Mono
- XLR or 1/4” Balanced Inputs
- Gold-Plated RCA Unbalanced Inputs
- Gold-Plated 5-Way Binding Posts
- Power Lamp
- Chassis/Float Ground Switch
- Rack Mount Handles

**WARRANTY**
- 7 Year Warranty

**DESCRIPTION**

The 9505 model sets a new standard of sonic excellence for professional applications. Utilizing Jim Strickland’s JFET input/MOSFET output trans•nova circuitry along with his brilliant DIAMOND driver stage creates the ultimate balanced amplifier.

The TRANSconductance Nodal Voltage Amplifier (patent #4467288) is a simple three-stage design delivering unparalleled speed and accuracy. The Dynamically Invariant Amplification Optimized Nodal Drive combines the linearity of Class A operation with the current headroom of a Class B system, resulting in a significant advancement in the art of power amplifier design. The sonic result of all this unique technology presents a deep, wide sound stage with incredible musical transparency and detail.

Many so-called “balanced” amplifiers are merely conventional unbalanced designs with a balanced-to-unbalanced converter (usually IC op-amp based) preceding the power amplifier. The 9505, however, is a true differential input power amplifier.

Starting with the much acclaimed trans•nova amplifier core, each (+) and (–) port of the input differential stage has been buffered with a high impedance buffer pair. This allows direct signal access to the differential amplifier, without conversion to unbalanced form. Deactivating the balanced mode is accomplished via a rear panel switch that grounds the (–) balanced inputs, effectively converting the amplifier to unbalanced operation.

**MADE IN THE USA**
## Specifications

**P9505**

<table>
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<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Power Rating</strong></td>
<td>250 Watts/channel @ 8Ω, 375 Watts/channel @ 4Ω, 750 Watts bridged/mono @ 8Ω</td>
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<tr>
<td><strong>Total Harmonic Distortion (THD)</strong></td>
<td>&lt;0.2% (20Hz-20kHz)</td>
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<tr>
<td><strong>Signal-to-Noise</strong></td>
<td>100dB “A” Weighted</td>
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<tr>
<td><strong>Full Power Bandwidth</strong></td>
<td>0.15Hz to 300kHz (±0/-3dB)</td>
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<tr>
<td><strong>Slew Rate</strong></td>
<td>150V/µs</td>
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<tr>
<td><strong>CMRR (Common Mode Rejection Ratio)</strong></td>
<td>75dB at 1kHz</td>
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<tr>
<td><strong>Input Impedance</strong></td>
<td>47kΩ per phase balanced</td>
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<tr>
<td><strong>Gain</strong></td>
<td>+29dB</td>
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<tr>
<td><strong>Input Sensitivity Range</strong></td>
<td>800mV (@ 8Ω) per phase balanced, 690mV (@ 4Ω) per phase balanced</td>
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<tr>
<td><strong>Damping Factor</strong></td>
<td>1000 (to 1kHz), 100 (to 10kHz), 20 (to 100kHz)</td>
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<tr>
<td><strong>Power Consumption</strong></td>
<td>160W / 2.0A @ 120VAC (idle power), 370W / 4.2A @ 120VAC (½ power - 8Ω), 840W / 8.8A @ 120VAC (max. power - 8Ω)</td>
</tr>
<tr>
<td><strong>Indicators</strong></td>
<td>Power</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>19”W x 12½”D x 5¾”H (3-rack spaces) (48.3cm x 31.75cm x 13.3cm)</td>
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<tr>
<td><strong>Net Weight</strong></td>
<td>50 lbs. (22.7kg)</td>
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*plus 1” for handles

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## Architect's and Engineer's Specifications

The audio power amplifier shall be a fully balanced, discrete solid state design employing JFET inputs and 16 lateral power MOSFET output devices. It shall be constructed on a 16 gauge steel chassis utilizing convection air cooling.

Each channel shall be rated for a minimum of 250 watts into an 8 ohm load and 375 watts into a 4 ohm load with both channels driven. In bridged mono mode, the amplifier shall produce at least 750 watts into an 8 ohm load. A switch shall be provided for stereo or bridged mono operation and all power ratings shall be measured from 20Hz-20kHz with less than 0.2%THD.

The amplifier's back panel shall provide a switch to select Unbalanced inputs via gold-plated RCA jacks or Balanced inputs via combination XLR and ¼" phone jacks. The back shall also utilize gold-plated 5-way binding posts for output connectors and a switch to isolate or connect the signal ground to the chassis ground. The amplifier shall include a 3-wire grounded AC line cord and a switch to operate the UI power transformer on 120V/60Hz AC mains. An optional transformer for 230V 50-60Hz operation shall be available.

The amplifier's front panel shall incorporate a lighted main power switch and have rack handles. The amplifier shall fit standard 19” EIA rack mounting requirements utilizing 3-rack spaces. The dimensions shall be 19” Wide, 12½” Deep*(plus 1” for handles), 5¾” High (excluding feet), and be finished in black with a net weight of 50 pounds. It shall be a Hafler 9505.

*plus 1” for handles