

## Model 750 5 x 165 Watt Amplifier

Not too many years ago the only audio power amplifiers available to the consumer were two-channel stereo designs. As a result, early home theater enthusiasts needed to buy two stereo amplifiers and one mono amplifier just to power a simple Dolby Pro-Logic® home theater system. As the popularity of home theater grew, many manufacturers began to offer 5 and 6 channel amplifiers based on existing lower-power amplifier designs. These amplifiers worked fine with Dolby Pro-Logic decoders because Pro-Logic decoders “phase steer” their signals, and never demand high power from all channels at the same time.

In terms of amplifier performance however, the new Dolby Digital® and DTS® formats separate the men from the boys. These new digital formats offer 5.1 channels of full-range discrete audio and are not only capable of demanding power from multiple channels at the same time, they frequently do. This means that using Dolby Digital® and DTS® formats requires a power amplifier capable of high power with ALL channels driven. Unfortunately, most affordable multi-channel amplifiers fail in this respect today.

The Outlaw design team, fully aware of the deficiencies of the current crop of amplifiers, went to one of the industry's premier amplifier manufacturers to design the Model 750. We asked him to create an amplifier that had no limitations in the reproduction of movie sound tracks, or in any of the new digital audio formats. Our goal was to produce an investment-grade component, one that we would be proud

to own ourselves. In addition to meeting our performance standards, this amplifier had to be affordable, and highly reliable.

From these design criteria came Outlaw Audio's first product, the Model 750 five-channel power amplifier. From the glass-epoxy, mil-spec circuit boards to the rugged, 13 gauge powder-coated, steel chassis, this unit utilizes the finest components available.

The heart of the Model 750 is a high-current power supply with enough energy to reproduce any dynamic, whether it comes from a soundtrack explosion or a symphony crescendo. We accomplished this through the use of a massive toroidal transformer with ten separate windings, one pair for each channel of the amplifier. In addition, each channel has approximately 20,000 uF of total filter capacitance, provided by computer-grade, premium electrolytic filter capacitors. This guarantees that the Model 750 has ample reserves of peak power regardless of signal demands.



To manage the heat produced by all high-power amplifiers, most manufacturers rely on inexpensive muffin fans to blow air over the output transistors. We feel this is unacceptable, because fans create noise which is clearly audible in a home theater system. In addition, fans suck dirt and dust into the unit which can shorten the product life. Rather than use

inexpensive fans, we chose the more elegant solution of utilizing over-sized heat sinks to dissipate the heat. Each of the five amplifier modules in the Model 750 is built around a huge milled-aluminum heat sink with 396 sq. in. of surface area. This allows the amplifier to stay cool during operation, while remaining absolutely silent.



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At Outlaw Audio, our emphasis is not just cutting-edge performance, but also bullet-proof reliability. The Model 750 is designed down to the component level to give you year-after-year of trouble free service. For example, even when the Model 750 is driven at abnormally high volume levels, or if the speaker terminals are accidentally shorted, an ultra-fast, opto-coupled protection circuit kicks in to shut down the unit for a few seconds. This method is distinguished from conventional amplifiers, not only by its effectiveness, but by its non-intrusive nature. Standard protection circuits merely throttle back an amplifier under fault conditions, resulting in clipped, distorted sound. We wanted to let you know directly if there was a problem rather than disguise it with muddled sound. You then have a chance to make immediate changes to avoid additional problems.

Given the costs of the components that make up the Model 750, and its craftsman-like manufacturing, we would have to price it at close to \$2000 if it were sold through traditional retail outlets. At that price, the Model 750 would still be a value, but the founders Outlaw Audio wanted to make this power-house of an amplifier available to more people. This is why we created the Outlaw brand. It allows us to offer the products directly to consumers via the internet. We bypass the multiple layers of margin that result in high prices when they are sold through conventional retail outlets. Creating an internet-only brand saves Outlaw Audio the substantial costs of promotional and distribution costs, and the difference is passed on to you.

When you buy from Outlaw Audio you not only get a great product, you might say that you make out like a bandit !

#### Toroidal Transformer

Provides higher current, and lower radiated noise than conventional EI-type transformers.

#### Massive Heat Sinks

396 sq. inches per channel assure cool running

#### Mil-Spec Circuit Boards

Double sided construction on an FR-4 Substrate for ultra-high reliability

#### Rugged Case Design

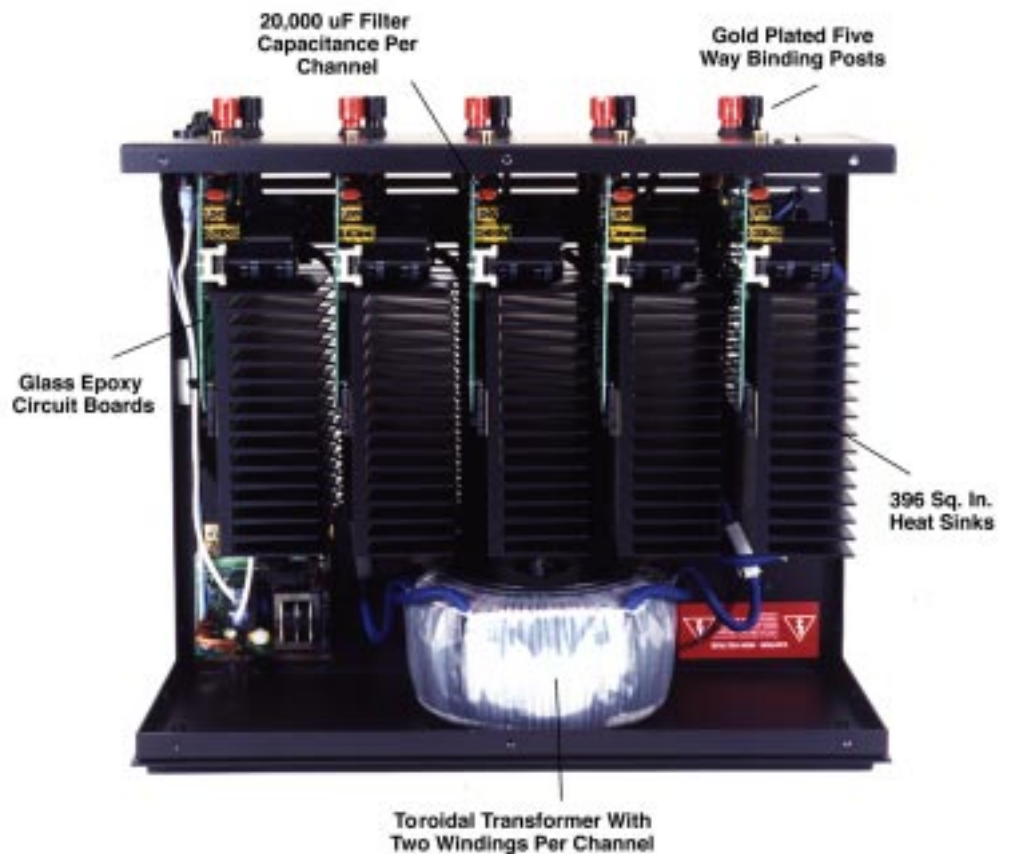
Strong 13-gauge steel with stainless steel fasteners and a powder coated cover.

#### Computer-Grade Filter Capacitors

Premium electrolytic capacitors used throughout for clean power

#### Advanced Protection Circuitry

Ultra-fast, Opto-coupled protection circuits monitor for fault or extreme conditions and shut the unit down if they occur



## Outlaw Model 750 Specifications

**Power Output:** 5 x 165 watts @ 8 ohms, FTC: 20 - 20kHz, 0.05% THD, All Channels Driven, 5 x 250 watts @ 4 ohms, FTC: 20 - 20kHz, 0.05% THD, All Channels Driven, **Frequency Response:** 20Hz. -20kHz. +/- 0.1 dB at rated output, **Signal To Noise Ratio:** 118 dB, **Total Harmonic Distortion (THD):** Less than 0.05% at rated output, all frequencies, less than 0.005% at 1 kHz., **Intermodulation Distortion (THD):** Less than 0.05% at rated output, all frequencies, less than 0.005% at 1 kHz., **Power Bandwidth:** 5Hz - >100 kHz +/- 3 dB, **Damping Factor:** 850 from 10 Hz to 400 Hz, **Crosstalk:** Greater than -90 dB from 20 Hz to 20kHz, **Gain:** Voltage gain of 28dB, **Slew Rate:** 50Volts/Microsecond, **Input Impedance:** Nominal 28k ohms, **Input Sensitivity:** 1.2 Volts for Full Rated Output, **Remote Trigger Voltage:** 3 - 32 Volts DC at 5 milliamperes or greater, **Dimensions: (HxWxD):** 7.75" x 17" x 14", **Weight:** 62 lbs, **Power Requirements:** 115VAC, +/- 3%, 50Hz - 60 Hz. 1800 watts, maximum