



# THE OUTLAW AUDIO MODEL 950 PREAMP/PROCESSOR AND MODEL 770 7-CHANNEL POWER AMPLIFIER

"Unconventional and Rebellious"



Out-law: "one that is unconventional or rebellious" according to Miriam-Webster Dictionary. I'd say that offering a preamp/processor with all of the latest sound processing modes, together with an enormous matching separate 90 pound, 200 watt per channel power amplifier for \$2,498 direct to the consumer through the Internet is both "unconventional" and "rebellious."

**A**s the folks at Outlaw Audio say in their ads, "the Outlaws want your money . . . but not much of it." Outlaw Audio sells factory-direct. It has no storefront, no dealer network and,

therefore, significantly lower costs to the consumer. Purchase is done through a well-organized website, which also provides the usual product information, reviews and forums that provide feedback to the company and other users on Outlaw equipment. Outlaw also provides a toll-free technical support line as well as an impressive 30-day, in-home audition of their gear. In addition to the equipment reviewed here, the Outlaw product line includes a full line of audio/video cables, a 6-channel A/V receiver (\$499), three other power amplifiers (a 7-channel, 100-watt per channel amplifier, a 5-channel, 200-watt per channel amplifier and a 200-watt single channel monoblock) and a 6-channel bass management system for use with DVD-Audio and SACD players. All are reasonably priced. So OK, the combo is in-

▲ The Outlaw Model 950 Pre/Pro incorporates a straightforward approach to the front panel providing simple and intuitive operation.

expensive in today's high priced world of home theater separates. But do they deliver the goods? Read on.

Before we start, I would like to confess I do have a personal interest in all of this. I come from a world of high-end two-channel audio and, when it comes to my separate home theater system, I rely on a B&K A/V receiver to provide the muscle and brains. Since the Outlaw Audio Model 950 preamp/processor and Model 770 power amplifier together cost less than a higher end A/V receiver today, I was particularly interested in how the separate components would compare. The answer, as it turned out, is that they fared quite well!

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### MODEL 950 PREAMP/PROCESSOR

#### Unique Features

The Model 950 arrived safe, sound, and well-boxed. The processor is light, weighing in at 17.6 pounds, but has a nice, solid feel, with a charcoal grey front and case. The layout of the front panel is functional and no-frills. My eye was immediately drawn to the large green standby power button on the lower left, which dominates an otherwise monotone front. The processor has a main power switch on the back, which, when turned on, puts the processor in "standby" mode. Underneath the power button is a small amber light which indicates whether the processor is in "standby" mode. A push of the green power button turns the processor on. The standby indicator also doubles as a "mute" indicator and blinks when the main volume is muted. The front of the processor is dominated by a large and well-lit display, with information displayed in pale blue LED characters. The front panel displays the program source, the type of connection

through which the displayed source is connected (coaxial, optical or analog), the current sound processing mode, and the volume in decibels. To the left of the front panel are two vertical rows of three pairs of unlit buttons that control the operation of the processor's built in AM/FM tuner. Below the front panel are the six buttons to navigate through the processor's menus. To the right of the front panel are two more vertical rows of three buttons each which control the digital inputs for each source, a stereo bypass (digital processing to the left and right channels), a test tone generator, a "trim" button to adjust the output of individual channels, and two buttons to scroll through the various sound processing modes. As you would expect, there are buttons to select the source and to mute the main volume as well. Although none of these buttons are lit, their functions are duplicated on the included universal remote control, which is back-lit. The volume control is large and has a solid, smooth operation.

The 950 includes some extras. Unlike many processors, the 950 includes a fully fea-

▲ The Outlaw Model 770 7-Channel Power Amplifier again uses the same simple, no-frills approach to high-quality audio in their massive 200 watt per channel amp.

tured AM/FM tuner with 32 presets, which I found worked very well and was able to tune in stations that my B&K receiver had trouble with. The 950 also has a useful "Bass Management Control" toggle switch on the rear of the unit, which, when turned on, activates an 80 Hz High Pass Filter for the 5.1 channel direct input, except the subwoofer. The bass signals from the five channels are summed and sent to the subwoofer output at all times. In the off position, full range audio is sent to all channels. This feature is separate from the Bass Management accessed through the set-up menu. So if you have small speakers, this function will manage the bass information from DVD-Audio and SACD sources.

Included with the processor is a very nice Home Theater Master universal remote control, similar to the one provided by B&K and others, which controls all of the 950's functions as well as being able to control your DVD player, VCR

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and other components. It can also learn functions from other remotes. A two-prong AC power cord is included, as well as an FM antenna, an AM loop antenna and an excellent Owner's Manual, written in easy to understand, plain English. It's refreshing not to need an engineering degree to read it.

### Installation/Setup/Ease of Use

Turning to the back of the 950 reveals plenty of hookups to go around, including two component video inputs and a component video output, several S-Video, composite, analog audio, digital audio (TosLink and coaxial) inputs, and two 12-volt triggers. Component video switching has about 45 MHz of bandwidth, enough for progressive scan DVD players, and arguably over the minimum requirement (30 MHz) for switching high definition sources. There is also the aforementioned 5.1 analog input for SACD/DVD-Audio players. There are digital outputs, outputs for a second zone, and remote control jacks to connect an external infrared sensor to the 950 if it is installed behind doors or otherwise not visible to the remote control. As with many processors, it is a little tight working back there, but the connectors all have a solid feel. Not surprisingly, considering its \$899 price, the 950 does not have balanced inputs. Also, although the 950 up-converts from composite inputs to S-Video (like almost every processor) it does not up-convert to component video, a feature I would find very helpful (and more useful than composite-to-S-Video, these days).

The 950 has all of the latest surround modes including DD EX, Pro Logic II, DTS, DTS-ES and DTS Neo:6. Another nice feature in the 950 is the Cirrus Extra Surround, from Cirrus Logic, the maker of the 950's digital signal processor. In this mode, the 950 synthesizes one or two back surround channels (either 6.1 or 7.1) from digital and analog 2 or 5.1 channel sources. The 950 does not have THX processing, however. There are also modes to compress the dynamic range for late night watching. Set-up was the utmost in simplicity. The features of the 950 can be set up using either the front panel, or the On Screen Display. The On Screen Display (OSD) output is sent only to the S-Video and composite Monitor Out jacks, not the component video



▲ The supplied universal learning remote is backlit and features a large volume control.

output. Since I use the component video outputs to connect the 950 to my Mitsubishi 65-inch Hi-Def widescreen TV, I had to run an S-Video cable to the TV to use the OSD—a little inconvenient, but not uncommon as passing the OSD through component video can affect video performance. Speaking of the setup menu, it is logical and easy to use. In fact, it was one of the easier setup menus I have used. The source inputs are pre-assigned labels that cannot be renamed. So although there are pre-assigned labels (and inputs) for VCR and DVD, for example, I found my ReplayTV was simply labeled "Video1." Like I said, no frills. There is a flexible crossover for the subwoofer that ranges the cutoff from 40 to 150 Hz in 20 Hz increments. There is a pink noise generator for channel calibration, which worked well.

The 950 was set up in my system using AudioQuest Python interconnects between the

950 and sources. Nordost Red Dawn Interconnects connected the 950 and amplifier. Digital connections were via glass TosLink cables. Video cables used were BetterCables S-Video and component cables. Power conditioning was supplied by a Monster HTS 2000. Nordost Superflatline biwire speaker cables were used between the amp and B&W 805 fronts, B&W HTM-2 center, and B&W CDM-1 SE rears. Amps used were the Outlaw Audio 770 and a Plinius SA 100 MkIII (for two-channel). Source for audio and video was a Philips 962 DVD/SACD player.

### Final Take

After hooking everything up, calibrating the speakers and reading the Owner's Manual (don't you hate that?), and giving the unit appropriate time to break in, it was finally time to see how the Model 950 measured up sonically. The most difficult test for a processor is its 2-channel audio capability. Using my Philips DVD player as a transport, I threw two of my favorite reference CDs at it, Patricia Barber's excellently recorded *Companion* and Diana Krall's well-done *Live In Paris*. I have to say that I was surprised at how well the 950 did in comparison to my reference music system. Music was quiet, but dynamic. Good bass punch, very nice wide soundstage. The overall feel was a relatively warm, not too detailed sound that was non-fatiguing. There is a slight edge to the high end, however, which was really the only weak spot. The overall performance was very good for two-channel. Bypassing any signal processing (using the analog bypass) the soundstage, imaging and overall tonal balance improved even more.

Movie processing with the 950 is better than any receiver that I have heard anywhere near the price. Particularly important in my system, where I use my ReplayTV for most TV watching, the Dolby Prologic II worked very well and really increased my enjoyment of two-channel sources.

### MODEL 770 AMPLIFIER

#### Unique Features

The second part of the team is the Model 770 power amplifier. It is a seven-channel beast, weighing in at 90 lbs., and delivering 200-

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watts per channel at 8 ohms and a whopping 300-watts per channel at 4 ohms, at 0.05% THD. Visually, the 770 is a plain box with a color scheme matching the 950's charcoal grey and a large green illuminated power button. The high current power supply is driven by custom-designed dual toroidal transformers with multiple windings for each channel. Each output module has 10 discrete output devices. Overall, the amp had a look and feel of good solid construction – nothing cheap here.

Heat dispersal in large amplifiers is important. Heat management in the 770 is provided by custom-designed heat sinks for each of the seven channels. It works remarkably well. Even left powered on, with the 950 stacked on top, the 770 always ran cool to the touch. Like the front, the back of the amp is utilitarian, with standard RCA connectors for connection to the processor, and good quality binding posts for the speakers. Also on the back is a power cord receptacle, a 12-volt trigger to turn on the amp when connected to the 950, and a circuit breaker.

### Final Take

Unlike some amps, the 770 sounded good right out of the box, and did not change appreciably as I put more time on it. Compared to my receiver, which is in the same price range as the 950/770 combo but only has 100-watts per channel, the improvements in soundstage were startling. The soundstage was wider, deeper, the imaging more focused and music had much more dynamism. No doubt the extra power helped, but the difference was amazing. Bass was tighter, deeper, and the rear channel information, which was weak in my B&K AVR 202, was much more present. The amp handled two-channel music very well. Particularly with Patricia Barber's *Companion* CD, which is a live recording with acoustic bass and a difficult dynamic range, the amp discharged its duties admirably, handling the deep bass very well and accurately rendering the position of the instruments and vocals in space, against a very quiet background. I have to say that it outperformed my receiver by a long shot on two-channel music.

Moving on to multi-channel music, the amp was equally impressive. Diana Krall's *Love Scenes* was conveyed with life-like realism.

Krall's throaty vocals had timbre and presence, while the surround channels had enough dynamics to really put you right in the audience at the concert. Similarly, on The Eagles' *Hell Freezes Over*, the guitar and vocals on "Hotel California" had more realism and "oomph" than I had experienced with my receiver. My experience with DVD movie tracks was no different. *The Matrix*, with its dynamic and well-recorded soundtrack, really shone. The staccato sound of bullets flying left and right made me want to take cover! I also noticed that the dialog was clearer than with my receiver. To top off my listening, I pulled out Queen's concert DVD, *We Will Rock You*, recorded in DTS. The crashing drums, Freddy Mercury's vocals and Brian May's excellent guitar were so real in all channels that it truly felt that I was there. In short, this amp has plenty of power – enough to satisfy most demanding applications.

### Summary

As you can probably tell, I am a big fan of Outlaw Audio's most recent product. Were they the equal of some of the \$5,000 separate processors and power amps we see? No, I don't think so, but the Outlaw gear is also a fraction of the

cost. Were they close? It's a subjective call, but I'd have to say that sonically, the 950/770 combo holds its own quite admirably against equipment more than twice the price. So what didn't I like? The slight edge to the high end never really went away, although experimenting with different cables might tame that minor issue. I would like to have seen customizable labels for the inputs, an On Screen Display that worked through the component video outputs, and conversion of S-Video to component video. I would also have liked a little more room in the back of the processor. However, in my mind, these are minor issues. What is inescapable is the simply amazing price/performance ratio of the 950/770 combo. At \$899, the 950 is a great deal – really without competition. At \$1,799, a 7-channel, 200-watt amplifier of this caliber is almost untouchable. At a special price for both pieces of only \$2,498 factory-direct from Outlaw (\$200 cheaper than if bought separately), it simply cannot be beat. Outlaw tries to give consumers the most bang for their buck. With the 950/770 combination, it's more like an explosion! If you are looking for a receiver or separates in the \$2,500 to \$4,000 range, you owe it to yourself to audition the Outlaw gear. 🎧

— By Philip H. Stillman

Rating  
**93**

#### Model 950

Dimensions: 17.2" W x 4.6" H x 14.76" D

Weight: 17.6 lbs.

Dolby Digital EX, Pro Logic II, DTS, DTS-ES,  
DTS Neo:6 Cirrus ES

6 digital inputs (4 optical, 2 coaxial),

5 audio/video inputs with composite and S-Video  
connectors, 4 audio-only inputs, 2 component  
video inputs, 1 5.1 channel analog input,

1 7.1 channel analog audio output,

2 digital outputs (1 optical, 1 coaxial), 2 Monitor  
outputs (S-Video and component video), 2 analog  
audio outputs, one Zone Two audio output,

2 external remote jacks and 2 DC triggers.

Dual Zone control

Warranty: 5 years parts and labor

MSRP: \$899 (if purchased separately)

Rating  
**94**

#### Model 770

Dimensions: 17.2" W x 7.75" H x 18" D

Weight: 90 lbs.

7 channels

200 wpc @ 8 ohms, 300 wpc @ 4 ohms,

0.05% THD, all channels driven

RCA inputs and heavy-duty speaker binding posts  
S/N ratio: >90 dB

Damping Factor: > 850 from 10 Hz to 400 Hz

Price: \$1,799 (if purchased separately)

#### Outlaw Audio

(866) OUTLAW2 (688-5292)

www.outlawaudio.com