

# T 975 Seven Channel Power Amplifier



## **Features**

- 7 x 140W Simultaneous Full Disclosure Power
- 7 x 250W Minimum Continuous Power (FTC)
- Dynamic Power 230W 8 Ohms, 390W 4 Ohms, 450W 2 Ohms
- PowerDrive™ amplifier technology
- · Mono-block, Modular construction
- Balanced Differential, Class A input circuit topology
- · Low loss, massive Holmgren toroidal mains transformer
- Input gain control for each individual channel
- · Thermostatically controlled fan with signal tracking circuit
- Custom 5-Way Binding Posts
- 12V Trigger for advanced control options
- NAD Soft Clipping™
- Detachable AC cord

#### Details

NAD has a well-deserved reputation for producing amplifiers with extraordinary performance and always at an affordable price. The T975 keeps this tradition alive and well by applying over 30 years of experience to the challenge of producing a very high power, high performance, seven channel power amplifier able to provide the musical muscle required for even the most sophisticated Home Theaters.

Consumers are often confused about power ratings, with many 'mass market' brands claiming power output levels that seem too good to be true. These inflated claims quickly fall short at the first listen. NAD's Full Disclosure Power ratings are the most conservative in the industry, and allow the T975 to handle any speaker load and any program material. The benefit of NAD's Full Disclosure Power is the total elimination of audible distortion at any listening level. This provides pinpoint imaging and spine tingling realism with music and movies alike.

The 7-Channel NAD T975 is a perfect accompaniment to the T175 A/V Tuner Preamplifier.

#### Design

As might be expected in an amplifier capable of one kilowatt (1,000 watts) of continuous power output, the power supply needs to be very carefully designed. As usual, NAD favors the toroidal transformer type for its superior regulation and low stray magnetic field. Our exclusive "Holmgren" transformer uses a special core design and materials to enhance efficiency and make the transformer less sensitive to DC offsets on the AC mains voltage. Over 80,000 uF of storage capacitance ensure an ample reserve of power for even the most demanding music and film soundtracks.

The T975 employs mono-block construction for each of its seven channels. Every element of each channel's circuitry, save the power supply, is fully independent thus eliminating inter-channel influences as a concern. The T975 employs active ground isolation to further eliminate any possibility of inter-channel interference even when more than one preamplifier is driving the power amp (as might be the case in a custom installation). Each section features an FET Class A input and driver stage circuits, and a high-current output-stage design, employing high speed, discrete output devices to promulgate superb dynamic quality. The result is musical detail, impact, and soundstage stability and depth unmatched by multi-channel amps of even two and three times the T975's price. NAD's proprietary Soft Clipping™ (defeatable) maintains sonic quality and offers speaker protection even under severe overdrive conditions.

Individual gain adjustment for each channel promotes easy, accurate system configuration, as does the

T975's integral 12V trigger turn-on response. This multi-channel amplifier delivers its output via heavy-duty "five-way" connectors. Ruggedness and in-system reliability are critical to successful home theatre systems. The T975 uses a unique variable speed fan cooling system first introduced on the M25 Masters Series amplifier, allowing the T975 to deliver massive amounts of power for hours on end. Many lesser amps thermally protect and cycle on and off when asked to perform at their maximum causing an unpleasant disruption of the movie. While a well designed forced air system can eliminate thermal cycling, it is crucial to keep the noise of the cooling fan from intruding - especially during quiet passages of the movie or music. To this end, we have developed a unique circuit that measures not only the operating temperature but also the level of the input signal, automatically silencing the fans during quiet passages.

This amplifier utilizes a combination of fuse and electronic non-intrusive protection: dependable, fail-safe, and sonically benign. Each channel is fully protected against excess temperature, DC fault, and loudspeaker short-circuit.

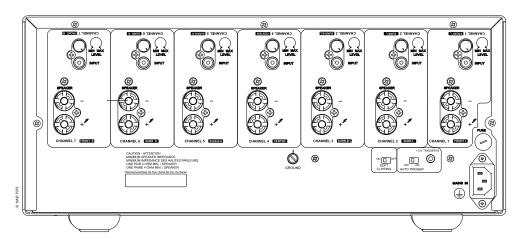
### PowerDrive<sup>™</sup>

The T975 also benefits from NAD's proprietary PowerDrive™ circuit topology, now well established and used throughout the NAD product range. The PowerDrive topology allows the T975 to deliver maximum performance under virtually any

circumstance, independent of the loudspeakers it is driving. The circuitry automatically senses the impedance characteristics of the loudspeaker and will then adjust its power supply settings to best cope with that specific load. PowerDrive topology is a practical approach to enable an amplifier to easily deal with musical dynamics and difficult speaker loads. Thus we have the highly desirable characteristics of high dynamic power and low impedance drive capability in one affordable package.

NAD also takes a stand against the meaningless "brochure power" touted by many of our competitors by offering Full Disclosure Power specs. We specify minimum continuous power, across the entire audible range of frequencies, at rated distortion, for both 8 and 4 Ohms with all channels driven simultaneously. Perhaps even more importantly, we also specify Dynamic Power at 8, 4, and even 2 Ohms, which better describes the way the amplifier will perform in the real world, with musical signals and reactive loudspeaker loads.

But even the most carefully reported specs cannot fully describe the sonic performance of an amplifier. Only your own ears can finally judge our achievement. We urge you to listen and compare NAD to other products in its price range, and even higher. We don't think you'll find anything that comes close to offering the T975's overall musical satisfaction, well-rounded performance, and stellar value for money.



#### SPECIFICATIONS

7 x 140W (21.5dBW)
7 x 250W (24dBW)
0.03%
170W (22.1dBW)
230W (24dBW)
390W (26dBW)
450W (26.5dBW)
ref. 8 Ohms, 50Hz >300
50K
1.1V

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Voltage Gain	29.0dB
Frequency Response	20Hz - 20kHz +0, -0.2dB
	2Hz - 100kHz -3dB
Signal/Noise Ratio ref. 1W	95 dB
ref. rated power	125dB
Net Dimensions (W x H x D)	17 1/8 x 7 1/8 x 17 3/4"
	(435 x 181 x 451mm)
Gross Dimensions (W x H x D)*	17 1/8 x 7 5/8 x 18 3/4"
	(435 x 194 x 476mm)
Net Weight	68 lbs (31kg)
Shipping Weight	72 lbs (33kg)

<sup>\*</sup> Gross dimensions include volume knob / speaker terminals / connectors / feet. Note: Installers should allow a minimum clearance of 2 - 4 inches for wire management.

