



# 306 Stereo Integrated Amplifier

Date of manufacture : Jul 92 - Dec 95

Please note that this document contains the text from the original product brochure, and some technical statements may now be out of date



The big brother of the 300 series integrated amplifiers, the NAD 306 carries more worthwhile (we call them Real World) facilities and features, offers more power and is more flexible and expandable in its potential than almost any other available. And although the 306 is fully loaded with features, everything has a sensible purpose which will expand your audio and home cinema system's potential and increase your listening pleasure.

Conservatively rated at 50 watts per channel into 8 ohms, the 306 will handle power peaks in excess of three times that figure, and again thanks to 'Soft Clipping' and 'EDP', does so easily, without losing the drama or presence of the music.

The 306 also offers a sophisticated tone selection configuration, including bass and treble controls, plus Tone Defeat, a Bass EQ selector that gives a slight boost in the bass response, particularly useful with smaller loudspeakers. The 306 is especially of interest to vinyl collectors, with our finest discrete, low noise transistor phono stage offering moving coil and moving magnet cartridge options. Finally, six stereo programme inputs allow for the full range of video and audio programme sources, including VCR/Laserdisc plus music via CD, tuner, phono and two tape inputs. The Record Out selector permits recording from any source whilst listening to another.

In all the NAD 306 is an incredibly versatile amplifier and a glance at the full specifications will prove that every feature offers a real benefit to your listening pleasure.

## PRE-AMP SECTION

### Phono input

Input impedance ( <i>R and C</i> )		47k $\Omega$ / 220pF
Input sensitivity, 1kHz	MM	2.5mV
	MC	120 $\mu$ V
Signal/Noise ratio ( <i>A-weighted with cartridge connected</i> )	MM	78dB ( <i>low gain</i> )
	MC	78dB ( <i>high gain</i> )
THD ( <i>20Hz - 20kHz</i> )		<0.04%
RIAA response accuracy ( <i>20Hz - 20kHz</i> )		$\pm$ 0.5dB

### Line level inputs

Input impedance ( <i>R and C</i> )		18k $\Omega$ / 200pF
Input sensitivity ( <i>ref. 1W</i> )		170mV
Maximum input signal		>10V
Signal/Noise ratio ( <i>A-weighted ref 1W</i> )		98dB
Frequency response ( <i>20Hz - 20kHz</i> )		$\pm$ 0.3dB

### Line level outputs

Output impedance	Pre-amp	300 $\Omega$
	Tape	Source Z + 2k $\Omega$
	Phones	330 $\Omega$
Maximum output level	Pre-amp	>12V
	Tape	>10V
	Phones	>10V into 600 $\Omega$ >500mV into 8 $\Omega$

### Tone controls

Treble		$\pm$ 7dB at 10kHz
Bass		$\pm$ 10dB at 20Hz

## POWER AMP SECTION

Continuous output power into 8 $\Omega$ *		50W (17dBW)
Rated distortion ( <i>THD 20Hz - 20kHz</i> )		0.03%
Clipping power ( <i>maximum continuous power per channel</i> )		60W
IHF Dynamic headroom at 8 $\Omega$		+5dB
IHF dynamic power ( <i>maximum short term power per channel</i> )	8 $\Omega$	160W (22dBW)
	4 $\Omega$	200W (23dBW)
	2 $\Omega$	250W (24dBW)
Damping factor ( <i>ref. 8<math>\Omega</math>, 50Hz</i> )		>100
Input impedance		18k $\Omega$ / 560pF
Input sensitivity ( <i>for rated power into 8<math>\Omega</math></i> )		1V
Frequency response ( <i>20Hz - 20kHz</i> )		$\pm$ 0.3dB
Signal/noise ratio	ref. 1W	101dB
	ref. rated power	118dB
THD ( <i>20Hz - 20kHz</i> )		<0.03%

### Bridged Mode

Continuous output power into 8 $\Omega$ *		100W (20dBW)
IHF Dynamic headroom at 8 $\Omega$		+6dB
IHF dynamic power ( <i>maximum short term power per channel</i> )	8 $\Omega$	400W (26dBW)
	4 $\Omega$	500W (27dBW)

Remote	No
NAD Link	No

## PHYSICAL SPECIFICATIONS

Dimensions (W x H x D)	420 x 108 x 385mm
Net weight	8.7kg
Shipping weight	10.6kg

\* Minimum power per channel, 20Hz - 20kHz, both channels driven with no more than rated distortion.

Dimensions are of unit's cabinet without attached feet; add up to 18mm for total height.

Dimension depth excludes terminals, sockets, controls and buttons.