

# SLEEPING BEAUTY IS AWAKE



For years you couldn't get rid of the feeling that NAD had lost some of its momentum. But behind the scenes it was apparently difficult to do anything and forged exciting new alliances with top technical developers. The new C 298 power amplifier also benefits from this. mit Top-Entwicklern geschmiedet. Wovon auch die neue Endstufe C 298 profitiert.

*Michael Lang 11g*

Amplifier technology based on the beautiful

■ The innovative hearing aid from the company

Purifi was developed with the M33 integrated amplifier tested in STEREO 9/20 and decorated with 89%, which really knocked us off our feet. Well, to anticipate the most important thing: the C 298, although clad in a much simpler sheet metal, has the same self-clock power amplifier modules implanted.

men that also work in the M33. Technically, only the power supply section has been slimmed down a bit.

The no-frills look of the NAD Classic-Line will presumably please many fans of the brand, for whom the design of the Master series seems too exalted, because it picks up on the timeless, functional look that was once introduced with the famous NAD 3020 integrated amplifier.

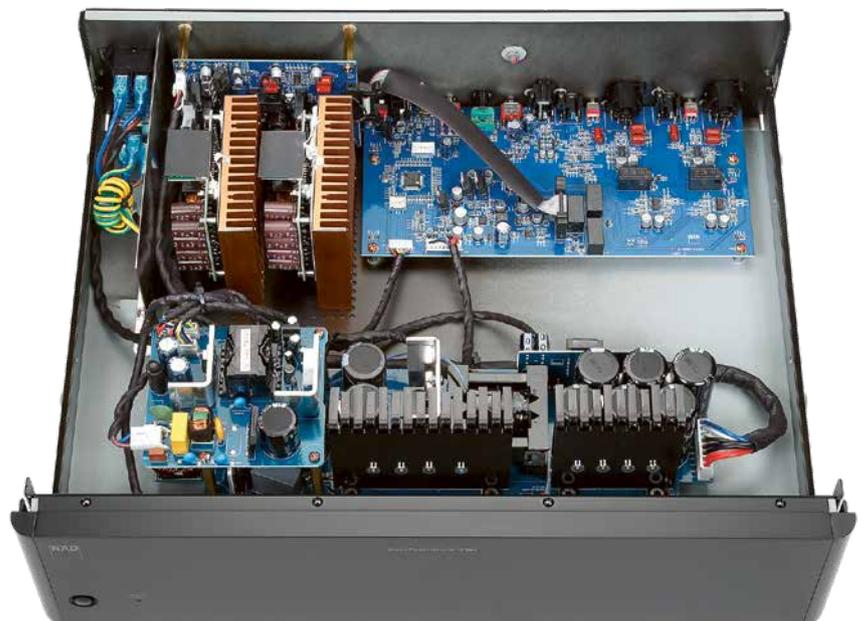
### Special features in the power supply

Like the M33, the C 298 uses a special power supply concept. This is why you can see small lightning bolts at the speaker connections on the back of the amplifier, which indicate where the "hot" connection is. And you can see that it is connected to the blue minus terminal for the left speaker. Blue and not black because there is no common ground. The idea behind this is that the load on the power supply unit becomes more even and the crosstalk attenuation increases at the same time. Intoxication and

### NAD C 298

#### FROM THE INSIDE

Thanks to highly integrated Technology is still air in the housing. Separate boards for various assemblies make it easier Service. The final stage sits directly in front of the speaker terminals for short distances.



NAD promises that with modern circuit technology, hum components are also a relic from the past. Our measurements support this statement.

What, in our experience, has to be considered for two C 298 power amplifiers and also for other Class D power amplifiers: They are less or not at all suitable for bi-amping.

Cas Oostvogel, international for NAD working as a product manager, explains this with the fact that amplifiers with this circuit technology like to share their performance with the people, i.e. want to bring them to the loudspeaker. However, this is hardly possible in the mid / high range, because around 80 to 90% of the available power is used by the bass range. The consequence of bi-amping operation: The output filter can be easily damaged. If you are lucky, the amplifier will overheat and switch itself off; if you are unlucky, only the workshop will help.

But at NAD they knew what to do and came up with a way to switch the amplifier to mono mode. In this operating mode, around 600 watts of sine output per channel at 8 ohms are available. Which should almost completely cover the range of speakers to be operated. With a unit price of almost 2000 euros per power amplifier, this is a strong fragrance brand that is set, assuming the appropriate tonal merits.

With the streaming preamplifier C 658 (test in STEREO 5/20) there is a congenial playing partner who not only speaks the same language visually, but also with its calibration function and symmetrical and asymmetrical outputs as well as perfectly harmonizing values for output impedance and output voltage

and a price of 1700 euros

to be allowed to sit on the same shelf.

If you use a different preamplifier, that's no problem either, because the input sensitivity of the C 298 can be adjusted. Are you thinking about a (partially) active concept or operation with an active subwoofer? The 298 has a line level preamp output that too

circumvented this hurdle. The sensitivity of the automatic switch-on can also be adjusted so that the power amplifier can also be positioned out of sight - then we recommend the symmetrical XLR cable connection for greater distances from the preamplifier.

ger is. But that's not enough of the unusually extensive equipment for a power amplifier. Because if there are grounding problems or ground loops, these can be reliably eliminated or reduced using the grounding clamp on the rear.

### Class D reinterpreted

But now of course we were interested in whether the bill also works musically. At first there was light fare for the NADSet by connecting the DALI Rubicon 6 BE to the power amplifier. Around 3700 euros plus a connection cable between the preamp and power amplifier were now playing on a floor-standing loudspeaker of about the same price. And the two got along very well. The DALI does not pose a challenge in terms of efficiency or impedance curve. Nevertheless, it is not entirely without, as it is able to represent the character of the upstream electronics very clearly. But the NAD station wagon did this job with flying colors. How plastic she is Madison



### DOUBLE MONO

An affordable, infinite  
a powerful dream  
set: NAD's preamp C 658 and  
two power amplifiers  
C 298 in mono  
Bridge circuit



Unusually versatile, but practical equipment for a power amplifier with cinch and XLR inputs, cinch output, level control and mono bridge switch.

Cunningham puts it in the room on "Bound" and has no trouble reproducing all the fine details of her voice, which has been captured with great accuracy, that is quite remarkable.

The NADs also handled Springsteen's "Letter To You" with ease, made the voice of the "Boss" heard emphatically, skilfully resolved the complex structure of the song, sounded lean and dry and took the DALI bass unit rock solidly into the Handle.

But then it got down to business. We wanted to tease out the capabilities and limits of the NAD's capabilities. To do this, we separated the NAD team, hung the reference pre-amp P 3100 from T + A on the front and brought in a loudspeaker that was demanding in every respect: the Gauder DARC 100, also one of our references and anything but a food lover. In addition, with its diamond tweeter and ceramic chassis - all from the renowned Accuton company

- a finely dissolving tool in order to mercilessly unmask any preceding discrepancy. And in this combination, two properties of the NAD were brought to light: Its enormous power reserves were sufficient, even with a room size of a good 40 m<sup>2</sup>, to effortlessly serve levels close to a sound system, as Neil Young's "Rockin 'In A Free World" proved.

Just as unshakable was the grip with which the NAD gripped the Gauder's basses - that was really great. What is allocated in this, due to the widely diverging price regions

give a rather unrealistic combination, there was a minimally bright tone of the NAD. What this power amplifier did away with two common prejudices against Class D power amplifiers: that power amplifiers based on this circuit principle cannot control critical loudspeakers and that they tend to soften the higher pitches, accompanied by a loss of resolution. No, the NAD showed all the virtues that you would expect from a really good power amplifier. Only their price tag remains in the pleasantly moderate range in accordance with NAD. ■

## NAD C 298

**Price:** around 2000 €

**Dimensions:** 44x13x38 cm (WxHxD)

**Guarantee:** 2 years (after registration 5 years)

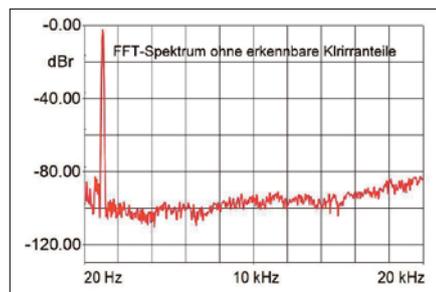
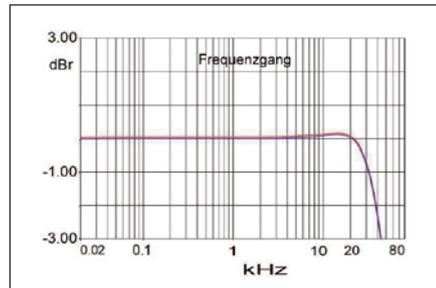
**Contact:** DALI

Tel.: +49 6251 8079010

dali-deutschland.de

Simple optics, state-of-the-art technology and very good sound - the advances in Class D technology are unmistakable and in this case come with a very fair price tag! There is also plenty of power and a high degree of flexibility.

### Measurement results



Continuous output (8 Ohm / 4 Ohm)	260 W / 516 W
Pulse output 4 Ohm (1kHz)	Protection circuit W
THD. 50mW / 5W / 1dB Pmax	0.005% / 0.001% / 0.6%
Interm. 50mW / 5W / 1dB Pmax	0.002% // 0.8%
Signal to noise ratio at 50mW / 5W	80 dB / 100 dB
Attenuation at 4 ohms (63Hz / 1kHz / 14kHz)	833/769/559
Upper limit frequency (-3dB / 4Ohm)	43 kHz
Crosstalk Line 1 > Line 2	74 dB
Input level control	yeah
Power consumption Sby / empty. ( at )	<0.1 W / 23.2 W (224 volts)

### Laboratory comment



Full of performance, distortion  
gene, noise, channel separation  
attenuation and damping factor

well; Bandwidth for Class D is very good.

### Furnishing

Cinch and XLR inputs switchable; Cinch output; Level control; Remote activation; Sensitivity adjustable in three stages; Mono bridgeable

**STEREO - TEST**

SOUND LEVEL	80%
PRICE-PERFORMANCE	
★ ★ ★ ★ ★	
<b>OUTSTANDING</b>	

WITH IT  
WE BELONG

**Madison  
Cunningham:  
Who Are You Now**



Strong voice, great Arrangements and skilful balancing act between styles

### TEST EQUIPMENT

#### CD player:

T + A MP 2500R,  
Wadia 8 / Brinkmann  
Nyquist

#### Integrated amplifier:

McIntosh MA  
7200 AC, musical  
Fidelity M3 si

#### Preamp:

NAD C 658,  
T + A P3100

#### Power amplifier:

NAD C 298,  
Fidek FPA 15,  
Aesthetix Atlas  
Eclipse Mono  
**Speaker:**  
DALI Rubicon 6 BE,  
Gauder DARC 100

#### Electric wire:

Audioquest William  
Tell, various HMS,  
Van den Hul,  
Summer cable,  
Cardas