

# STEREO

THE GERMAN HIFI MAGAZINE

ISSUE #4 2016

HIGHEND  
2016  
RE  
VIEW



› **Call me DAVE**  
**Chord's new  
super-DAC**

› **Power Play**  
**4 integrated  
amps compared**



**REVIEWS: DYNAUDIO FOCUS 600 XD +++ ENTOTEM PLATO +++ NAIM  
NAC-N272 +++ NAIM NAP 250 DR +++ CANTON REFERENCE 9K +++ CYRUS  
PHONO SIGNATURE +++ AUDEZE LCD 4 +++ AVID DIVA II**  
**REPORTS: GERMAN HIFI AROUND THE WORLD**



**We tested the following:**

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McIntosh MA 7900	14

# ALL AMPED UP

STEREO picked four very interesting and very different amp types and tested them in depth – potential cult characters from 2,550 to 8,990 €.

By Tom Frantzen





# BLUE HORIZON

A „Big Mac“ is always something special – at least in amp form – so kudos to the people in Binghamton for their successful transportation of a legendary design into the digital age.

**Y**ou can spot a McIntosh amp a mile off: the „blue eyes“, in form of modern LED-lit VU meters are unmistakable. That’s as true with the MA 7900, the second most powerful model in the range of the American manufacturer, as it is when you spot the distinctive

needles kicking in the background of well-known US series such as CSI Las Vegas (in which McIntosh amps feature in the home of the main character Dr. Gilbert „Gil“ Grissom).

Even after more than two decades as technical journalist and tester, I’m

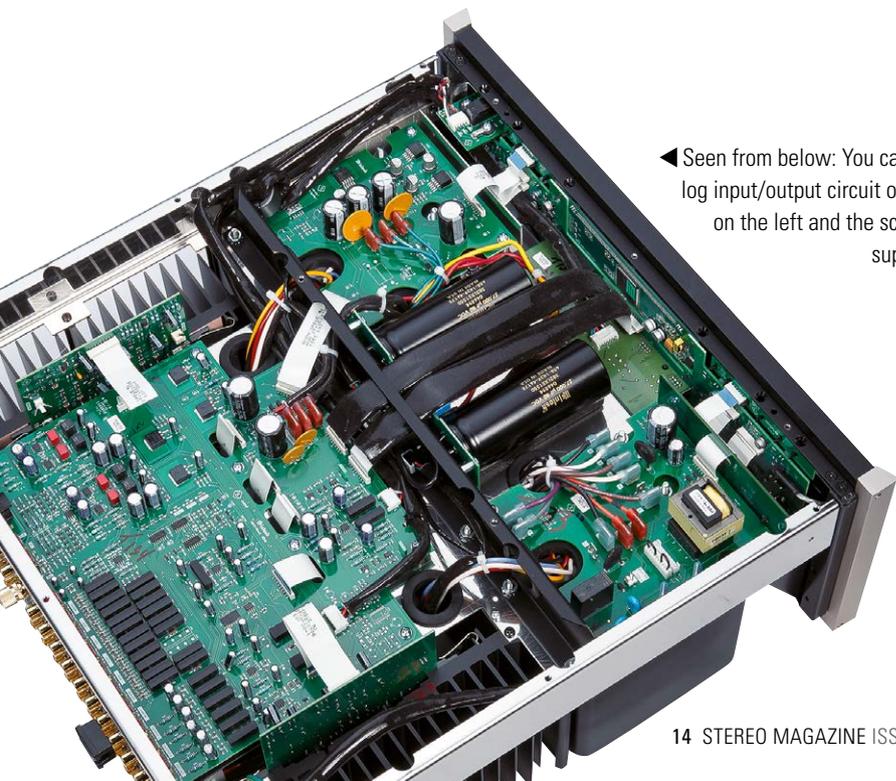


◀ The universal remote control can do a great deal, but feels a bit out of place in this range.

spellbound by the aura and effect of this brand: there are products which make your hands sweat, which make you shuffle your feet if things take too long in the photo studio or during set-up, when all you are waiting for is to hear the thing go, and the US cult brand is at the top of that list.

McIntosh has never suffered from exaggerated purism: its pre and power amps always had plenty of dials and buttons to set or large, blue VU meters to read, even when others went for a simpler, more subdued look. That flamboyance is OK – after all, the recently-passed pontiff of amp design, James Bongiorno (SAE, GAS, Sumo), once said that he could never imagine developing an amp depriving the user of any chance to adjust the sound. I feel the same: the use of a „better“ sound control in the form of an equalizer is desirable, and the MA 7900 has such a mighty sound control network with five bands on board. Of course!

In its latest amp generation, McIntosh has decided to ‘do digital’ and, while we didn’t see this in the previous MA 6900, the ‘7 Series’ has acknowledged the modern requirement, and now packs



◀ Seen from below: You can see the analog input/output circuit of the McIntosh on the left and the screened power supply to the left.

a high-quality DAC, aka the „McIntosh Digital Engine“, designed to offer uncompromising performance for digital sources.

The three inputs – optical, coaxial, and asynchronous USB – each accept signals up to 32 Bit/192 kHz, and in addition there’s also expanded analog capability: compared to the MA 6900, the MA 7900 has gained compatible with MC phono compatibility, with two separate inputs available for turntables.

Riding another current trend, a high-quality headphone amp is also installed, good for headphones of 20 to 600 Ohm: clearly the Americans want to sell a complete package with a large power amp, making superfluous future add-ons, especially third-party ones.

**Sledgehammer**

The MA7900 is designed to pump a full 200 Watt per channel of continuous power to the speakers, no matter whether into 2, 4 or 8 Ohm impedance. How so? Well, the answer is in the output transformers – or „autoformers“ as McIntosh calls them – which are a company hallmark.

Apart from in the tube world and for stage technology, output transformers of any type are almost extinct since semiconductors have a significantly lower output impedance than tubes, and so don’t need any adjustment to cope with the 4/8 Ohm

impedances of speakers. What’s more, transformers can be a source of distortion, so some tube designers have attempted to build amps without them, using so-called ‘Output Transformer-Less (or OTL) circuit layouts.

Not McIntosh. While the MA 7900 is a transistor/tube hybrid design, it makes life hard for you before you start listening, its two additional transformers contributing to a significant 34 kg weight.

Make sure you’re feeling strong, or have a friend to hand, before setting this one up, and remember that some shelves may also have a problem with this mass, not to mention the amp’s 56cm depth - make sure you have space for your cables.

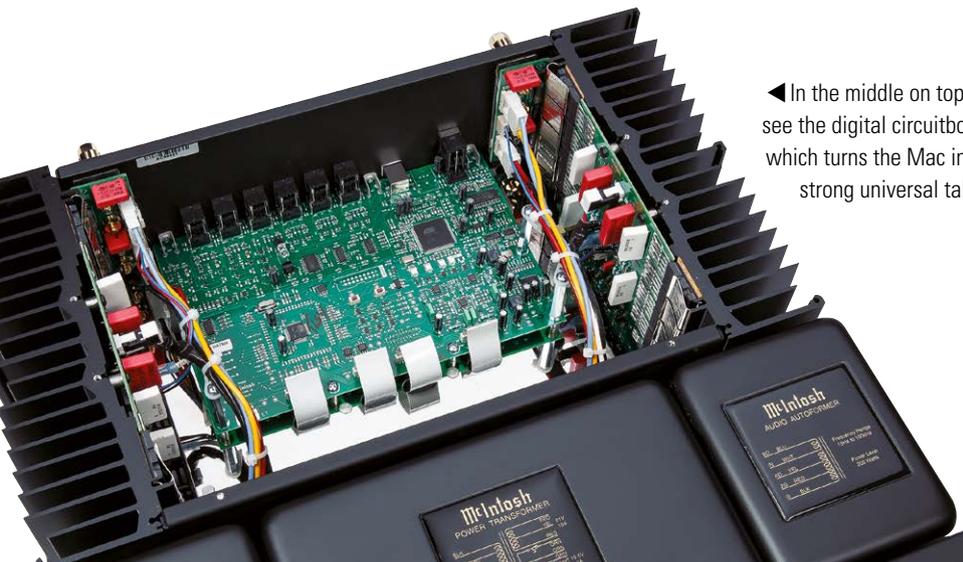
It’s worth all the effort: the MA 7900 sounds majestic and powerful in the STE-

REO sound booth. They say the 8 Ohm speaker ‘tap’ of the autoformers often sounds the best, even with 4 Ohm speakers, so of course we tried this, and would agree without reservations, at least in terms of the DALI Epicon 6. The combo sounds more open and tighter than with the 4 Ohm tap.

The control and calmness of McIntosh amps is legendary: it’s solid and steadfast, its timbre slightly warm and definitely a bit darker, although never over-smoothed. Gliding through scores with poise and agility, it just waits for the

**TEST-COMPONENTS**

- TURNTABLE: Transrotor Rondino nero/SME 5009/Transrotor Figaro
- PHONO-Pre: Brinkmann Edison
- Multi-Player: T+A MP 3000 HV
- PRE-/POWER AMP: Accustic Arts Tube Preamp II Mk2, Amp II Mk2
- AMP: AVM Ovation A 6.2, Symphonic Line RG 9 MkIV Ref.
- LOUDSPEAKER: B&W 802 D3, DALI Epicon 6
- CABLE: In-Akustik, HMS, Supra



◀ In the middle on top you see the digital circuitboard, which turns the Mac into a strong universal talent.

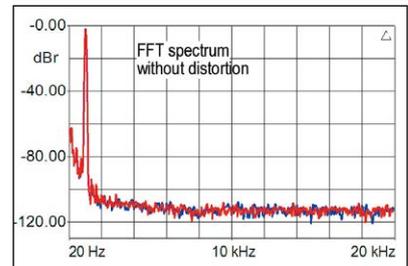
**MC INTOSH MA 7900 AC**



approx. €8,950  
 Dimensions: 44.5x19.4x56 cm (WxHxD)  
 Warranty: 5 years  
 Contact: McIntosh  
 Phone: +1 607/7233512  
 www.mcintoshlabs.com

An overwhelming power amp masterpiece in every respect with excellent, complete equipment, enormous sound potential and a look that gets you to your knees.

**MEASUREMENT RESULTS**



Continuous power at 8   4 Ohm	234   204 Watt per channel
Impulse power at 4 Ohm	* Watt per channel
Distortion at 50 mW   5 W   Pmax -1 dB	0.007   0.002   0.001 %
Intermodulation at 50 mW   5 W   Pmax -1 dB	0.004   0.002   0.03 %
Signal-to-noise ratio CD at 50 mW   5 Watt	70   89 dB
Signal-to-noise ratio Phono MM   MC 5 Watt	81   78 dB
Channel separation at 10 kHz	67 dB
Damping factor at 4 Ohm 63/1k/14k (Hz)	33/33/41
Upper cutoff frequency (-3 dB, 4 Ω)	70 kHz
Load ratings	practice-oriented
Crosstalk tuner/CD (10 kHz/5 kOhm)	70 dB
Timing error volume control up to -60 dB	0.002 dB
Power consumption On   Standby   Idle	0 / <2 / 53 Watt

**LAB COMMENTS:** High output power and extremely low distortion level. Good to excellent values throughout. The low damping factor is due to the output transformers. The upper cut-off frequency is surprisingly high. \*protection switch kicks in.

**EQUIPMENT**

Remote control, phono MM/MC, complete D/A converter, symmetrical/asymmetrical inputs, output transformers

**STEREO-TEST**

**SOUND QUALITY 96%**

**PRICE/PERFORMANCE**

★★★★☆

**EXCELLENT**

decisive moment to expose its full glory and reach out with so much dynamic power that you are left open-mouthed.

### Music in 3D

Music spreads opulently through the room: in front of a pitch-black backdrop, thanks to the absence of any noise, it feels enormously three-dimensional and solidly planted. The Mac is no detail-obsessed lightweight, although it is unexpectedly fleet-footed, with good speed, enormous oversight, and no shortage of agility. And the bass is in a league of its own...

Combined with speakers able to demonstrate these attributes – substantial-sounding also peppy, so think large Bowers & Wilkins, Elac or Magico models, or high-resolution panel radiators like Martin Logans – you get musical experiences of McIntosh kind: it's unmistakable, idiosyncratic – and this is exactly why people like it.

The automatic impedance adjustment in the output transformers ensures that the McIntosh doesn't give a hoot what's connected to its speaker terminals, even tackling speakers dipping down to 2 Ohm, which would give other, even expensive, amps severe headaches. The MA 7900 can barely

**KEYWORD**  
**Output transformers:** Special transformers to connect the speakers, used especially for tube amps for impedance adjustment.



▲ The pre/power amp section can be split up. The variety of connections is clearly visible.

„see“ the gaping and power-draining impedance hole, especially in the bass range, due to giant buffers and virtually limitless power supplies.

On which subject, we measured output at just over 200 Watt at 4 Ohm, 234 Watt at 8 Ohm, 17 % more than stated by the manufacturer. Any speaker can profit from this capability – and with the speaker question dismissed, the amp never fails to make every listening session an event.

The MA 7900 serves up an emotional and elegant view of AC/DC's „Thunderstruck“, which makes the walls shake, then lets Vivaldi's „Four Seasons“ flow without there ever being any sense that the violins may shriek. Fantastic.

As the song says, „Somewhere over the rainbow“: well, here it's blue meters, not bluebirds, flying, but there aren't many better amplifiers better beyond this one, especially when you consider both the sound and the visual appeal. Then the competition starts to look a bit distant...

## CONCLUSION



**TOM FRANTZEN**  
 STEREO Editor

It is no secret that I find amps especially exciting. I own more amps than any other kind of component, and I deal with them the most, including bi-amping so on, and am particularly fascinated with the effect of power supplies on the sound and performance of amps.

Of course, I've heard the claim that all properly-designed amps sound the same, at least when you plug them into good-natured speakers – no offense intended but, based on almost 40 years of HiFi experience, half of which has been as a professional tester, this is patent nonsense, on a par with „The earth is flat“.

The differences are huge, and not just with difficult speaker loads: the four amps in this test – plus the AVM and the comparison devices by Accuphase, Exposure, Lua, Symphonic Line & Co. run up at the same time in the STEREO sound studio – show such significant fingerprints using the same speakers that curiosity alone will get you to work extremely early with stack of your own CDs, just to get a feel for their standing and tendencies.

Every test candidate revealed its particular strengths, and while you'd expect special things from the € 9000 McIntosh, the spice in the chili of testing – and the essence for readers who make normal amounts of money – are the surprises here. Those came when the anniversary amp by Analogue Audio, that British triode/pentode tube amp by Icon Audio, and more than anything the affordable, upgradable Audia Flight, each took off into the ether in terms of musical performance at significantly lower prices. In this test field we found just about everything amp technology

can offer today: tubes vs. transistors, triodes vs. pentode, negative feedback vs. „none“, transformer technology vs. mainstream topology, phono vs. high-level, digital vs. analog. The lot, in other words!

The McIntosh is a undeniably a feast for the eyes and technically outstanding: simply a cult object, with the right speakers it makes an almost unbeatable statement. But in the 3000 Euro range (one third of the price!) there are also outstanding contenders: we liked the Audio Analogue as an extremely potent all-rounder with charm and a good dose of fun; the audiophile Icon Audio has the looks and will suit the tastes of lovers of classical tube technology; and the arrow-true, charming and spacious-yet-smooth Audia Flight basically makes you sit there with your mouth open.

How does it go in one of the current charts hits? Ah yes, „I Wasn't Expecting That“! It's a lot of fun – especially considering that you can own it starting at just € 2,500. I will definitely be volunteering for the next amp test...