

The Ten Most Significant European Amplifiers of All Time

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Good sound is a universal thing. And good audio has been a popular pursuit among enthusiasts the world over for decades. There have been deeply innovative and important amplifiers from all points on the compass, but until relatively recently what happened locally, stayed local; the Dynaco ST-70, for example is virtually unknown outside of the USA, while the Leak Stereo 20 tube power amp was extremely popular in early 1960s Britain, but almost unheard of elsewhere.

The rise of the high-end movement meant good products were not so restricted by country boundaries, but what's prosaic in one part of the world is often exotic in others. This meant each part of the world developed its own trends; the big is beautiful movement of the US high-end, the lower-power minimalist amps of the British and the Scandinavians, the old-world opulence of French and German products, the suave turned-wood luxury of Italian audio. Eventually this isolationism all but dissolved, but the character of these 'flavors' of audio persists to this day.

Europe has a rich heritage of audio, and picking ten of the most significant products is always going to be an exercise in omission. Where is Arcam, Creek, Cyrus, Copland, Densen, Gryphon, Hegel, MBL, Musical Fidelity, Restek, T+A and the rest? Each one is worthy of inclusion, in its own right. But arguably – and such things are argued in perpetuity – these 10 amplifiers have changed the face of audio significantly in their own right.



10 Quad II power amplifiers

We could place any of the range of Quad amps from the 1950s to the present day here, but the Quad II is something special. These small tube amplifiers first appeared in 1953, were in production until 1970, have been the subject of endless modification and enhancement and were reborn a few years ago as part of Quad's new Chinese production.

The little Class A 15 watt per channel cathode-coupled push-pull paraphase mono amplifier was a pioneering design, for among other things, it was one of the first to use a tag board rather than point-to-point wiring. By today's standards, it's also an ultra-minimalist design, with just 13 resistors, six capacitors and five tubes per channel. Back in the 1950s, 15 Watts was considered enough for any domestic setting, especially when used with Quad's original Electrostatic loudspeaker. It was obviously a successful formula, because 93,000 of those diminutive amps were sold.

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9 Leak Stereo 30

Although an invention of the late 1940s, the first commercially available truly modern all-transistor hi-fi amplifier didn't appear until 1963, and came from H.J. Leak & Co, Ltd. of London, England. There had been transistor amplifiers before the Leak Stereo 30, but most used a transformer-coupled output stage (in the manner of a tube amp). The Leak design featured the first commercially available transformerless transistor output stage, which set the archetype for almost all solid-state amps that followed. Leak improved on the basic Stereo 30 with the Stereo 30 Plus, which changed the transistors from germanium to silicon, thereby making the amplifier more stable, and there are still Stereo 30 Plus amps in daily use.

Harold Joseph Leak is very much the 'forgotten hero' in audio. His company was founded in 1934 and in 1945 it developed the 'Point One' range of tube amplifiers, so called because it was the first design to deliver 0.1% total harmonic distortion. This, along with the Williamson amplifier circuit published in *Wireless World* in the late 1940s, helped create a market for high-fidelity ultra-linear amplifiers.



8 Sugden A21

And the award for longest running product in audio goes to... Denon for the DL103 cartridge, which has been in production since 1963. Sugden's A21 amplifier comes a close second. One of the first solid-state amplifiers made (the Leak Stereo 20 beat it to the punch... just), Sugden's low power, hot running pure Class A design is still in production today, albeit several generations later. Sugden has based every product in its five-decade history on the same Class A

Perhaps part of the reason for Sugden's continued success is its beguiling sound, warm and comforting. Or maybe it's down to Sugden's reputation for building products that never, ever break down. Whatever the reason, the A21 in all its guises is still very much alive and kicking, despite being older than the Moon Landings. Those canny Yorkshiremen from Sugden really live by the maxim "If it ain't broke, don't fix it".



7 Naim Audio NAP 250

One of the most popular amps of the last 35 years is still made in Salisbury, England. Originally designed as a musical, ultra-reliable amplifier for his friends, Julian Vereker's Naim Audio company hit pay-dirt when he was commissioned to make amplifiers for the studios of London's Capital Radio. The 70 watt NAP 250 power amplifier was launched in 1975, formed the core of all Naim's amplifier designs until 2000 and – although not the same circuit design - the amp remains in production to this day. Original 'chrome bumper' NAP 250s are still highly prized by many, still fully serviceable by Naim and considered by their followers to still be the best amplifier in the world.

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6 Burmester 808 preamp

Now in its fifth iteration and its 31st year, Burmester's modular Reference preamplifier is a timeless chrome masterpiece. The two-box Class A preamp can be configured exactly how the listener wants, with optional phono boards, balanced or single-ended connections and unique top-mounted input/output gain adjustment for each channel. From the outset, the 808 eschewed the use of capacitors in the DC-coupled signal path. The net result is a preamp that hardly ever appears on the second-hand market, because it's so good, few ever find anything better to upgrade.

The 808 set new standards in build quality, sound quality, finish and price way back in 1980, and through a series of constant improvements and developments, it's never been far from the top slot.



5 Electrocompaniet 'The 2 Channel Audio Power Amplifier'

Back in the early 1970s, the prevailing view among amp designers was to deliver high power amplifiers using large amounts of global feedback. They measured perfectly, but frequently didn't sound good, and no-one knew why. Then one Dr Matti Ojala started discussing Slew Rate or Transient Intermodulation Distortion, which undermined the performance of an amplifier but did not appear on steady-state measurements. Dr Ojala's concepts first appeared in a 25 watt Norwegian power amplifier called the Electrocompaniet. It wasn't easy to get, it wasn't that reliable and it was that powerful, but boy did it sound great. As a result, TIM became widely accepted and good amps sounded better as a result.



4 NAD 3020

A genuinely groundbreaking amplifier with a truly international lineage, the NAD 3020 was an amplifier from an company based in England, designed by a Scandinavian, and built in Asia. The 3020 appeared in the late 1970s, a tiny integrated low-power integrated amplifier that sounded better than many far larger, more expensive amps from then-famous names. It was the brain-child of Bjørn Erik Edvarsen, who designed the amplifier to use a flexible power supply to cope with real music and defeatable soft clipping to prevent the amp from sounding harsh when pushed. It came to redefine what an amplifier could do when the prices (and style) was stripped to the bone. The brand moved around Europe before settling in Canada, but the designed in the West, built in the East concept behind the 3020 set a precedent that is even more important today.

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3 Lavardin Model IT

A relative newcomer to this line-up, the French integrated amplifier first hit the audio scene about 15 years ago. Lavardin's circuits rely on eliminating what the company calls 'memory distortion', a form of non-linear distortion in the time domain that is not recognized or measured elsewhere. The company suggests this distortion is inherently lower in tube amp designs compared to most solid-state models, and this is the secret to the continued success of tubes. Lavardin's solid-state circuits claim to reduce this temporal distortion to as low as 1,000th that of other solid-state designs.

The range has grown to include a cheaper integrated amplifier, two preamps, four power amps and a range of cables today. And there's also a 15th anniversary amplifier that improves upon the IT. But it's that first integrated amplifier that took the European audiophile world by storm that really started the ball rolling. Fifteen years on and, from a temporal perspective, few products still come close.



2 Lyngdorf/Tact Millennium

New amplifier topologies don't come along that often. The Millennium is the exception. When it first appeared (given the name, perhaps unsurprisingly at the turn of the century), the idea of a Class D, pulse width modulation amplifier was not new or exceptional, but such systems were commonly used in low-grade settings where their small size and low operating temperature was prized above sound quality. The problem was a distortion that rises with frequency.

So, when an amplifier that not only overcame the problems seemingly inherent to the performance of Class D (by switching at a far higher frequency than usual), but also managed to produce a sound that redefined clarity and detail, meant the world sat up and listened. Some stunning reviews, a whole slew of products that followed in the Millennium's footsteps and four iterations later, the amp still sounds like the future.



1 Devialet D-Premier

Great audio products aren't just in the past. The D-Premier from Parisian design team Devialet has caused a stir since first appearing less than two years ago. The slim, chrome pizza box effectively combines a powerful integrated amplifier with very high-resolution analog-digital and digital-analog conversion, a high-resolution phono stage (designed for archival) and more. It uses Devialet's unique ADH architecture, which uses a small, high quality Class A amplifier with a Class D amplifier providing the motive force (in a manner not dissimilar to a 21st Century version of Quad's Current Dumping 405 amplifier).

Because it's still in its early stages, there still room for growth. And 'growth' for the eight processor D-Premier a purely 21st Century concept, with firmware updates that radically change the amp-DAC concept, by adding daisy-chained multi-amp connectivity improved transients and a remapped, more responsive power supply. Forthcoming improvements include a unique asynchronous WiFi connectivity. Devialet call the D-Premier 'The Audiophile Hub', and for good reason. It's changing the face of amplification.