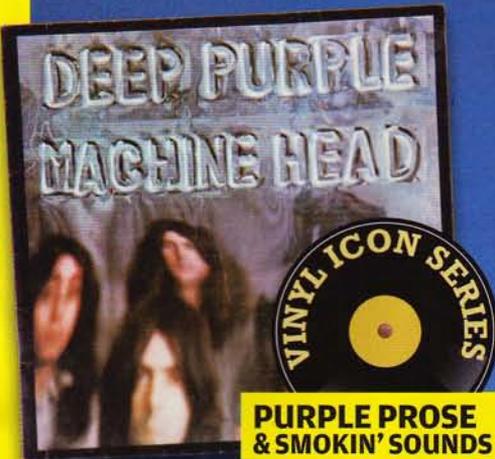


THE HOME OF REAL HI-FI

# hi-fi news

## & Record Review



# A STEREO SURPRISE...

ARC unveils its first *solid-state* integrated!



### 'Leak Stereo 20, still rocking in 2010'

Vintage review, p118

### Roksan Radius 5.2

A revamped UK classic



**REVEALED!**

Cutting-edge kit from the greatest show on Earth

2010 International

# CES

### CES 2010

Inside: all the hot hi-fi on show

### Electrocompaniet Hi-rez ECD1 DAC from Norway

### High output speakers Five 'valve-ready' floorstanders

- **PLUS** 13 pages of music • **VINYL RELEASE** Neil Young's *Everybody Knows...* on 180g vinyl
- **AUDIO MILESTONES** Tannoy Dual Concentric • **INVESTIGATION** Cutting art of vinyl
- **ON LOCATION** Linn Records • **HI-FI @ HOME** From Bush record player to Oracle Delphi

UK £4.00 US \$9.50 Aus \$9.95



# Micromega CD-30/IA-180 (£3297)

More rapid-fire hits from the returning French squad: an integrated amplifier and matching CD player that British makers would be proud to claim as their own

Review: **Ken Kessler** Lab: **Paul Miller**

**H**i-fi rarely gives second chances, and yet here we have a once-moribund brand becoming a major force in the mid-price sector. Considering that, in the past, my relationship with Micromega was frosty at best, I'm taken aback by its plethora of new products and especially for the 'positive vibe' they seem to exude. No, I'm not bewildered because they're French – I willingly admit that my favourite cheese is Brillat-Savarin, and that I dream of Nathalie Baye – but because this company has come back like gangbusters.

From the upper-end of the catalogue is its best CD player, the CD-30, and the most powerful of three integrations, the IA-180. And yet the two manage to cost below £3300, despite being manufactured in Europe. In the current economic climate, that's not an inconsiderable amount, but it still represents incredibly good value.

What's so clever is how Micromega, in a most Gallic manner, has balanced performance, style, build quality and features in such intelligent proportions that the final melange pushes all the right buttons: modern appeal (iPod and headphone sockets on the front of the IA-180); retro appeal (rotary volume control, phono stage); audiophile appeal (preamp out, processor loop, digital output); and convenience (full remote control, assignable input names).

## À LA FRANÇAISE

Returning to my befuddlement, there's a plethora of sockets on the back of the amp versus the dearth of output options on the CD player, the presence of a phono stage yet no earthing tag... I suppose that this quirkiness is merely French tradition, harking back to steak tartare or the brake pedals on old Citroens. And yet it all works.

Consider the only daunting element of the package: a system remote with 46

**RIGHT:** Micromega's uniform fascias mean that the right-hand halves are nearly identical on the two components. Blue LCDs are easy to read and attractive: take note, Audio Research!

buttons, all black, all the same size and laid out in straight rows – bland and seemingly unintuitive for the techno-fearful. And yet, because 'standby' is red and four blue buttons switch the remote through the components it operates – CD, FM, AV and amp functions – after a few minutes' usage, there was little in the way of operational hindrance when compared to my equally cluttered All-In-One, which has illumination and buttons in different shapes and sizes.

Proof of this intuitive user-friendliness is demonstrated by a simple fact: from opening the two boxes to hearing music required all of six – yes, six – minutes. I took advantage of banana plugs on the YTER cables to connect quickly between the wonderful multi-way binding posts on the IA-180, into LS3/5As and Tannoy Autograph Minis, while a set of Atlas phono cables was all I needed between the units.

I didn't even look at the user manuals until the system had been playing for a couple of hours.

So far, I could be describing anything from Arcam to Musical Fidelity to Cambridge, to one of another 20 or more highly competent home-grown contenders.

But there has to be, beyond a deceptive remote control, pretty blue lights and ridiculously impressive build quality, an element to make one shout, 'Vive la difference!'. I hoped that I would find it in the sound. And, as I learned after a week or so, it *is* a case of steak tartare versus steak and kidney pudding – a matter of taste.

If there's a nationwide 'French sound', it's as impossible to pin down as any: with the exception of much of the gear from Germany and Japan, I find most of the major countries producing serious hardware to be too broad to define glibly. Just as we in the UK have everything from the classic BBC sound to the Linn/Naim alternative, French sonics range from the Toulouse-Lautrec-fat-bottom lushness of Jadis, to horns so strident that they make German alternatives sound like Quad ESLs. Micromega adds another wrinkle, and it is – to me at least – the distillation of ultra-modern detail and hygiene, tempered with overtones of classic opulence.

One supposes that is what Rolls-Royce and Bentley try to achieve with their current, state-of-the-art luxury vehicles, and it's a tough challenge: making a modern





car that still offers the sumptuousness of a coach-built motor carriage of the 1930s. Simply shoving valves into a CD output stage, for example, isn't enough. When we reviewed Micromega's top pre/power combination last December (coincidentally costing exactly the same as this integrated amp-plus-CD player), I learned that Micromega's roots and reputation, though entirely based in digitalia, had been respected in the brand's reawakening. But the focus on digital has not been allowed to dominate.

And yet... however much one approaches this as a pair of carefully voiced and matched siblings, the CD player manages to overshadow the amplifier. We'll get to them as standalone products in a second, but keep that thought in mind, for it's all-pervasive. Alternating my listening with nice, comfortable vinyl sessions and a couple of bouts with other CD players such as my aged Marantz CD-12/DA-12 and Quad's 99 CDP-2, I kept returning to the synergy that is the CD-30/IA-180 *au naturelle*.

**IT'S STEAK TARTARE THEN**  
As an ensemble, the two create a balance between the aforementioned modern-and-retro that will mean more to older listeners. By that, I refer to those who started with vinyl and witnessed CD's evolution from its launch in the 1980s through to its

maturing to something acceptable in the 1990s. (This is not the place to defend CD *per se* but, trust me, you *will* miss the maligned CD when compressed formats become the norm.) Digital versus analogue sonic differences may never be resolved, so any *détente* comes in the form of behaving realistically: by treating the two as merely dissimilar rather than as good versus evil.

Using the two with Red Book CDs creates an experience that asks, what is all the fuss about? I sat there and listened to all three discs in the new Charisma Label anthology *Refugees* without stirring except to change discs. Ladies and gentlemen: that statement is far more pregnant with revelatory import than identifying the system's ability to hold my attention for a couple of hours: amongst the tracks were offerings from artists I'd drive 100 miles to avoid, like Lindisfarne, Genesis and Van der Graaf Generator.

Indeed, the music is so utterly, mercilessly, putridly 'progressive' that I don't even know why I bought the set. I don't like Peter Hammill *that* much. And yet the music is also of the era before digital recording made audible artifice a permanent part of our lives, so I was captivated by textures and detail, spatial

**ABOVE: Minimalism and clean styling endow the Micromegas with both high functionality and the kind of look that won't grow tiresome; a large rotary volume-control aptly dominates**

trickery and studio gimmickry that reminded me why I was first blown away when life moved from mono to stereo (which is another can of worms not to be opened here).

Classicists will be gnashing their teeth, for the decade in question – 1969-78 – also represents the era, defined by those

with an ear for natural sound, as that when studios lost the plot, compared to the genius studio work of the 1950s. Either way, the Micromega system, with Charisma's music, possessed exactly the

'A coherent, top-to-bottom richness pervades the music'

seductive charms which keep us wedded to vinyl and valves and analogue in its most pure form. Voices, even if weirdly processed in the recording stages, sounded more real than those which pass for today's cutting-edge releases. The likes of Simon Cowell would do well to look back to their own early years if they're to salvage the sound of the swill spat forth by *X Factor*.

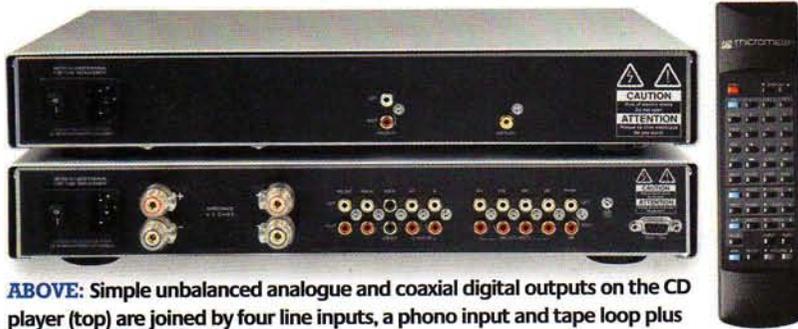
Keep in mind that I am discussing the way the pair behaved without any tweaking or cable chicanery or accessory indulgence. It simply works. Just listen to the kick-drum opening to the Black Crowes' 'Kept My Soul' on the sublime *Before The Frost*: the air, the resonances, the scale, all possess the sort of airiness and authenticity that keep sending us back to our turntables and moving-coils. Then the band kicks in, and the sheer mass reminds you that you are listening to a fast, crisp and powerful solid-state amplifier, its Class D technology forgotten in the musical bliss delivered.

Yes, there's a knee-jerk tendency that says a Class D amp has no right to sound this good after all the years the hard-core

## 132K UPSAMPLING

Look closely at the CD-30's slim fascia and you'll see a little badge declaring '132kHz Upsampling'. That's 132kHz, not the usual 192kHz. In its white paper, Micromega explains that the mathematics of asynchronous upsampling from CD's 44.1kHz to 192kHz are not straightforward, unlike upsampling from DVD's 48kHz to 192kHz, which is direct 4x multiplication requiring one single synchronous clock. Upsampling between two rates that are not multiples of one another requires two clocks, with the possibility of 'beating', jitter and inaccurate calculation. *HFN* has been saying the same thing for a few years [most recently Feb '10, p90]. Micromega has opted for the simple expedient of 3x upsampling from 44.1kHz to 132kHz followed by another 8x oversampling in the Analog Devices DAC that follows [see Lab Report, p50]. **PM**

## CD PLAYER & AMPLIFIER



**ABOVE:** Simple unbalanced analogue and coaxial digital outputs on the CD player (top) are joined by four line inputs, a phono input and tape loop plus preamp output and a set of unswitched speaker outlets on the amp (below)

have decried such technology. No, it doesn't have the warmth of valves, nor the visceral presence of Class A tranny amps. Its lack of absolute transparency only becomes apparent when you feed the CD-30 into a different amplifier, as I found when playing it through the McIntosh C2200/MC2102 combination. But a slight graininess is not enough to condemn the amp, for it is so mild as to warrant no more concern than the shadings between consecutive grades of speaker cable from the same maker.

### SPANNING THE ERAS

Am I suggesting, then, that the CD player 'lifts' the IA-180 up a notch? Perhaps it does, but then this is not the first time source/amp combinations have benefited from such synergy. Despite any inferences from my ordeal with three discs' worth of Charisma excess, the pair's prowess is neither music genre nor era-dependent.

The Black Crowes' cut, for example, is recent, grungy, live and loud. The same satisfying sound also applied to the CD of Peter Ustinov's utterly hilarious, 50-year-old *Grand Prix of Gibraltar* free with a recent issue of *Motorsport*, the new 4CD Hall & Oates box set covering 1966-2009, and the decidedly odd CD of Christmas classics issued by Bob Dylan. That's a span of *all* the decades: the Micromegas do not favour one over another.

While a coherent, top-to-bottom richness pervades the music – and this certainly enhances the acceptability of recordings made in the post-digital age, while complementing AAD discs – no too-fleshy elements are suffered that would, for example, soften or stifle transient attack. The rich, fat, yet fast bass is the first thing you'll hear if you go back to that Crowes track

or any of Hall & Oates' classics from their first two decades. Your spine will tingle when you hear the mix of hi-hat, bass and the wash of the synths that open 'She's Gone'.

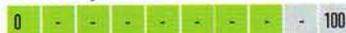
When the two voices float in, the Micromega CD and amplifier keep everything positioned across the soundstage, the parts forming a perfect whole. And that's down to the CD player, as this was a prime element of the performance when I plugged the CD-30 into another system. You can do it again with the electric piano in 'Rich Girl', waiting in anticipation for the rhythm section to add so much mass to the proceedings that even the smallest Tannoys will seem huge.

There's nothing particularly 'negative' about the IA-180 amplifier: it's as good as any solid-stater I can think of at around £1700, while I'm enamoured of its clean styling and terrific fit-and-finish. Ergonomically? All one truly needs. But the CD-30 reminds the listener of what made Micromega a contender in the first place, by minimising digital artefacts and delivering a silky, solid, of-a-whole sound that belies its price. ☺

### HI-FI NEWS VERDICT

As anticipated, given Micromega's history, the CD player is the marginally superior half of this pair; the percentage below is a combined figure for the two, but the breakdown would be 77% for the amp, and 83% for the disc-spinner – yup, it's that good, as satisfying as Marantz's delightful KI Pearl. But the amp is no slouch, and the units combine so well that they reaffirm Micromega's return to form as no fluke.

Sound Quality: 80%



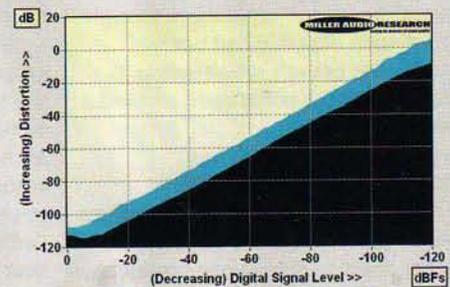
## LAB REPORT

### MICROMEGA CD-30/IA-180 (£1599/1698)

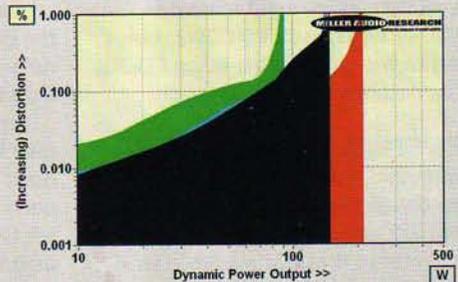
Micromega's CD-30 delivers a top-notch performance, offering a 108dB A-wtd S/N ratio from a 2.1V maximum output and with distortion almost unchanged at a fabulously low 0.0003-0.0004% across the 20Hz-20kHz audio range. Through bass and midrange, distortion is <0.01% over the top 45dB of its dynamic range [see Graph 1, below]. The combination of Crystal's CS8421 SRC for 3x upsampling followed by a pair of AD1853 DACs [see boxout, p49] yields an exceptional >125dB rejection of stopband images coupled with very low levels of ultrasonic noise and a mere 115psec of jitter (this is as low as we can measure with a 16-bit data pattern). The player's output impedance is just a little higher than I'd like to see at 600ohm but its response is only gently rolled away at -0.3dB/20kHz which will have no impact on its subjective brightness.

The partnering IA-180 amplifier has more 'character' with distortion that gradually climbs with power output from 0.0015% at 1W/8ohm to 0.25% at 90W/8ohm, but at least this trend is broadly consistent with frequency. While the Class D modules are rated at 180W/4ohm this is somewhat dependent on implementation, in this case reaching 120W/8ohm and 170W/4ohm. Under dynamic conditions it's possible to achieve 150W/8ohm and 212W/4ohm [see Graph 2, below], so it's beefy enough. The response rolls away to -0.7dB/20kHz and -7.5dB/100kHz from a low 0.023ohm impedance and only the 76.5dB S/N ratio (A-wtd, re. 0dBW) is mildly disappointing.

Readers are invited to view a full QC Suite report for the Micromega CD-30 and IA-180 amplifier by navigating to [www.hifinews.co.uk](http://www.hifinews.co.uk) and clicking on the red 'download' button. PM



**ABOVE:** Distortion versus digital signal level over a 120dB dynamic range using CD data at 1kHz (black) and 20kHz (blue)



**ABOVE:** Dynamic power output versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (blue) and 1ohm (green) speaker loads.

### HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	120W / 170W
Dynamic power (<1% THD, 8/4/2/1ohm)	150W / 212W / 145W / 90W
Output impedance (20Hz-20kHz)	0.023-0.11ohm
Freq. resp. (20Hz-20kHz, CD/amp)	+0.0 to -0.3dB/+0.0dB to -0.7dB
Digital jitter (CD, 16-bit/44.1kHz)	115psec
A-wtd S/N ratio (CD/amp)	108.1dB / 76.5dB (re. 0dBW)
Distortion (20Hz-20kHz, CD/amp)	0.0003-0.0004%/0.0006-0.011%
Power consumption (CD/amp)	12W / 22W/490W (Idle/Rated o/p)
Dimensions (WHD)	430x70x265/430x70x300mm