



# conrad-johnson ACT 2 Vaccum-Tube Line-Stage

by Roy Gregory

The language of hi-fi is a constantly evolving and shifting semantic landscape, terms emerging, gaining currency and attached values before subsiding once more into the oral history. It's a strange melange of technological terminology, fashion and marketing speak, prone to abuse and shorthand. Yet many of these terms started life with quite precise meanings and implications. In a world of line-stages, line-amps, transformer coupled passives and signal processors, the poor old "pre-amp" has definitely had its day. But reach back further and you'll unearth an even older term – control amp. It refers of course, to the signal routing function of the pre-amplifier and dates from the days when tape was a serious high-end source and no fewer than three tape-loops was considered normal. Yet it's the term of art that most accurately conjures my feelings regarding the ACT 2. Not, I hasten to add, because the c-j possesses myriad switching options, but because it sets it apart from the crowd while also suggesting the root of its singularity.

Descriptive writing is the reviewer's stock in trade. Putting words to sounds is how we describe a product's musical performance. We can qualify its dimensionality, its presence, its dynamic range and tonal impact. We can discuss its grasp of musical nuance and flow. Listen to the ACT 2 and it instantly conjures a whole host of positive hi-fi speak to define its performance characteristics. But to do so risks missing the point, precisely

because it reduces the performance from a single whole to a series of negotiable and comparable elements. Understand this: the ACT 2 is unlike any other pre-amp I've ever used. How it's different and why it's different is what's important – and why I choose to think of it as a control-amp.

The starting point must be the sonic presentation. The singer is seated on a stool, the band arrayed in an arc behind her, the tight confines and low ceiling of the club ramping up the atmosphere. Her spoken introductions to the songs are light with excitement and humour: She's on familiar ground and the audience is appreciative. Her mind outruns her lungs and she stumbles mid-sentence to snatch a necessary breath. Her guitar, caressed gently as she plays the crowd, springs to life, full of body and warm, resonant presence, the band lock step behind her. Her voice is solid and stable

as she shapes her phrases and dictates the pace of the songs, the lift into a chorus or climax. The applause explodes and the shouts and

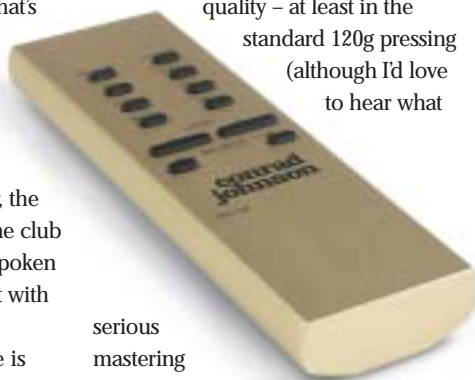
whistles surround me. It's a performance to cherish, musically AND sonically.

Now think about what's missing from that description. What about the recording, the speakers, focus, transparency and rhythm? What about

the hi-fi? You begin to see my point. The record in question, Nanci Griffith's *One Fair Summer Evening* (MCA Records MCF 3435) is a nice enough live recording, but it is hardly audiophile quality – at least in the standard 120g pressing (although I'd love to hear what

serious mastering and cutting could put onto a 180g biscuit). Nor is it a purist production, yet what I'm hearing puts many an audiophile darling disc to shame. Played through the ACT 2 it has a natural warmth and presence that breathes life into the performance; that exists in total separation from the speakers. The music, the acoustic of the club, the crowd noise and band create a single, holistic event, none of which seems to emanate from the speakers. Well, not quite none. It's an old record and well played. The rustle and tick of surface noise is there, but that is lodged firmly in the speakers, completely separate from the musical event.

The naturalness of the ACT 2's performance rests on its overall coherence. Working back from the whole, it's the evenness of the information across the entire acoustic space that strikes you. Regardless of pitch or spatial location, the c-j seems uncannily capable of defining discrete energy ►



► levels across the entire sonic picture, mapping the relative energy spectrum of notes within strands and one strand relative to another, until it weaves it into a single, seamless whole. The effect in musical terms is to resolve each instrument or source of sound, irrespective of level, and preserve it and locate it amongst the others. Going back to Nanci, just listen to the decay on an open guitar string at the end of a track, individual claps in the crowd (all well in front of the band) or the natural separation and identity of the backing harmonies. But the real kicker is the way in which you can hear her sway her head relative to the microphone, reinforcing the impetus, accent and emphasis of her lyrics in the most fundamental and physical way. It's one more layer of insight into the emotional core of the song and the singer, the most intimate of contacts, without having to push the vocals closer than the recording.

This is key to the way in which the ACT 2 goes about its business. By locating and defining energy levels, regardless of their scale, one to another, it provides insight without exaggeration, access without paring away or etching the harmonic structure of notes. The Conrad-Johnson is neither forward nor bright. It's not overtly transparent, focussed or dynamic. Indeed, I can name pre-amps that surpass the c-j in many of these individual respects, but none that can match its overall sense of proportion. It's the definition of one sound or note relative to another at which the ACT 2 excels. As such, it matters not whether the dynamic range (for instance) is that of real life, but that it's correct within itself. It's an effect I've

noted before with Conrad-Johnson's products – most notably the Premier 140 and 350 power amps. But the ACT 2 elevates it to a whole new level: a new level of resolution, a new degree of micro information. The end result is to further divorce

the musical performance from the mechanics of its reproduction, to make it more easily understood, more convincing and ultimately more entertaining.

At the same time consider just how effectively it dealt with the surface noise on the record. Those pops and clicks are signals, sure enough, but they're not part of the original recording, and though the two coexist the contamination is alien to it. Which is exactly how the c-j presents it: In a different plane, with a different texture and spectral balance. It's suddenly easy to separate the two,

both aurally and intellectually. It's there, but it doesn't, it almost can't, intrude. Such is the inner integrity of the musical performance that it recreates, the system, the physical surroundings of the listening room, surface noise and other extraneous signals are rendered external to and distinct from it.

Playing music (or speech) through the ACT 2, you should be struck by the stability of the image it throws. The shape, location and size of individual elements doesn't

change with level; they don't crowd forward or swell as things get loud or busy. Instead, that perfect sense of proportion remains, virtually irrespective of what's played and the level you play it at. Again, it's not necessarily an obvious, or an obviously important trait – until you realise just how unstable most other pre-amps are in this regard, how destructive that is to the willing suspension of disbelief.

Real orchestras don't rush to a line of scrimmage at the front of the pit; nor do the ones you hear with the ACT 2. It makes listening civilized. It also makes it far more convincing.

So, you begin to understand that the ACT 2 is able to set the music apart from earthly considerations, and that that, in turn, sets it apart. But what's the nature of this view that it creates? In c-j tradition, the basic building blocks that construct the whole are still rooted in the correct reproduction of the harmonic envelope. Notes swell, peak and decay with natural shape and complexity and it's this that defines so much of the control amp's performance. Colours are rich, as they should be, while instruments have weight and presence, as they should. Piano is a ►





## Giant Steps

Development at Conrad-Johnson is and always has been an evolutionary process, which means that a product like the ACT 2 doesn't just happen. Instead there's a clear learning curve and developmental path. Which begs the question, where does the ACT 2 come from and what separates it from its predecessors?

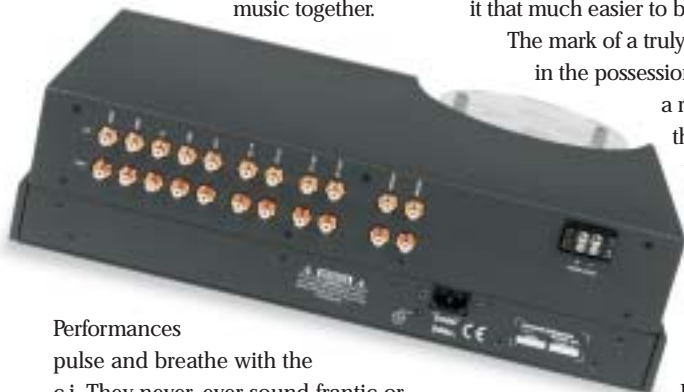
Well, its immediate precursor was the legendary ART, an expensive beast built in two, separate cases. This is the composite triode circuit on which the ACT 2 is based, but designer Bill Conrad identifies three separate areas in which he feels the new design offers technological advances over the older one. First and most obviously, the ACT 2 uses

6N30P valves whose electrical characteristics enable the use of fewer output devices without compromising the output impedance. Internally, there's an even bigger change, with the adoption of new, proprietary Teflon capacitors in place of the ART's polystyrenes. That's quite a switch for c-j, who've relied on the 'styrenes for many years. However, having found what they feel to be a superior solution, they also warn that the new Teflon caps have a burn-in time of several hundred hours, and that in common with Teflon cables, burn-in is eroded by shipping. The final piece in the jig-saw is a general improvement in the quality of peripheral components and

the ever important power supply circuits. Do these changes and developments make the ACT 2 a better pre-amp than the ART? Most of us will never know, simply because the ART was a limited edition anniversary model and you can no longer buy one even if you want to. So, the question, whilst understandable from a human point of view is actually irrelevant. The facts are simple: the ACT2 has learnt its lessons well and is both cheaper and more compact than the ART. Both are undoubtedly superb pre-amps. Only those actually in possession of an ART need concern themselves about this possible replacement. The rest of us can just enjoy its stellar performance.

► particular beneficiary, the instrument possessing a realistic scale and authority that's rare where hi-fi is concerned. The power and vibrational complexity of Starker's Cello (the Speakers Corner/Mercury Bach *Suites*) is awesome – and inspiring, exactly as it should be.

At the same time, giving notes their correct life and decay whilst keeping placement precise locks the tempo of music together.



Performances pulse and breathe with the c-j. They never, ever sound frantic or hurried (unless of course, they should). Music can be urgent and incisive – it should never be hasty! Again, the contribution to relaxed, long-term enjoyment is considerable, meaning that you don't just get to enjoy the ACT 2's performance, you get to enjoy it for longer.

The final element in the completeness of the overall picture again evolves from the resolution of the individual notes. The space between and around players and instruments is beautifully captured and retained. Of course, I've

touched on this in describing the way in which the picture painted remains so stable. But the detail at a closer, more intimate level, the individual rather than the holistic, is also important: The hard, reflective floor beneath a harpsichord, the riser beneath a quartet of double basses. These insights may not be vital, but they contribute to the uncannily natural feel of what the c-j does, making it that much easier to believe.

The mark of a truly great product is in the possession of not one, but a range of qualities that elevate above the crowd. The Connoisseur line-stage offers a stellar contribution to musical reproduction. In its case, that performance is

founded on micro-dynamic integrity – the precise tracking and preservation of steps in energy levels. It generates a sound of compelling power, life, intimacy and vitality, redolent with a driving energy and purpose that leaves other hi-fi sounding pale in comparison. In its own, very different way, the ACT 2 is just as impressive and just as superior to the run-of-the-mill competition. That it is more relaxed, more equitable in its presentation shouldn't be mistaken for any lack of authority when it comes

to the musical message. Arguably less obviously impressive, as we have seen, things are not always as obvious as they seem. However, there is one performance trait that these two products do share, and it's critical to their greatness. Both make the most of whatever you play, somehow transcending the limitations of poor recordings or poor pressings to liberate the musical life trapped within. We can discuss dynamic range or dimensional integrity all day, but their only worth is in the achievement of this final goal. A truly great product puts the music first and on that score the ACT 2 is clearly front-rank.



### TECHNICAL SPECIFICATIONS

Type:	Vacuum-Tube line stage
Valve complement:	4 x 6N30P
Gain:	21.5dB
Phase:	Inverting
Output impedance:	500 Ohms
Max output:	10V
Dimensions (WxHxD):	483 x 137 x 400mm
Weight:	14kg
Price:	£12000

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