

## Equipment Report

Paul Bolin

# Halcro dm10 preamplifier

**M**y last visit to Planet Halcro transformed my audio life. All but the newest readers will recall that the Australian dm58 power amplifier was *Stereophile's* Amplification Component of the Year and overall Component of the Year for 2002. To this day, I have yet to hear any amplifier that equals the dm58's combination of complete neutrality, harmonic generosity, lightning reflexes, and a sense of boundless power that is difficult to describe. Though some others have come close, the dm58 shines as a singular beacon of excellence among power amplifiers.

After designing an amplifier that turned much of the audio world on its head, Halcro's head honcho, Bruce Candy, turned his attention to developing a preamplifier to match what he'd already wrought. Two years later, the results appeared: the dm8 line preamplifier and the subject of this review, the \$15,990 dm10 preamp, which adds a full-featured phono stage to the dm8. Would lightning strike twice, or was the dm58 a once-in-a-lifetime accomplishment for



any designer?

### Rocket science

Like the dm58, the dm10 is a strikingly original piece of industrial design. It fairly bristles with cutting-edge technology, and its appearance matches its space-age design. Matching Halcro's amplifiers, the box containing much of the preamp's innards is suspended between two pillars, resulting in a component that doesn't look as hefty and bulky as it is. Bulky it is, though; the thing is built like

a bank vault and weighs a chunky 50 lbs. The clean, straight-forward front panel contains all of the necessary switching, and an LCD panel shows input, stereo/mono status, attenuation, polarity, and the input in use.

As is his wont, designer Bruce

Candy set some formidable goals for his preamp: unmeasurably low distortion of all kinds, exceptionally low noise, immunity from electromagnetic interference, minimal electromagnetic emissions, and bulletproof reliability. "Exceptional" regulation of the power supply was another central concern; the power-supply switching frequency was chosen to be far above the audioband, at more than 200kHz. Top-quality parts are used throughout the dm10, including [Vishay resistors](#) and [FKP1 capacitors](#).<sup>1</sup>

<sup>1</sup> The fullest available technical information regarding the dm10's concept and design is available at [www.halcro.com/pdf/Halcro\\_preamplifier\\_design\\_concept.pdf](http://www.halcro.com/pdf/Halcro_preamplifier_design_concept.pdf).

**Description:** Full-function preamplifier with remote control and switch-mode power supply. Inputs: 3 unbalanced (RCAs), 3 balanced (XLRs) (both conventional voltage mode); 1 current mode (RCAs). Phono input has variable phono capacitance and load resistance. Outputs: 2 pairs unbalanced (RCAs), bridgeable and 2 pairs balanced (XLRs), bridgeable, both conventional voltage mode; 2 pairs current mode (RCAs), 1 pair for unbridged connection, the other pair used in bridged mode; 1 pair tape output (RCAs); ¼" stereo headphone jack. 6-pin XLR for control data. Maximum voltage gain: 20dB, line stage; 32dB, 38dB, or 44dB, phono MM, +27dB for MC. Line

input impedance: 20k ohms balanced, 10k ohms unbalanced. Phono input impedance: 10k–60k ohms plus 60pF through to 350pF, both continuously variable (MM); 220 ohms plus 4.7nF (MC). Current input mode: 50 ohms. Output impedance: 340 ohms balanced, 170 ohms unbalanced; >30k ohms current mode; 10 ohms headphones; 340 ohms tape. Distortion: unmeasurable, below noise floor. At full specified output, <250 parts/billion (–132dB) for balanced and unbalanced and current modes. Phono equalization: RIAA ±0.5dB. Power consumption: 100W max. AC mains voltage, 40–200Hz: 85–240V AC, 120–340V DC (power supply will operate up to 270V, but

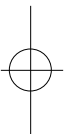
IEC sockets rated only up to 240V by regulatory authorities).

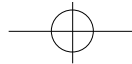
**Dimensions:** 17.5" (448mm) W by 9.4" (240mm) H by 15.6" (400mm) D. Weight: 50.6 lbs (23kg).

**Serial number of unit reviewed:** 0054.

**Price:** \$15,990. Approximate number of dealers: [to come from Stephen].

**Manufacturer:** Halcro, 118 Hayward Avenue, Torrensville, South Australia 5031. Fax: (61) 8-8238-0852. Web: [www.halcro.com](http://www.halcro.com). US distributor: On A Higher Note, LLC, 26081 Via Estelita, San Juan Capistrano, CA 92675. Tel: (949) 488-3004. Fax: (949) 488-3284.





## Halcro dm10

Each input can be assigned to any source component via switches above each set of inputs, the name of the source then being visible on the screen. Seven sets of inputs and multiple outputs are provided, including two sets available for current source connection. Most notably, the dm10 features a fully adjustable phono stage in which gain—and, for MM cartridges, capacitance and resistance—can be varied over a wide range. When used with an MC cartridge, loading is fixed at 220 ohms and 4.7nF.

The following description of the dm10's technical particulars is necessarily sketchy, as Candy is notably closemouthed about the specifics of his designs.

The phono stage has four stages: an “ultra-low-noise input stage” with a 20x gain for MC cartridges, which can be switched out when using MM or high-output MC carts. This is followed

by a high-input-impedance FET amplifier with 4x or 8x gain options. The output of this portion of the circuit is then fed to a 15Hz, third-order, high-

### All the dm10's switching functions are performed by expensive-sounding relays.

pass Bessel filter that serves as a rumble filter. Next, RIAA equalization is applied, and the output of the RIAA stage is fed to a “low-noise input selector stage” that has a gain of 2x, depending on the gain of the selected phono input. Two mini toggle switches on the dm10's rear panel control all of this: one selects MM or MC, the other 1x,

2x, or 4x overall phono gain. These are easy to bump when reaching around the back of the unit or changing cables; I did so on a few occasions, only to find myself wondering where the gain had gone. The line stage, as far as I can tell from Halcro's white paper, also features four distinct gain stages. The dm10's volume control includes two identical stages in series.

The big Halcro features extensive microprocessor control. Each audio channel has its own controller, a second serves the front-panel display and user interface, and a fourth controls the activity of the other three processors. All switching functions are performed by expensive-sounding relays. Relay switching was chosen because it offers zero “on” resistance, infinite “off” impedance, very low “off” capacitance, and zero distortion. While the dm10 doesn't allow the user to vary the individual gain of each input, it reaches the same

## Measurements

It's rare to find ground-lift switches in consumer audio equipment, much though they are needed, but the Halcro dm10 is one such component. Arranging the grounding between my Audio Precision System One to get the lowest noise was therefore a relatively simple business, without me having to reach for a “cheater” AC adapter. I also used the dm10's supplied Shunyata AC cord. (Note that I was only able to measure the dm10 in conventional voltage mode. I also didn't test the headphone jack, which I will do in a Follow-up.)

I first tested the dm10's phono stage. The MM input impedance at 1kHz was a high 53k ohms with the rotary control at its rightmost position (“60k”), 9.8k ohms with it set to the leftmost position (“10k”). The MC input impedance was 220 ohms as specified. The three gain settings of the moving-magnet setting provided 32dB, 38dB, and 44dB of gain at 1kHz, exactly as specified, while switching in the moving-coil stage added another 26dB. (All figures measured at the tape output jacks and with the AP source impedance set to 25 ohms.) The phono input inverted absolute polarity, and the RIAA error (see fig.1) was very low, at less than  $\pm 0.1$ dB. Fig.1 also shows that the

Halcro implements the IEC-recommended LF rolloff, reaching  $-0.5$ dB at 30Hz and  $-3$ dB at 15Hz. The phono-stage channel separation at 1kHz was excellent, at almost 80dB.

The dm10's phono stage was very quiet; the A-weighted signal/noise ratio with the input set to MM, highest gain, measured 83.2dB (ref. 5mV input), this reducing to a still excellent 67.1dB, unweighted, wideband. Set to highest-gain MC, the S/N ratio was a still superb 72dB, A-weighted (63dB, unweighted). Because of the low noise, I was able to get an accurate reading of the phono stage's distortion—a mere 0.0007% at 1kHz for the 32dB MM setting with a 6mV input signal, with the second harmonic the highest in level at just  $-103$ dB (not shown). Correlating with that low distortion, the dm10's phono overload margins were superb. For the MM setting in the lower two gain settings, I measured 27dB at 20Hz and 25.9dB at 1kHz and 20kHz, these figures dropping to 21.1dB and 19.9dB for the highest gain mode. The corresponding MC figures were 21.3dB and 19.9dB for the two lower gain settings, and 15.2dB and 13.9dB, respectively, for the highest gain mode. The latter figures are good rather than

great, but it must be remembered that this mode's very high gain of 70dB will be used only with very-low-output cartridges.

As set by PB for his auditioning, the dm10's balanced line-stage gain was 5.53dB with the volume control set to “0,” 25.53dB with it set to “20.” The figures for the unbalanced input to unbalanced output were 6dB lower, as expected. Both balanced and unbalanced I/O jacks preserved absolute polarity, and while the input impedance was almost exactly twice that specified, at 21k ohms unbalanced and 43k ohms balanced, the difference is in the right direction for optimum system matching. The output impedance was basically to specification, at 171 ohms unbalanced and

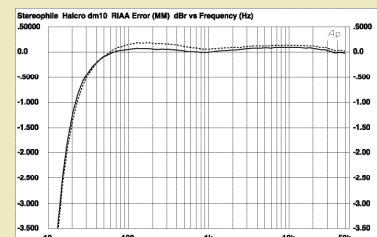
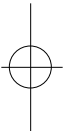
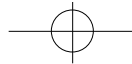


Fig.1 Halcro dm10 phono stage, MM, RIAA error at 10mV input at 1kHz (0.5dB/vertical div., right channel dashed).





**Halcro dm10**

end by remembering the last volume setting used for each source.

Topnotch mechanical design was also a priority. A switching power supply such as the dm10's necessarily contains inherently noisy digital circuits. To solve this problem, Halcro encases the audio, display-panel, and power-supply sections each in its own internal aluminum enclosure, in addition to further extensive shielding.

There are more extras, including a headphone amp (which I didn't try, as I couldn't find my elderly AKG 240 headphones) and a 5V trigger that allows the dm10 to turn on Halcro power amplifiers by remote control. A thorough remote with excellent ergonomics is included, as is a very complete owner's manual.<sup>2</sup> As with the dm58, there appears to be no way to open up a dm10, so the exact configuration of the electronics remains a mystery shrouded in an enigma.

**Countdown**

Installation was straightforward: I set it on my reference Grand Prix Audio Monaco Modular equipment rack on a GPA F1 carbon-fiber shelf. The dm10's jacks look to be of superb quality, and were a tight fit with every cable I used.

Break-in time was minimal; within 25 to 30 hours, the Halcro had lost its initial, somewhat pinched sound and settled into an unchanging routine. I left the unit fully powered up, but in Mute mode when not listening. Despite this extended duty, it never became more than slightly warm. During four months of listening, the dm10 never misbehaved, produced any untoward noises,

<sup>2</sup> My review sample of the dm10 arrived nestled in form-fitting foam and packed in a heavy-duty Anvil-style road case. The preamp was further wrapped in a fabric overlay, and white gloves were provided for handling. The dm10 is also supplied with a Shunyata Diamondback power cord, the first instance I can recall where a manufacturer has supplied an aftermarket AC cord as part of the package.

or did anything other than perform its appointed tasks with perfect precision—as well it should for \$15,990.

**Blastoff**

In accordance with the “change one variable at a time” requirements of proper audio reviewing, I first listened to the dm10 strictly as a line stage. To get a grasp of the Halcro's sound as a line stage, I stuck with my familiar Aesthetix Io Signature and Manley Labs Steelhead phono stages for LP listening. Unsurprisingly, the dm10 displayed much of the familiar sonic character of its sibling amplifiers. Paramount was its supernatural quiet. The noise floors of Halcro components simply must be experienced to be appreciated, as there is nothing else like them. This **silence allows for an almost unbelievable** level of detail retrieval.

I've said it before, but it bears repeating: retrieval of detail alone does not

**Measurements**

330 ohms balanced. The tape-output source impedance was higher than specified, at 673 ohms.

The balanced line-stage frequency response was perfectly flat from 20Hz

to 20kHz (fig.2), -0.4dB at 10Hz, and 1dB down at a high 144kHz. The unbalanced response was basically the same as the balanced, and the response didn't change with the volume-control setting. One thing that should be noted in this graph is the slight (0.2dB) channel imbalance, which persisted at all volume-control settings. (The balance was set to dead center for the measurements.) The line-stage channel separation (not shown) was superb, at almost 130dB at 1kHz.

The dm10 can deliver very high output voltages with virtually zero distortion. Figs.3 and 4 show the THD+noise percentage in the pre-amplifier's output plotted against

voltage for the balanced and unbalanced outputs, respectively. At our usual 1% THD clipping point, the dm10 could output a balanced 16V into a high 100k ohms, and more than 10V even into the demanding 600 ohm load. (The corresponding unbalanced figures were half these voltages, as expected.) Note the downward slope in these graphs: this means that at voltages less than the clipping point, the measured THD+noise is actually dominated by noise, not distortion. Therefore, plotting the THD+noise against frequency at a 10V balanced output and 7V unbalanced (fig.5) really shows only noise, at least below 10kHz. With the input shorted and the volume control at its

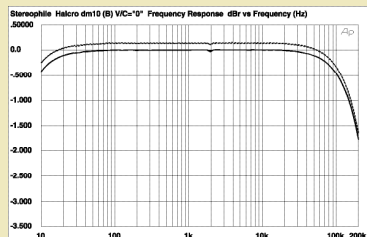


Fig.2 Halcro dm10 line stage, balanced frequency response at 1V into 100k ohms with volume control at “0” (0.5dB/vertical div., right channel dashed).

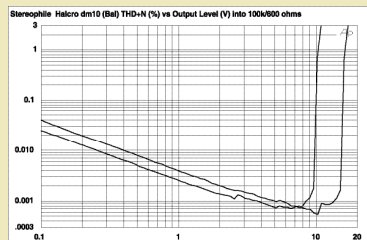


Fig.3 Halcro dm10 line stage, distortion (%) vs balanced 1kHz output voltage into (from bottom to top): 100k ohms, 600 ohms.

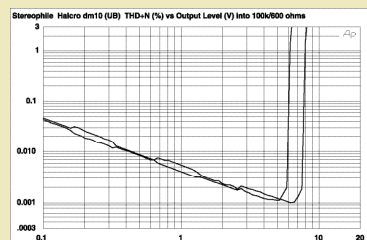


Fig.4 Halcro dm10 line stage, distortion (%) vs unbalanced 1kHz output voltage into (from bottom to top): 100k ohms, 600 ohms.

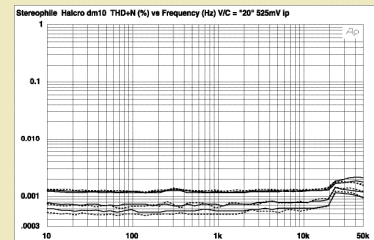
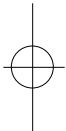
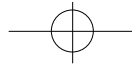


Fig.5 Halcro dm10 line stage, THD+N (%) vs frequency at (from bottom to top): 10V balanced into 100k ohms and 600 ohms, 7V unbalanced into 100k ohms and 600 ohms.





equal transparency. True transparency requires that a listener be able to place all of that miraculously retrieved detail into the context of a musical event. The dm10 always placed the enormous amount of information it passed along in a context, at least with any recording that allowed it to do so.

It was a total gas to listen through the Halcro to such highly complex sound collages as Manu Chao's *Esperanza* (CD, Virgin 10321 21), Future Sound of London's *The Papua New Guinea Translations* (UK CD, Jumpin' and Pumpin' CD TOT52), and Porcupine Tree's *Voyage 34: The Complete Trip* (UK CD, Delirium DELEC CD074). Such

recordings are painstakingly constructed assemblages of multiple interlocking layers. When a component cuts through the murk as thoroughly as did the dm10, not only the details themselves but the spatial, timbral, and temporal relationships of all of those details come together far more precisely, to express the musicians' true intentions with utmost clarity.

But those are highly processed recordings, you say. Fair enough. Put on purely acoustic music such as Kodály's *Magnificat*, from Philips' demonstration *SACD Multichannel Hybrid Disc* (no catalog number). The unaccompanied women's chorus floated deliciously out

into the room, each voice separate and unique and firmly anchored to a place within the space in which the singer had performed. This was true transparency.

The Halcro's soundstaging is easy to describe: What was on the recording was what came through the dm10, nothing more, nothing less. Timbral balance was generally excellent. Bass was neither exaggerated nor diminished—what was on the CD was what I got. The stride of Ron Carter's upright bass on Jim Hall's "You'd Be So Nice to Come Home To" (SACD, Mobile Fidelity UDSACD 2012) was rock-solid, with superb pitch definition. The dm10 handled ultra-deep synthesized low bass with ease and

## Measurements

maximum setting, the unweighted wideband S/N ratio (ref. 1V) was 84.7dB, due to the presence of a small amount of ultrasonic noise. Switching in an A-weighting filter improved the ratio to 106.5dB.

The dm10's actual distortion is at or below the residual level of the lowest-distortion signal generators I have on hand: the Audio Precision System One's analog generator and a PC-based, National Instruments digitally synthesized generator. A plot of the dm10's unbalanced output driving a 1kHz signal from the latter into a lowish 8k ohm load is shown in [fig.6](#). What harmonics are visible are below -110dB (0.0003%), which is extraordinary linearity. The picture was similar when I tested the Halcro's high-frequency intermodulation. The spectral products you can see in [fig.7](#) lie at around the -100dB level (0.001%), which is negligible.

Halcro's dm10 offers measured performance that is both beyond my ability to fully characterize and beyond reproach. Wow.

—John Atkinson

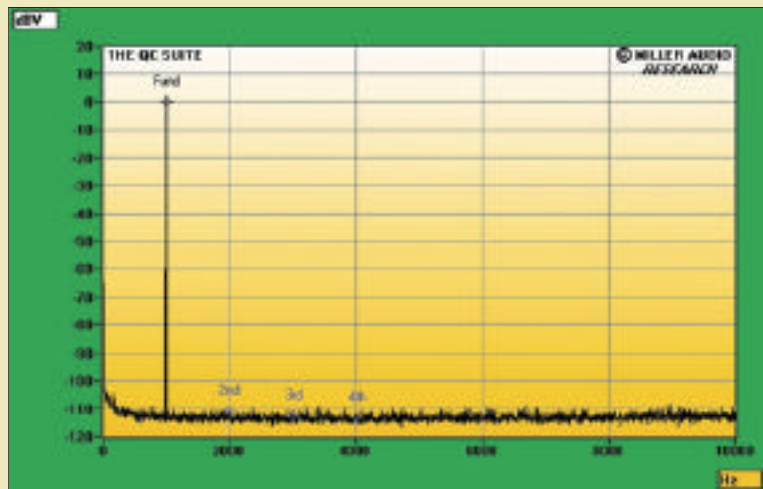


Fig.6 Halcro dm10 line stage, spectrum of 1kHz sine wave, DC–10kHz, at 1V unbalanced into 8k ohms (linear frequency scale).

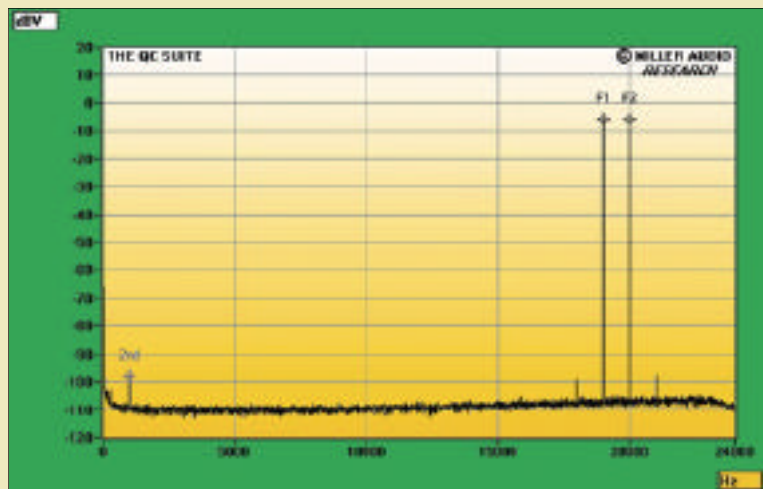
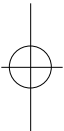
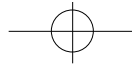


Fig.7 Halcro dm10, line-stage HF intermodulation spectrum, DC–24kHz, 19+20kHz at 1V unbalanced into 8k ohms (linear frequency scale).





consistent excellence.

Voices and midrange-heavy instruments were presented with openness, harmonic completeness, and wholly individualized character. Carla Bley's *Night-glo* (LP, WATT/16) features some especially creamy and rich brass and woodwind arrangements on the title track and "Pretend You're In Love." The Aesthetix and Halcro came through like champs on this smoochy adult makeout music. The dm10's midrange and treble were unconditionally grainless and exceedingly smooth, the top octaves very smooth and equally extended—a paradigm of high fidelity.

Some, including our own Sam Tellig, have grouched that Halcro's electronics sound a bit cool. While I respectfully disagree with Mr. T as to the dm58, I did hear a meager degree of that coolness in the dm10's line stage. Images were fully formed and dimensional, but ever so slightly less palpable than when heard through the VTL TL-75. I occasionally—not often—wished for just a bit more warmth, usually in the dm10's presentation of CDs. Far more often than not, the Halcro's extraordinary resolution and dynamics overcame my petty carping. Perhaps I was simply hearing artifacts of the digital process that have been veiled by other preamps.

Explosive dynamics were also much to the fore. The *Poem of Chinese Drums* and Hugh Masekela's "Stimela," both from Burmester's *Demonstration CD 3*, had genuinely startling force from top to bottom. The way the drums popped into space when they enter before the first chorus of Elton John's "Levon,"

from the remastered *Madman Across the Water* (Japanese CD, Universal UIC4-9104), was wondrous.

Things happened with almost brutal immediacy through the dm10, and the bigger those moments were, the more powerfully the Halcro rendered them. The gentle moments were all the more

**I could have sat  
and counted the heads  
and bodies of the  
individual background  
singers at the end of  
Elton's "Tiny Dancer."**

gentle. I could have sat and counted the heads and bodies of the **individual background singers** at the end of Elton's "Tiny Dancer," should I have desired to do so, but why bother? The point of the exercise is music, not such anal-retentive audio geekery.

The music sounded glorious. The Halcro's ability to respond instantaneously to transients, however steep, brought an intensely lifelike quality to the presentation of the piano and guitar. There was no sense of delay or smearing when a key or string was struck, only the sense of an action done in perfect consonance and in real time.

**Escape velocity**

While I was deeply impressed by the

dm10's performance as a "mere" line stage, that didn't prepare me for the quality of its phono stage. I've lived with some remarkable phono preamplifiers: the Aesthetix Io Signature, the Manley Steelhead, and, for a few weeks each, the +\$20k FM Acoustics 222 and the two-chassis, \$32,000 Boulder 2008. The dm10's phono preamplifier was fully competitive with the Boulder, which is everything Mike Fremer said it was.

Again, the most remarkable aspect of Halcro's phono stage is its complete and unconditional background silence. The only comparably quiet standalone phono stages I've heard are the megabucks Boulder and the FM Acoustics.<sup>3</sup> The dm10's silence permitted previously unheard microdetails to rise from the noise floor and flesh out the sonic picture in a thousand little ways that added life to the illusion of recorded music.

Start with the best: Hearing Frank Sinatra singing "Guess I'll Hang My Tears Out to Dry" or "One for My Baby," from *Only the Lonely* (LP, Mobile Fidelity MFSL 1-137), through the dm10 was one of those special audio moments. Every detail of the swell and reach of Sinatra's voice, his uncanny ability to internalize and project the bleakest emotions, was simply overwhelming. Those trademark long breaths and subtle pauses had a vividness and authenticity that transcended mere hi-fi. Transient speed plus silence and harmonic bounteousness here equaled virtual reality.

Michael Fremer's acute observation that the greatest components make time move slower was proved time and again as I listened to LPs through the dm10. Things did seem to literally slow down, as more delicate details floated effortlessly into place within the soundscape. Perhaps the best way to describe this phenomenon is that the Halcro, like the Boulder 2008, filled in spaces that lesser phono stages leave empty. The effect was like comparing bedsheets of 150 and 500 thread counts. There's so much more substance in the finer weave—more spaces are filled. Thus it was with LPs through the dm10—the sonic weave was so much finer and more nuanced. And the imaging! Instrumental and vocal images of immense, convincing solidity flowed effortlessly and believably off of LP after LP.

The Jayhawks' cover of "Bad Time," from *Tomorrow the Green Grass* (LP,

**Associated Equipment**

**Analog source:** SOTA Cosmos Series III turntable, Graham 2.2 tone-arm, Dynavector XV-1S cartridge.

**Digital sources:** Esoteric DV-50 universal digital player, Classé Omega CD/SACD player.

**Preamplification:** Manley Labs Steelhead, Aesthetix Io Signature phono stages.

**Power amplifiers:** Lamm ML1.1, VTL MB-450 Signature, Halcro dm58, McIntosh C501 monoblocks.

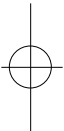
**Loudspeakers:** Focal-JMLab Nova Utopia Be, Legacy Audio Focus 20/20.

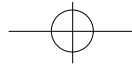
**Cables:** Phono: Hovland Music Groove 2. Interconnect: Acoustic Zen Silver Reference & Matrix Reference, Nordost Valhalla, Siltech SQ-110

Classic. Speaker: Nordost Valhalla, Stereovox LSP-600, Cardas Golden Reference, Siltech LS-188 Classic. AC: Shunyata Anaconda & Anaconda Vx, Siltech SPX-30 Classic, Wireworld Silver Electra 3+.

**Accessories:** Shunyata Hydra & Hydra 8 power-distribution/conditioning (front end), Walker Audio Ultimate High Definition Links; Grand Prix Audio Monaco stands, Ultra Resolution Technologies Bedrock stand, Ganymede isolation footers; Caig Labs Pro Gold contact enhancer; Ayre-Cardas IBE system-enhancement CD, Cardas *Frequency Sweep/Burn-In LP*; Argent Room Lenses, Disc Doctor & LAST Labs record-care products. —Paul Bolin

<sup>3</sup> My memory of the FM Acoustics 222 is vivid, despite the nearly five years that have passed since I last heard it.





## Steel Cage Death Match, or Four Front Ends Considered

**D**uring the period I was reviewing the Halcro dm10, VTL TL-7.5 Reference, and BAT VK-51 SE preamplifiers, John Atkinson decided it would be enlightening to have me listen to these state-of-the-art contenders in comparison to the venerable Mark Levinson No.32 Reference (reviewed by Jonathan Scull in January 2000). How, we wondered, would the new boys stand up when compared not only with each other, but also with a long-term resident of Class A of "Recommended Components"? So, over the Thanksgiving holiday weekend, I did just that.

All four were auditioned over the course of four days. The solid-state units were warmed up in standby for

were used on the Halcros.

In back-to-back listening sessions, the character of each preamp came into sharper focus. The VTL TL-7.5 Reference's strongest suit remains its complete lack of discernible sonic character. It had a vanishingly minuscule sonic fingerprint and, as noted in my October 2003 review, does everything so well that it is beyond reasonable criticism. There's nothing meaningful I can add to my earlier review comments.

The BAT VK-51 SE sounded tubier, in the best way possible, through the ultra-neutral dm58s than it did through the *tube* amps I used when auditioning it for review a few months back (November 2003). Through the Halcro

amps, the BAT was abundantly tactile and sensuous; "seductive," in an almost physical sense, accurately describes this combination. Bass power and precision were

awesome, and the

BAT's enveloping, enfolding soundstage, intensely saturated tonal colors, and incredibly delicate and tactile presentation of dynamic contrasts made it a hedonist's delight.

The Halcro dm10 was dazzlingly, impossibly quiet, had majestic overall dynamic performance, and was, by a whisker, even more transparent than the VTL. But when taken strictly as a line stage, it was to my ears just enough cooler in overall character to make a difference I found important. Its precise definition of images and superb sense of space and air combined to create a striking illusion of reality, but there were times I wished that it were just a little more plush and giving.

There's no argument that the Levinson No.32 set a high standard for a number of years, but its age has begun to show. Comparatively speaking, the Levinson's backgrounds were nearly as silent as the

Halcro's, and its user interface was the best of the four, which is high praise. But on the sonic report card it came up short. The No.32 sounded much darker than the tubed BAT, but without the latter's ripeness, palpability, and flat-out sexiness. The Levinson couldn't seem to generate as spacious a soundstage as the competition, and it consistently put me further away from the music, emotionally, than did the other three. It skated over the surfaces of music, albeit very stylishly, whereas the BAT, Halcro, and VTL dug into the music's substance with appreciably more conviction.

Time has marched on; while the \$15,950 Levinson No.32 still has an excellent line stage, the others offer a wider performance envelope. The BAT and VTL have appreciably lower (though still very substantial) prices — \$9000 and \$12,500, respectively — while the Halcro offers as fine a phono stage as I have ever heard as an integral part of the package.

I can feel one of JA's steady, quiet stares directed at me and calling for some conclusions, so I must beg just a bit of forbearance and indulge in a bit of Solomonic baby-splitting. Were I forced to decide which line stage I would opt for (under the threat of having my LP collection incinerated before my eyes should I fail to do so), I would fess up and go for the VTL. It's the finest pure line stage I have heard, barely nipping the Halcro by a few thousandths of a second at the finish line of this Grand Prix. Its supreme neutrality makes it as nearly perfect a reviewer's tool as exists in the audio world. As noted above, when taken strictly as a line stage, the Halcro sounds, to me, the tiniest bit cool, being ever-so-slightly leaner than the VTL. However, if I were forced to abandon having an outside phono stage, the story becomes somewhat different: As a full-function preamplifier, the Halcro dm10 has no competition and would



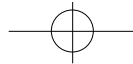
Cutline here. Cutline here. Cutline here. Cutline here. Cutline here. Cut-

a minimum of 48 hours prior to being auditioned; the tubed units were allowed one to two hours of warmup and stabilization time before I did any listening. All comparisons were made with the same system: my regular analog rig (see "Associated Equipment" sidebar), the Aesthetix Io Signature phono stage, Esoteric DV-50 universal digital player, Halcro dm58 amplifiers, and Focal-JMLab Nova Utopia Be loudspeakers.

Acoustic Zen Silver Reference cables were used between the Aesthetix and the individual line stages and between line stages and amplifiers. Siltech SQ-110 Classic carried the Esoteric's signal to the line stages, and LS-188 Classic speaker wire fed the Nova Utopia Be's. Shunyata's Hydra 8 was used as the power source for all front-end components. Shunyata's Anaconda power cables supplied the juice to all of the preamplifiers, and an Anaconda Vx did the honors for the Esoteric. Siltech's SPX-30 Classic AC cords



Cutline here. Cutline here. Cutline here. Cutline here.



## Halcro dm10



Cutline here. Cutline here. Cutline here.

be my first choice.

The BAT VK-51 SE does far more than hold its own in this company, finishing hard on the Halcro's tail. While it's sometimes a little more seductive than life, this can sometimes be a fine thing, especially if one is married to somewhat lean- or bright-sounding speakers. The VK-51 SE will justifiably be the favorite of many, and I would not argue with its boosters for one second—there is plenty to fall for in its generous, appealing character. Were I a listener looking for a line stage to love strictly for itself and not a reviewer in search of perfect neutrality, I could see myself among those BAT partisans.

There are definitely systems I have heard in which each of these three stellar performers would be the first and best choice. I could have a long and meaningful relationship with each of them.

Picking among these magnificent line stages is much like picking your favorite Bond Girl—there are no bad choices, and differences in individual taste will control one's particular preference. Just because I go for Denise Richards doesn't invalidate for one second your preference for Barbara Bach or Claudine Auger. Shouldn't we all be so lucky as to have such choices? —Paul Bolin

American 40036-1), was gorgeous beyond words. That the Jayhawks could infuse this piece of Grand Funk fluff with such soul and yearning is quite something by itself. That it sounded so heart-stoppingly marvelous through the dm10 was something else altogether. Karen Grotfeld's swinging piano and passionate harmony vocals leaped into prominence. The warmth and intimacy of Stan Getz's sax and Astrud Gilberto's voice on *Getz/Gilberto* (LP, Verve V6-8545) sent tingles up the back of my neck. Chris Isaak's "Wicked Game," from *Heart Shaped World* (LP, Reprise 25837-1), was pure sensory overload: reverb trails seemed to last forever, so silken and delicate as to approach the erotic. Rickie Lee Jones' fabulous remake of

haps the most completely neutral reproduction of LPs that I have ever heard from any component or combination of components.

### Re-entry

Coming back to earth after an experience such as that provided by the dm10 takes a little concentration. The oxygen gets very thin at the **stratospheric levels of performance** offered by this extraordinary preamplifier.

Conventional audio wisdom would dictate that all of Bruce Candy's complex circuitry and relentless application of high technology in the service of sound reproduction would bleach the life, color, and humanity out of the music that comes through it. The dm10 does nothing of the sort. While the line-preamp section of the dm10 is perhaps a couple of ticks toward the cool side of the spectrum, its performance, considered as a whole, has so much to recommend it that minor quibbles become, as is so often the case with components at this exalted level of performance, a matter of taste. But when the phono stage is taken into consideration, any minor reservations vanish. LPs played through the dm10 simply sounded more real than with any other phono stage I have heard, save for the astrally priced Boulder 2008. Even then, I'd have to hear the two stages back to back to determine if the Boulder is in fact superior to the Halcro.

Yes, at \$15,990 the Halcro is expensive, but when comparable pairings of line and phono stages are considered, it emerges as, if not a bargain, then at least a fair deal. The closest overall competition that I have heard from multiple components (exempting the dizzyingly expensive Boulder 2008) is the Manley Labs Steelhead paired with the VTL TL-7.5 Reference line stage. Those two, plus a 1m length of, say, Acoustic Zen Silver Reference interconnect, totals \$20,800 —\$5000 more than the Halcro.

But as good as the Steelhead is—and it's superb—the dm10's phono stage is even better. I know of no other **full-function preamp that comes standard** with such a stellar phono stage, though mbl and Burmester offer modular preamps that can be equipped with phono stages. I have heard neither of these worthies, but within the realm of my experience, the Halcro dm10 is not only a superb line stage, it stands alone as *the* everything-included-for-one-price preamplifier. Incredibly, Bruce Candy has done it again. ☒

### The oxygen gets very thin at the stratospheric levels of performance offered by this extraordinary preamplifier.

the Left Banke's immortal "Walk Away René," from *Girl At Her Volcano* (LP, Warner Bros. 23805-1B), was simply ravishing and totally heartbreaking.

Soundstaging was something near ideal. Each record presented a unique and individual picture of instruments and voices in space. The dm10 imparted no extra expansiveness to somewhat boxy-sounding jazz LPs engineered by Rudy Van Gelder, and it let large-scale music, such as Bruno Walter's full-bodied take on Beethoven's Symphony 9 (LP, Columbia Masterworks M2S 608), expand into large, unerringly delineated spaces.

Where, as I described above, the line stage has the skimpiest scrim of cool, the dm10's phono stage was clearly voiced toward a somewhat warmer sound—at least, that's how it sounded to me. The most thought-provoking aspect of this is that the uncanny resolution that is one of the most defining characteristics of Halcro's power amplifiers and the line stage has apparently not been affected by the choices that have been made regarding the phono stage. The combination of phono and line stages in the dm10 produces per-