

# AVI Laboratory Series Integrated amplifier

This 200W amp has plenty of finesse to complement its muscle

PRICE	£1400
SUPPLIER	AVI
CONTACT	01453 752656

**A row of indigo** blue lights corresponds with the six inputs, record and mute on the satin-textured, milled aluminium fascia of AVI's new Laboratory Series integrated amplifier. (Silver might be the 'new black' for 21st Century hi-fi but, like Naim, AVI is sticking with the old).

The 50mm bead-blasted aluminium volume control perhaps won't get much use as the amp is remote-operable — and very small increments of level are possible with a light press of the handset's plus/minus buttons; the signal may also be muted. The plastic-cased handset caters for input selection (green buttons), two tuners and CD player, with standby (blue); the track/program/repeat/search controls for CD are RC5 coded, and so worked conveniently with my Meridian 508/24 player. The remote requires four AAA batteries: a point yet to be addressed in the user's manual, although replacement fuse types for 110–120V or 220–230V are specified.

On the fascia itself are push-buttons for disc, video, AV, CD, tuner, tape; and spaced to the right, record. The tape loop is buffered and allows listening to one source whilst recording from another. The review sample was supplied as line-level only but for an additional £200 a

**AVI claims that its integrated can outperform its previous pre-amp working with a couple of monoblocks — with a saving of £1000**

phono stage can be fitted, switchable between m-c or m-m. For a surcharge of £50 this can be optimised for any specified cartridge.

At the rear there are, from right to left, the corresponding input phono pairs (gold-plated) with earthing post for tonearm lead, plus record in/out and pre-amp out; IEC mains socket, power on and fuse; and stout, shielded speaker-lead posts. These accept bare wire, spades or 4mm plugs. AVI recommends replacing the



AVI's 50mm-diameter volume control dominates the dark fascia

plastic push-fit covers after termination.

The 200W/ch amplifier has a mild switch-on (and power down) thump, but normally one would leave the unit in standby — command from handset only. The last selected function remains active when listening is resumed. The pre-amp out allows bi-amping with AVI's partnering Laboratory Series stereo amplifier.

At 95 x 315 x 350mm (hwd), this is a compact design — these dimensions include the 40mm outer anodised heat-sink ribs — but the weight

is a substantial 12.8Kg. I used it on a Torlyte platform on a carpeted solid floor.

AVI developed the Laboratory Series Integrated over a period of 13 months, and claims that it outperforms its earlier pre-amp used with a pair of monoblocks (a saving of £1000).

Be warned, though, that should a dealer demonstrate this product switched on from cold, you'll probably dislike it. In the first 20 minutes it makes music impersonal. It only gets more

involving after about 1½ hours and further improves over days.

In my DNM system I use Reson solid-core, spaced conductor speaker cables. AVI has a dislike of this type and so I went for Kimber 4PR: which is an appropriate price for for a £1400 integrated. Much listening was done via AVI's recent Pro-Nine Plus speakers (reviewed next month). I was even more interested in hearing it with my Quad electrostatics (notwithstanding the high power output). Remarkably, the Integrated reproduced a wider, deeper soundstage than I had experienced with them up to now. Instruments were tightly held in focus and one could concentrate on any musical line or low-dynamic detail at will.

With the three Aranjuez tracks on the Columbia/Legacy remastered *Sketches Of Spain* [CK 65142], there's a great deal of small-scale peripheral detail to begin with; then Miles Davis plays against a substantial brass group. Through the AVI all this separated out superbly. As did the low-level harp parts on Claudio Abbado's new Debussy disc, [DG 471 332-2; see p69], with every note in the cascades clear in *L'Après-midi d'un Faune*; and in 'Sirènes' the women's voices were firmly set at the back of the soundstage.

Keith Johnson's studio 'walkaround' on

Reference Recordings' invaluable test disc [RX-1000] verified the AVI's ability to recreate ambience and space convincingly.

To get away from digital sources I listened to known voices from taped Radio 3 programmes via a Sony Walkman Pro (albeit with bog-standard interconnect). The Laboratory Series Integrated reproduced well the nuances, sibilants and breath inhalations caught by the microphones. The Reson speaker cables sounded faster, with sharper focus and attack, but thinned the sound very marginally; on BBC material most listeners would prefer the warmer balance given by 4PR. (The Reson cable and DNM amplifiers are unquestionably synergetic.)

With orchestral and chamber music I felt that AVI's integrated gave some interesting insights into musical interpretation. For example: I had just come across an Electrola CD of a 1959 Philharmonia recording I had never previously heard, Karajan's *Peter And The Wolf* (which received sniffy reviews at the time it was issued). Not only was the sound superb, in the classic EMI early stereo, Kingsway manner, but one could readily grasp the musical logic of slow tempos which earlier critics had so disliked. The

cat (clarinet) must be the slinkiest on records!

The rich humour of Red Priest in Vivaldi's concerto 'La Notte' (see p71), notably in track five, with the *sotto voce* harpsichord chromatic runs and 'bent' intonation, registered fully, confirming that this is a disc not to be missed — though the AVI wasn't kind to poor tuning in other period-instrument performances.

After a few days, I began to prefer manual control for level setting, although the long shaft is a little springy in feel (the knob is set into a fascia cutout and the motorised potentiometer is towards the back of the chassis). It was worth crossing the room to make the finer adjustment, given the potential for realism here.

There are no tone or balance controls; and a headphone socket would have been a plus. But input choice is ample and the pricing allows a cost saving for non-turntable users. Offering over 300 watts into 4 ohms, it should suit a range of complex/low sensitivity speakers. It offers a non-fatiguing, musically involving performance. It's a neutral, fast-sounding unit capable of well focused soundstages and accurate presentation of different material.

**WORDS CHRISTOPHER BREUNIG**

## TECHNOLOGY

This is 200W/ch design uses bi-polar output devices fed from a massive power supply, and is built on a rugged steel base with 40mm aluminium heat sinks. Behind the 10mm bevel-edged fascia is a 140mm-diameter, silent, toroidal transformer, with the principal PCB inverted and set under the steel top-plate. At the back is a second PCB, linked via a ribbon connector to a smaller, vertical board behind the fascia which deals with the switching. Distortion (THD) is quoted as <0.002% (at 1kHz, -1dB below full power), into either 4 or 8 ohms, with IEC 'A' wtd signal-to-noise rated at 112dB. Frequency response (-3dB) is given as 1.5Hz-250kHz. Input sensitivity (for 150w into 8 ohms, 1kHz) is 530mV, impedance 14k ohms.

## KEY FEATURES

- High power but compact design
- Remote controlled inputs and volume
- Six inputs/record out; phono stage option

# Mirage OM-200 subwoofer

PRICE	£800
SUPPLIER	API
CONTACT	01787 249656
WEB	www.miragespeakers.com

**Mirage's intriguing** Omnisat system [HFN Oct '02] was rather hampered by the LF150 subwoofer supplied for that early review. The optimum match was always intended to be the OM-200, which has only just become available.

The LF150 is a plain vinyl box, and looks out of keeping with the startlingly original Omnisat satellites (seen below). This criticism can hardly be levelled at the OM-200, with its smoothly rounded edges and superb black gloss finish (it's also available in cherry). In place of the LF150's single 250mm twin-vented polypropylene cone

unit with a vapour deposited titanium driver, the OM-200 distributes the load between two 200mm units, one each end of the unit, firing

180° apart. Each has its own attendant reflex-loading port.



Mirage describes the OM-200 as an 'omnipolar' design, which might perhaps be misleading as sound propagation at low bass frequencies is largely omni-directional anyway. But the Mirage approach claims several incidental advantages. For example, Mirage says, the enclosure sees no net turning moment as the cones move in and out. Rather, the whole enclosure is subject to compression and rarefaction, which it should be well capable of sustaining. Also, the smaller cones should be able to follow the applied waveform more faithfully. Finally, the sound source is distributed across a long baseline, which should soften room resonant modes.

There are other differences too. The OM-200 has more power — 200 watts continuous, 800W peak (LF150: 150/600 watts) and deeper bass 20Hz at -3dB (against 23Hz). The OM-200 also boasts a continuously variable phase control and a music/video switch, but forget the latter.

This is a much better subwoofer than the LF150. It does go deeper into the bass, and it also goes a little louder. Low-pass filtering is similar, with good attenuation of midband information in each case. The critical differences, however, lie elsewhere. The OM-200's bass breathes more naturally and evenly across the band, and the humped-up response towards the top of the LF150's passband has gone — before, it either



sounded lean and controlled, or it was meaty but overblown in the mid-bass.

The OM-200 sounds much more even across its passband. As a result, the whole system sounds more integrated and controlled across the band, the subjective effect extending right through the midband. Imagery is more explicit and consistent, and the performance of the whole Omnisat system benefits immeasurably. In the original review we concluded, 'The subwoofer supplied for this system doesn't allow the system to express itself ideally.' Well with the OM-200, it does. It costs a lot more (the LF150 sells for £370), but finally the satellites have a fitting partner.

**WORDS ALVIN GOLD**