

A-1VL

INTEGRATED DIGITAL STEREO AMPLIFIER

ONKYO
IMAGINATIVE SIGHT & SOUND

VL DIGITAL **192kHz/24bit**



Available in Silver

Enter the World of Pure Audio with Exclusive Onkyo VL Digital Technology

It's here, the world of digital components with high power from slim, stylish designs. But it's not just power and a pretty face that set the A-1VL apart from the rest. A low-impedance design, featuring carefully selected audiophile quality parts, makes for pure, crystalline sound. But here's the kicker: the A-1VL is a digital power amplifier. One that combines PWM (Pulse Width Modulation) amplification and exclusive VL (Vector Linear) technology to smooth the fluctuations and eliminate the noise inherent in analogue or other PWM technologies. The result is amplification with over 90% efficiency, for wide dynamic and frequency ranges and sound harmony that provides the audio impact you've been missing.

Exclusive VL (Vector Linear) Digital Technology

Conventional conversion methods reduce digital pulse noise at the conversion stage but can't remove it completely. Previously only available on Onkyo's high-end components, VL (Vector Linear) Digital technology employs a unique conversion circuit to overcome this problem. Data is converted between the sampling points, and these discrete sampling points are joined with vectors in real-time to produce a smooth output wave form. The result—a noiseless, smooth signal based on the digital source.

PWM (Pulse Width Modulation)

While the name Pulse Width Modulation may seem imposing, it's actually an efficient method of amplifying analogue audio signals. The amplifier operates at a high frequency, with high level signals resulting in longer pulses. In amplifiers that use conventional PWM, there is more of a one-to-one correlation which results in greater phase error. This results in a signal carrying phase inaccuracies created by pulse noise in the original signal. Onkyo combines PWM with its exclusive VL Digital technology which looks at the average energy in a given cycle to greatly reduce phase inaccuracies created by pulse noise in the original signal.

Dual Mono Circuitry Design with Ultra-High Power Supply

When a digital amplifier's input signal is "0", no current is passed. But when the signal changes to "1", the amplifier must instantly provide full output power. Now, if the amplifier is receiving a relatively small amount of power, and if it is operating at full capacity, there will be sharp, unwanted fluctuations in voltage. The amplifier's output power won't be proportional to its input power, and tonal accuracy during CD playback will be degraded. Thankfully, the A-1VL is equipped with dual power supply circuits—one for each channel—in order to boost power output while avoiding interference between the left and right channels. In addition, each channel features a large toroidal transformer and a mass capacitor rated at 24000 μ F—that's 48000 μ F for the amplifier overall—to suppress excessive fluctuations in voltage.

Thick, Low-Impedance Copper Bus Bars for Perfect Grounding

Electricity stored in an amplifier's condenser is outputted via an electric power line. To provide continuous output at full-power, a digital amplifier requires a large, stable flow of current. Any loss of power at the output stage becomes a hindrance to the instantaneous flow of that current. That's why we use thick (1.5 mm x 5 mm) copper bus bars on the A-1VL, to achieve an extremely low level of impedance. Printed circuit boards, by contrast, typically use beaten copper for their power lines. Because this beaten copper is extremely thin (as thin as 35 μ m), it creates far more impedance. Even if it were the same width as the copper bus bars, a printed circuit board would yield 43 times as much impedance. So, if you want rock-solid power output at virtually any volume, the A-1VL won't let you down.

High-Grade Build Quality

In addition to features only Onkyo can give you, we've made sure that unwanted noise and vibrations won't taint your delicate audio signal. Just one look at the A-1VL will confirm this is amplifier built to last. The rugged chassis on the outside makes sure that any shelf-borne noise never interrupts your listening. Inside you'll find brass insulators, pinjacks and on the back, you'll find high-grade, banana-plug-capable, transparent speaker terminals for hook-up to high-quality CD players like the C-1VL for an audio experience that finally does justice to your music CDs.

A-1VL

INTEGRATED DIGITAL STEREO AMPLIFIER



Features

- Exclusive Onkyo VL Digital 2-channel amplifier
- 2 x 100 W, 8 ohms, 1 kHz (DIN)
- Separate toroidal transformers for L/R channels
- Separate mono circuitry design
- Low-impedance, copper bus plate
- Direct function for using as a power amplifier
- Audiophile grade parts
- Linear motor volume control
- Brass insulator
- Brass pinjacks
- High-grade, banana-plug-capable, transparent speaker terminals
- Pre-out terminal
- Main in terminal
- Extruded aluminium front & side panels
- Rugged chassis to prevent vibrations
- Heavy-duty, inlet power cord
- Full-function RI remote control



Full-function RI remote

SPECIFICATIONS

AMPLIFIER SECTION

Power Output	Front L/R 100 W + 100 W (8 Ω , 1 kHz, DIN)
Dynamic Power	310 W + 310 W (3 Ω , Front) 240 W + 240 W (4 Ω , Front) 130 W + 130 W (8 Ω , Front)
Total Harmonic Distortion	1% (Power Rated)
Damping Factor	25 (Front, 1 kHz, 8 Ω)
Input Sensitivity and Impedance	
Line	200 mV/50 k Ω
Phono MM	2.5 mV/50 k Ω
Output Level and Impedance	
Rec out	200 mV/2.2 k Ω
Phono Overload	130 mV (MM, 1 kHz, 0.5%)
Frequency Response	10 Hz-60 kHz (+1, -3 dB, CD)
Signal-to-Noise Ratio	100 dB (CD, IHF-A) 70 dB (Phono, IHF-A)
Input Terminals	
Analogue Inputs	Phono, Tuner, CD, Line1, Line2, Main in
Output Terminals	
Analogue Output	Line2
Pre Output	1 (L/R)
Speaker Output	1 (L/R)
Speaker Impedance	4 Ω -16 Ω

GENERAL

Power Supply	AC 230 V-240 V, 50 Hz
Power Consumption	105 W
Dimensions (W x H x D)	435 x 81.5 x 390 mm
Weight	11.3 kg

Due to a policy of continuous product improvement, Onkyo reserves the right to change specifications and appearance without notice.
"VL Digital" is a trademark of Onkyo Corporation. All other trademarks and registered trademarks are the property of their respective holders.

ONKYO
IMAGINATIVE SIGHT & SOUND

Onkyo Corporation Business Unit Dept.: 2-1, Misshin-cho, Neyagawa-shi, OSAKA 572-8540, JAPAN Tel: +81-72-831-8005 Fax: +81-72-833-5222 <http://www.onkyo.com/>
Onkyo Europe Electronics GmbH Liegertstrasse 6, 82194 Grobenzell, GERMANY Tel: +49-8142-4401-0 Fax: +49-8142-4401-555 <http://www.onkyo.net>
Onkyo Europe UK Office Suite1 Gregories Court, Gregories Road, Beaconsfield, Buckinghamshire HP9 1HQ, UNITED KINGDOM Tel: +44(0)1494-681515 Fax: +44(0)1494-680452