



*Black version is available.



The First A/V Amplifier To Master Movies and Music

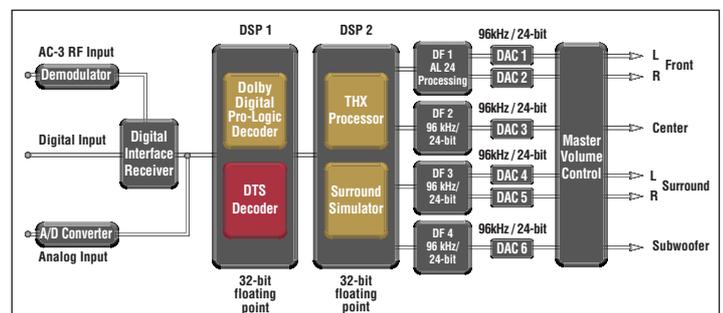
DENON, the developer of the world's first A/V components that combined the magic of Dolby Digital with Lucasfilm's THX 5.1 technology, now elevates the performance standard with the new AVC-A1D A/V surround amplifier. Packed with virtually every desirable feature for outstanding home theater and music surround sound enjoyment, the AVC-A1D is the only A/V component that provides optimized surround sound for both movie soundtracks as well as discrete multi-channel music surround. Powered by the newest high speed dual 32-bit DSP processors, the AVC-A1D includes Dolby Digital as well as dts decoding, along with Lucasfilm THX 5.1 post-processing, entirely in digital domain - the world's first A/V surround amplifier with this capability.

The AVC-A1D is engineered for the future, with eight channel (7.1) inputs for the future multi-channel formats, and 8 channel pre-amp outputs for a clear system upgrade path. Able to accommodate virtually any present or future source, the AVC-A1D provides component video switching along with "S" and composite video switching, and nine digital inputs (including one for RF laser disc). Premium 24-bit, 96 kHz DACs on all six channels with DENON's exclusive 24-bit Alpha processing for the main (L/R channels), and a THX Ultra-certified five channel power amp section with an output of 140 watts per channel, all add up to the best-sounding A/V component available today.

■ New DDSC-Digital Circuit

DENON's original DDSC (Dynamic Discrete Surround Circuit) -Digital audio technology represents the integration of all blocks of a surround circuit into a single, high-performance IC to reproduce digital surround sources at higher levels of sonic quality. The New DDSC-Digital audio circuit embodies further performance improvements over the original DDSC-Digital circuit, and reproduces superior-quality sound not only from surround sources but pure audio sources as well.

The high sound quality of New DDSC-Digital is due in part to the high-grade signal processing of the 24-bit, 96 kHz Digital Interface Receiver (DIR). The AVC-A1D not only allows digital signals input from DVD and other advanced media to pass directly to the DIR, it also processes them while preserving their integrity so that even the most delicate nuances of the music, reflecting the emotions of the artists, are passed unfettered to the digital signal processor (DSP).



Dynamic Discrete Surround Circuit-Digital Block Diagram

■ Two 32-bit Floating Point DSPs

The AVC-A1D is equipped with two DSPs that employ newly-developed 32-bit floating point technology to faithfully process the delicate details of the original sound recording. One of the DSPs is dedicated for use with the Dolby Digital and dts decoder and the other is used for THX and surround sound reproduction. The 32-bit digital signals that are decoded by these two DSPs are then converted at high resolution into 24-bit signals and passed to the digital filter.

■ 24-bit, 96 kHz D/A Converters for All Channels

The same Multiple 24-bit D/A Converter that is used in the DVD-5000 has been employed for all channels in the AVC-A1D—a dedicated converter for each of the five Front, Center, and Surround channels, plus a 24-bit D/A converter for the subwoofer—to ensure smooth D/A conversion at high resolution of 24 bits and 96 kHz for all channels.

■ AL24 Processing for Front Channels

The AVC-A1D includes AL24 Processing, the same highly-acclaimed analog waveform reproduction technology that is used in the DVD-5000. AL24 Processing realistically reproduces subtle background sounds that heighten the emotional drama of movies, or the delicate residual sounds that are enjoyed during live musical performances.

■ Discrete Amplifiers with Uniform Power and Response to All Channels

The wealth of DENON's technological know-how in pure audio amplifiers has been tapped to build a powerful, high-quality amplifier system for the reproduction of Dolby Digital. Each channel is configured with its own discrete power amplifier, all of which deliver equal power and perform with uniform response. The AVC-A1D's power unit incorporates a large transformer and other vital parts that have been developed for DENON's high-end pure audio components. The various blocks of the AVC-A1D, such as the analog section, digital section, video section and micro-processor section, have all been isolated from each other in order to thoroughly suppress any mutual interference caused by noise. This design ensures that the extremely high level of sound quality that is the hallmark of current and next-generation media remains pure and transparent from input to output.

■ Built-in DTS Decoder

The AVC-A1D also has a dts Digital Surround decoder to faithfully reproduce the original sound that was recorded on sources via a Digital Surround encoder. This feature allows home theater buffs to enjoy at home the same sort of dynamic power that one can experience in the sound space of dts-equipped movie theaters. Since the high performance of 24-bit, 96 kHz D/A converters delivers the full effects of dts Digital Surround to all channels, the sonic results are completely satisfying.

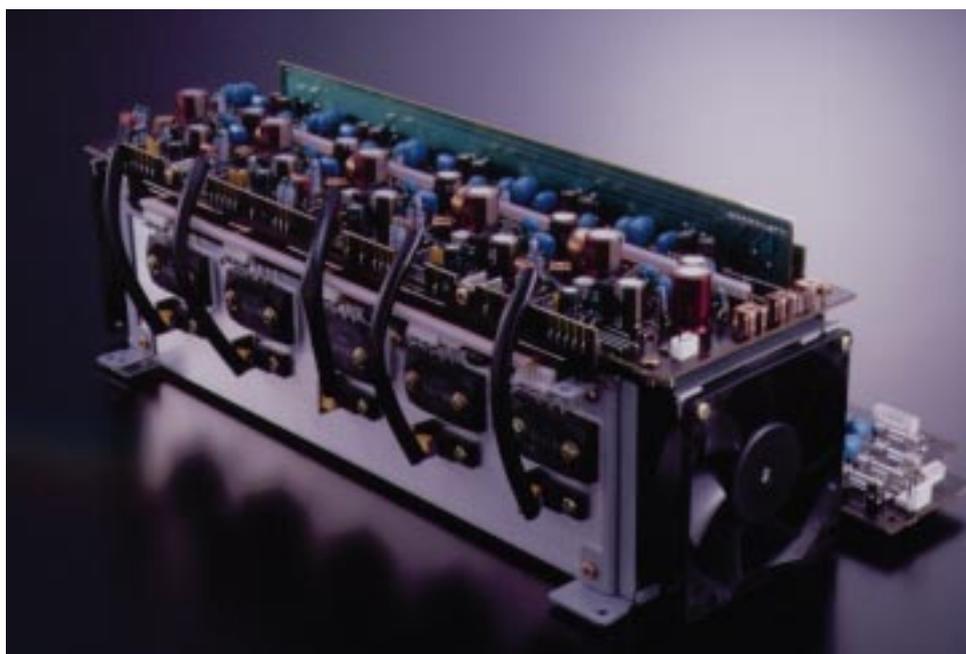
■ THX Ultra: Advanced Surround Taken to the Hilt

The AVC-A1D is equipped with a THX Processor supporting THX 5.1, an advanced surround technology that recreates the sound space created at a dubbing studio for producing the sound tracks of movies. When the digital signal that was processed in the Dolby Digital decoder and the dts decoder is passed on to the Re-Equalization Circuit and the Timbre Matching Circuit, the AVC-A1D is capable of reproducing an ideal sound space for the enjoyment of multi-dimensional sound.

The AVC-A1D has also cleared approximately 300 requirements to meet the standards of THX Ultra that Lucasfilm Ltd., the developer of THX technologies, has established governing audio quality and the operating ease of other components in the A/V system.

■ A Rich Selection of Surround Modes

Besides the red-hot Dolby Digital + THX 5.1 combination plus the dts + THX 5.1 alternative being offered for the first time in the world in a single A/V surround amplifier, the AVC-A1D provides a wealth of playback options as well.



5-Monaural Construction Power Block

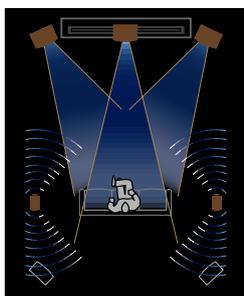
■ **Two Sets of Surround Speakers for Music and Movie Surround**

Two sets of surround speaker output terminals, A and B, have been provided to reproduce the surround sound tracks more closely to the originally intended ideal.

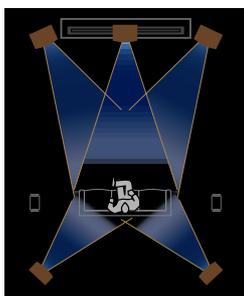
To recreate the spacious and enveloping ambiance of a motion picture soundtrack, side-mounted bipolar or dipolar speakers are most often preferred. These avoid the "point source" localization problems that plague conventional direct-radiator speakers, and are best for accurately re-constructing the motion picture soundtrack's surround field.

On the other hand, multi-channel music surround sound is recorded with 3 front channels and 2 rear channels and a pair of direct-radiating speakers at the rear corners of your listening room are recommended for the accurate music surround sound reproduction.

Select these surround speakers when listening to discrete multi-channel music surround and concert video. Only the DENON AVC-A1D lets you choose between two surround speaker types (and placements) for music and movie soundtracks, for surround sound without compromise.



Movie Surround



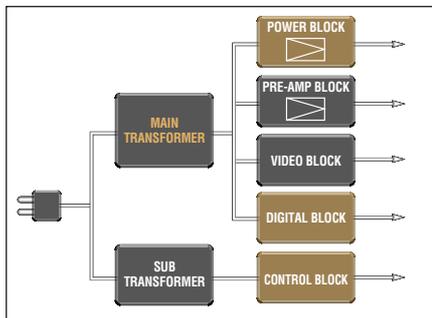
Music Surround

■ **6-channel + 8-channel Input Terminals for Future System Upgrading**

The AVC-A1D provides two sets of expansion input terminals, one of which can be used as an EXT IN terminal for the 8th channel, in case home theaters of the future need to support program sources with increased numbers of channels or other developments. By simply adding a stereo power amplifier, the AVC-A1D system will be able to support 7.1-channel surround sources which are expected to appear in the future. Along with 8-channel input, a high-precision electronic attenuator will be able to achieve less than 0.1 dB mutual deviation among all channels and adjust volume levels in 1 dB increments.

■ **Powerful, Responsive Power Supply**

AVC-A1D incorporates two independent power transformers for each power amplifier, preamplifier and micro-processor to ensure a stable current supply for each block without mutual interference and noise.



Independent Power Transformers Block Diagram

■ **Icon-based On-Screen Display**

The AVC-A1D is equipped with an On-Screen Display (OSD) featuring icons (pictorial representations) to let you easily monitor the current operating status. The OSD feature lets you check or change the source you want to see, listen to or record, and you can also monitor or change the speakers, surround sound mode, delay time, channel level, digital inputs or listening parameters. What once required a number of complicated operations can now be accomplished via a quick glance at the AVC-A1D's OSD, which has been refined for greater ease of operation.



System Setup Menu



Easy setting of speaker configuration

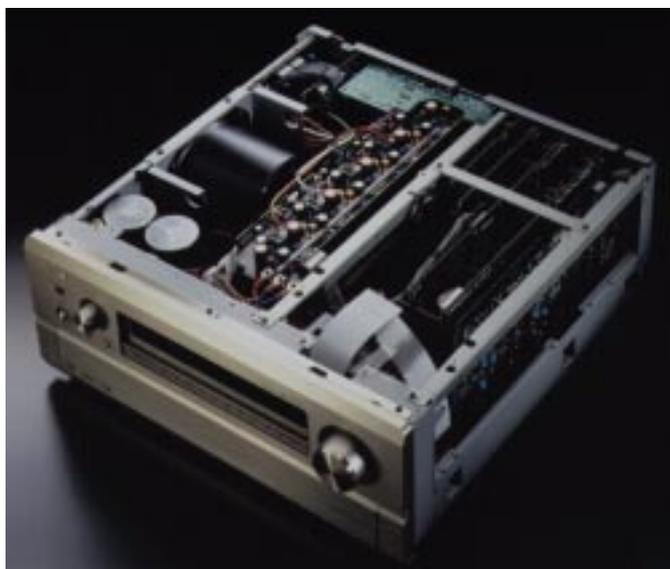
■ **Personal Memory Plus**

The AVC-A1D's Personal Memory Plus function allows you to store the parameter of the surround mode for further sound source customization. A single push of any source button will instantly recall the settings stored for each of the sound sources.

■ **Multi-function Remote Controller**

The dominant theme in the design of the AVC-A1D's remote controller has been vastly improved ease of use from the two aspects of tactile perception and visual ergonomics. The buttons have been given different shapes so that they can be recognized by touch in a dark room, and visually, the buttons' functions are grouped by color so that the required buttons are easily found. The buttons also feature GLO-Key for further ease of operation in the dark. And buttons that are not so frequently used are arranged under a cover that can be easily opened when needed.

- **System Call function to execute up to 10 successive pre-assigned commands at the single touch of a button**
- **System Remote Control**
- **Pre-Memory and Programming function for non-DENON components**



■ **Other Features**

- **Color Component Video Input/Output / Thoroughly Vibration-resistant Structure**
- **Tone Control Circuit (Front L/R, Center, Surround)**
- **REC OUT Select**
- **1 AC Outlet**

■ **Input/Output Terminals For Every A/V System**

● **Audio Inputs**

- 11 Analog Inputs..... PHONO, CD, TUNER, DVD, VDP, TV/DBS, VCR-1, VCR-2, V-AUX, MD/TAPE-1, TAPE-2
- 6 Analog EXT. Input FRONT L/R, CENTER, SURROUND L/R, SUBWOOFER
- 8 Analog EXT. Input FRONT L/R, CENTER, SURROUND L/R, EFFECT L/R, SUBWOOFER
- 5 Digital (Optical) Inputs OPTICAL X 5
- 3 Digital (Coaxial) Inputs COAXIAL X 3
- 1 Dolby Digital RF Input..... Dolby Digital RF

● **Audio Outputs**

- 8 Analog PRE OUT Terminals.. FRONT L/R, CENTER, SURROUND L/R, EFFECT L/R, SUBWOOFER
- 4 Analog REC OUT Terminals... VCR-1, VCR-2, MD/TAPE-1, TAPE-2
- 2 Analog Multi Source Terminals.. L/R
- 1 Digital (Optical) Out Terminal.... Optical

● **Video Inputs**

- 2 Component Video Inputs DVD, TV
- 6 Composite Inputs DVD, VDP, TV/DBS, VCR-1, VCR-2, V-AUX
- 6 S-Video Inputs..... DVD, VDP, TV/DBS, VCR-1, VCR-2, V-AUX

● **Video Outputs**

- 1 Component Video Input MONITOR
- 4 Composite Outputs VCR-1, VCR-2, MONITOR-1, MONITOR-2
- 4 S-Video Outputs..... VCR-1, VCR-2, MONITOR-1, MONITOR-2

Specifications

Power Amplifier Section		Same quality amplifier for all 5-channel
Rated output		*THD figures are power amp stage values.
Front	140 W + 140 W	(8 ohms, 20 Hz - 20 kHz, THD 0.05 %)
Center	140 W	(8 ohms, 20 Hz - 20 kHz, THD 0.05 %)
Surround	140 W + 140 W	(8 ohms, 20 Hz - 20 kHz, THD 0.05 %)
Dynamic Power	190 W x 2 ch (8 ohms) 310 W x 2 ch (4 ohms) 390 W x 2 ch (2 ohms)	
Preamplifier Section		
Input sensitivity/ Impedance	PHONO (MM) : 2.5 mV/47 kohms CD, DVD, VDP, TV/DBS, VCR-1, VCR-2, V.AUX, MD/TAPE 1, TAPE 2, 6-ch EXT., 8-ch EXT. : 200 mV/47 kohms	
Output level/Load Impedance	FRONT L/R, CENTER, SURROUND L/R, EFFECT L/R, SUB WOOFER : 1.2 V/10 kohms VCR-1, VCR-2, MD/TAPE 1, TAPE 2, MULTI SOURCE : 150 mV/47 kohms	
Digital Input	Optical VDP, VCR-1, VCR-2, V.AUX, TAPE1 (Initial) Coaxial CD, DVD, TV/DBS (Initial) RF VDP (Fixed)	
Digital Output	REC OUT : TAPE-1 (Initial)	
RIAA deviation	±1 dB (20 Hz - 20 kHz)	
Signal-to-noise ratio (A-weighting)	105 dB (DIRECT)	
Tone control	Treble : ± 10 dB at 10 kHz Bass : ± 10 dB at 100 Hz	

Video Section

Input Terminal	Composite	DVD, VDP, TV/DBS, V.AUX, VCR-1, VCR-2 : 1 Vp-p/75 ohms
	S-Video	DVD, VDP, TV/DBS, V.AUX, VCR-1, VCR-2 : 1 Vp-p/75 ohms
	Component Video	DVD, TV
Output Terminal	Composite	VCR-1, VCR-2, MONITOR-1, MONITOR-2 : 1 Vp-p/75 ohms
	S-Video	VCR-1, VCR-2, MONITOR-1, MONITOR-2 : 1 Vp-p/75 ohms
	Component Video	MONITOR

General

Power Supply	AC 230 V, 50 Hz
Dimensions	434 (W) x 181 (H) x 494 (D) mm
Weight	21.5 kg

*Design and specifications are subject to change without notice.

