

A/V Surround Amplifier

DENON AVC-A1XV

DENON

The AVC-A1XV incorporates a host of new technologies, circuits, and functions to achieve DENON's ultimate aim for all its amps, which is to recreate the producer's original intent with absolute fidelity. The "New DDSC-Digital" surround processor, developed around DENON's design concepts for high-quality sound reproduction, is now equipped with the latest 32-bit floating-point DSP as well as newly-developed AL24 processing, high-performance 24-bit/192-kHz D/A converter, and other much improved technologies. The AVC-A1XV is also endowed with a wide range of features such as a hefty 10-channel power amp capable of bi-amp drive, new Auto Set-up utilizing multi-point measurement and analysis to support the entire listening area, Room EQ (equalizer), advanced digital audio interfaces including DENON Link and IEEE 1394, support for THX Ultra2, multi-zone system, newly-developed analog video scaler, DVI/HDMI video selector, and full up/down video conversion.

These new technologies, circuits, and features enable the AVC-A1XV to reproduce the original design intent of content producers from a wide range of sources in such areas as surround sound, multi-channel audio, 2-channel stereo, and video.



■ Audio Section

• 'New DDSC-Digital,' for dramatically improved processing performance

The New DDSC (Dynamic Discrete Surround Circuit)- Digital is a high-quality surround sound reproduction circuit designed by DENON, and forms the core of the design concept that DENON pursues for all its A/V amps: to faithfully reproduce the original intent of content producers. DENON has succeeded in developing a fully discrete design for the New DDSC-Digital in which high-performance ICs are used in independent blocks to form a signal processor that reproduces surround sound, and the discrete design ensures that all channels are endowed with identical response and quality of sound.

-New 32-bit floating point DSP

Three of the latest 32-bit floating point DSPs for the decoder for main zone. A latest-generation 32-bit floating point SHARC DSP for the second zone.

-24-bit/192-kHz D/A Converter

The latest high-accuracy 24-bit/192-kHz D/A converter has been employed for the audio DAC. The AVC-A1XV has 8 of these D/A converters for 16 circuits, achieving differential drive for all 16 channels and digital-to-analog conversion with wide dynamic range at a high S/N.

-High-performance A/D Converter

A high-performance A/D converter of 24-bit/192-kHz quality has been used to significantly boost S/N and dynamic range.

• 'Advanced AL24 Processing,' the latest technology for high sound quality

• DENON Link, enabling high-speed, high-grade digital signal transmission

• IEEE 1394 digital interface

• Large-output Power Amp Section and Power Supply Configuration, for stable high-power output

• 10-channel power amp, supporting multiple uses

Since the 10 speaker terminals can be assigned to any channel, the AVC-A1XV can be used to enjoy home theater entertainment in the following configurations:

- One dynamic 9.1-channel surround system in a single room
- 5.1-channel theater environments in two different rooms, both operating simultaneously
- Multi-zone system: a 7.1-channel theater in the main room, a 2.1-channel environment in a second room, and a monaural environment in a small third room.
- "Bi-amp" system: Front (L/R) and Center speakers are bi-wired in a 7.1-channel theater to improve playback quality in the front for enhanced listening enjoyment.

• Stabilized, independent power supplies for each circuit

• Chassis construction to suppress internal/external vibration

• Pure Direct mode, for the pure enjoyment of music in high-quality sound

• Variable Gain Volume and Pre-amp

• New Auto Set-up and Room EQ, Featuring Mult EQ XT from Audyssey, for overall listening area support

• Full support for the most advanced surround playback formats

- Dolby Digital EX - Dolby Digital - Dolby Pro Logic IIx
- Dolby Headphone - DTS-ES - DTS 96/24
- DTS Neo:6 - DTS - HDCD

• THX, THX Surround EX, THX Ultra2 Certified

• Original surround modes from DENON

■ Video Section

• Newly-developed video circuitry, for high picture quality

- HDMI/DVI digital video I/O terminals
- Component video switching
- Video up/down conversion
- I/P conversion and scaling
- High-speed, high-accuracy 12-bit/216-MHz video DAC
- TBC (Time Base Correction) technology is used when converting composite video or S-video signals to component video

■ Expandability

- Analog EXT IN terminal
- 4-zone, multi-room support
- Ethernet and RS-232C terminals

■ Other Functions

- Auto Surround Back Channels ON function, for auto-detection of supporting sources
- Auto Surround mode
- New design and ease-of-use
 - Front panel's large display.
 - A cursor key and Buttons on the front panel
- EL remote controller for easy operation
- On-screen display, for easier, error-free operation
- Variable subwoofer crossover switching (40/60/80/90/100/110/120/150/200/250 Hz)
- Muting level settings (∞ /-40dB/-20dB)
- Audio Delay function (max. 6 frames)



■ Input/Output Terminals For Every AV System

• Audio Inputs

13 Sets Analog Inputs	PHONO, CD, (TUNER), CDR/TAPE, DVD, VDP, TV, DBS, VCR-1, VCR-2, VCR-3, VCR-4, V.AUX(FRONT),
1 Set 10-ch Analog EXT. Input	FRONT L/R, CENTER, SURROUND (A) L/R, SURROUND (B) L/R, SURROUND BACK L/R, SUBWOOFER
1 Set 6-ch Analog EXT. Input	FRONT L/R, CENTER, SURROUND L/R, SUBWOOFER
12 Sets Digital Input	OPTICAL x6 (incl. FRONT x 1) COAXIAL x6 Denon Link x1

• Audio Outputs

10 Sets Analog PRE Output	FRONT L/R, CENTER, SURROUND(A) L/R, SURROUND(B) L/R, SURROUND BACK L/R, SUBWOOFER
5 Sets Analog REC Output	VCR-1, VCR-2, VCR-3, VCR-4, CDR/TAPE
3 Set Analog Multi Zone PRE Output	ZONE2 L/R, ZONE3 L/R, ZONE4 L/R
3 Sets Digital Output	OPTICAL x3

• Video Inputs

6 Sets Component Video Input	VIDEO-1, VIDEO-2, VIDEO-3, VIDEO-4, VIDEO-5
9 Sets S-Video Input	DVD, VDP, TV, DBS, VCR-1, VCR-2, VCR-3, VCR-4, V.AUX(FRONT)
9 Sets Composite Input	DVD, VDP, TV, DBS, VCR-1, VCR-2, VCR-3, VCR-4, V.AUX(FRONT)

• Video Outputs

3 Set Component Video Output	MONITOR x3 (incl. 1 set for ZONE2)
7 Sets S-Video Output	VCR-1, VCR-2, VCR-3, VCR-4, MONITOR, ZONE2, ZONE3
7 Sets Composite Output	VCR-1, VCR-2, VCR-3, VCR-4, MONITOR, ZONE2, ZONE3

■ Specifications

• Power Amplifier Section

Rated output

Front	170 W + 170 W (8 ohms, 20 Hz - 20 kHz, 0.05 % THD) 220 W + 220 W (6 ohms, 1 kHz, 0.7 % THD)	*THD figures are power amp stage values.
Center	170 W (8 ohms, 20 Hz - 20 kHz, 0.05 % THD) 220 W (6 ohms, 1 kHz, 0.7 % THD)	
Surround (A, B)	170 W + 170 W (8 ohms, 20 Hz - 20 kHz, 0.05 % THD) 220 W + 220 W (6 ohms, 1 kHz, 0.7 % THD)	
Surround Back	170 W + 170 W (8 ohms, 20 Hz - 20 kHz, 0.05 % THD) 220 W + 220 W (6 ohms, 1 kHz, 0.7 % THD)	

• Preamp Section

Analog

Input sensitivity / impedance	200mV/47kohms
Frequency response	10Hz-100kHz: +0, -3dB (Direct mode)
S/N	105dB(Direct mode)
Rated output	1.2V

Digital

D/A output	2.0V
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Phono

Input sensitivity / impedance	2.5mV
RIAA deviation	+/-1dB(20Hz to 20kHz)
Rated output	150mV

• Video Section

Frequency response	
Composite video/S-video	5Hz-10MHz (+0, -3dB)
Component video	5Hz-100MHz (+0, -3dB)

• General

Power supply	AC230V, 50Hz
Power consumption	850 W
Dimensions	434 (W) x 280 (H) x 505 (D) mm
Weight	44.0kg



*Design and specifications are subject to change without notice.
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