World’s First 7.1 Channel A/V Surround Receiver with DTS-ES 6.1 Discrete, DTS-ES 6.1 Matrix, and THX Surround EX

THX Ultra Certified 7-channel High Power Amp

- Front: 170 W + 170 W (8 ohms, 20 Hz - 20 kHz, 0.05 % THD)
- Center: 170 W (8 ohms, 20 Hz - 20 kHz, 0.05 % THD)
- Surround: 170 W + 170 W (8 ohms, 20 Hz - 20 kHz, 0.05 % THD)

The AVC-A1SE features an equal power 7-channel amplifier section, with identical amplifier design on all 7 channels. The Front (L/R), Center, and Surround (L/R) channels are driven by 170 watts of power each, and the two Surround Back channels, used for 6.1-channel DTS-ES and THX Surround EX sources, are also each powered with 170 watts (all channels rated into 8 ohms, 20 Hz - 20 kHz).

- High current, low impedance drive-capable discrete power transistors are used for each channel, and the high power output of 170 watts per channel (into 8 ohms) ensures that the speakers are driven with ample foundation to reproduce movie and music soundtracks with superb fidelity and widest dynamic range.

The AVC-A1SE’s power section is configured with a 1200VA high current toroidal transformer and large high capacity electrolytic capacitors optimized for audio use to deliver a constantly stable, clean supply of power. The AVC-A1SE proudly bears the THX Ultra logo, certifying that it satisfies the strict standards of Lucasfilm, Inc., governing performance, features, sound quality, power, stability into low impedance speaker loads (3.2 ohms and higher) and ease of operation.

- THX Ultra Certified 7-channel High Power Amp
- Chassis construction focused on high-quality pure audio
- DDSC-Digital, for High-quality Sound Reproduction
- Analog Devices SHARC Dual 32-bit Floating Point DSPs
- DENON’s latest surround technology faithfully recreates the surround sound produced at the dubbing stage.

DDSC-Digital is a circuit configuration specially designed by DENON in which all the elements of the surround processor are optimized by the use of selected high performance discrete elements, including separate A/D and D/A conversion, with sophisticated dual DSP surround decoding.

1. 24 bit, 96 kHz A/D Converters

The AVC-A1SE uses highly accurate 24 bit, 96 kHz A/D converters to handle analog to digital conversion. Since the converted digital signals are at extremely high resolution, the resulting sound quality is far more faithful to the original source than with conventional designs.

2. Digital Interface Receiver Supporting 24 bit, 192 kHz Signals

The AVC-A1SE includes a Digital Interface Receiver (DIR) that distinguishes various types of digital input signals, including 24/192 and 24/96 stereo PCM signals, performs the appropriate signal processing, and transmits the information to the DSP block.

3. Analog Devices SHARC Dual 32-bit Floating Point DSPs

Featuring the latest Analog Devices 32 bit floating point SHARC DSP devices, the AVC-A1SE provides superb resolution and widest dynamic range of Dolby Digital, DTS and PCM audio signals.

4. 24 bit, 192 kHz All-channels Differential-mode D/A Conversion

For optimum fidelity and transparency, the AVC-A1SE features the latest Analog Devices high resolution AD-1853 24 bit, 192 kHz DACs, in 16-DAC differential configuration (2 DAC channels per each audio channel).

DENON’s latest surround technology faithfully recreates the surround sound produced at the dubbing stage.

5. DTS (Digital Theater System)

1-1) Featuring the World’s First DTS-ES Extended Surround

6.1 Discrete & DTS-ES 6.1 Matrix Decoding

The AVC-A1SE is the world’s first AV component that is equipped with the DTS-ES (true discrete) 6.1 decoder, developed by DTS to provide dramatically improved surround sound panoramic reproduction and superior surround sound localization.
Digital-to-Analog Recording

Pure Direct Mode, to Deliver Pure Audio Quality

Wide dynamic range.

Of course, the RC-871 also provides convenient Preset Memory, Learning, and its buttons can be rearranged, added, deleted, and their names changed, giving you terrific flexibility in customizing the unit for your home theater or listening room.

The RC-871 is a remote control unit that lets you use IR (infrared) signals to control your A/V receiver and related gear such as your TV and DVD player, as well as other components.

The AVC-A1SE provides a Multi Zone Output function and a Select function that let you output different sources to multiple zones. Sources can be selected for reproduction of the sound originally designed by film and music producers.

DTS-ES is also provided in a discrete configuration. The addition of a Surround Back channel of like DTS 5.1-channel sound, the sound from the Surround Back channel of DTS-ES is also provided in a discrete configuration. The addition of a Surround Back channel to the 5.1-channel sound enables more faithful reproduction of the sound originally designed by film and music producers. When a 6.1-channel DTS-ES discrete recording is played, the AVC-A1SE automatically detects the signal and plays the source in 6.1 discrete mode.

1-2) Supports DTS-ES Extended Surround Matrix 6.1

This mode utilizes the DTS matrix encoder to reproduce 2-channel analog and PCM recordings through 5.1 or 6.1 channels. (Provided in 2 modes: Music/Cinema)

2. THX Surround EX Decoding

3. Dolby Digital Decoding

■ Pure Direct Mode, to Deliver Pure Audio Quality

In addition to surround sound playback, the AVC-A1SE lets you enjoy pure 2-channel stereo sound as well through its Pure Direct mode. In Pure Direct mode, power to the video circuitry and the front panel display is turned off, and during analog input, power to the digital circuitry is also automatically turned off. Furthermore, during 2-channel linear PCM input, the D/A converter section is re-configured to 8 DAC dual-differential operation (4 DAC channels for each audio channel) to provide optimum D/A conversion of 2-channel PCM sound sources, such as CD with the highest transparency and widest dynamic range.

■ AL 24 Processing

The AVC-A1SE includes DENON’s renowned 24 bit ALPHA processing technology that reproduces digital signals in a waveform with the smoothness of analog signals. This technology thoroughly suppresses annoying quantization distortion and faithfully reproduces the delicate musical details of low-level signals. AL 24 processing works in 2-channel Stereo, Direct, Pure Direct modes.

■ Digital-to-Analog Recording

The AVC-A1SE lets you make analog recordings of digital signal sources.

■ RS-232C Port

The AVC-A1SE includes an RS-232C port for connection to external whole-house control systems, from companies such as Crestron, Panja and others, and provides a software/firmware upgrade pathway.

■ Supports IEEE 1394 Upgrade, via upgradeable DSP board and upgradeable digital jack panel.

■ Support for Multi Zone Configurations

The AVC-A1SE provides a Multi Zone Output function and a Select function that let you output different sources to multiple zones. Sources can be selected for output to up to 2 additional zones, in addition to the main room. Multi-room Zone 1 can have variable pre-amp output along with composite video feed, and Multi-room Zone 2 can have fixed stereo audio pre-output.

■ Includes the RC-871 remote control unit with large LCD touch panel

The RC-871 is a remote control unit that lets you use IR (infrared) signals to control your AV receiver and related gear such as your TV and DVD player, as well as other control components such as a powered video screen and lighting controls in your home theater.

The RC-871 unit is equipped with a large 320 x 240 dot LCD touch display with a backlight for easy operation in the dark.

The commands of up to 23 components can be programmed into the RC-871, and its buttons can be rearranged, added, deleted, and their names changed, giving you terrific flexibility in customizing the unit for your home theater or listening room. Of course, the RC-871 also provides convenient Preset Memory, Learning, and System Call functions.

Specification

■ Power Amplifier Section

Rated output

Front ........................................ 170 W + 170 W (8 ohms, 20 Hz - 20 kHz, 0.05 % THD)

Center ...................................... 170 W (8 ohms, 20 Hz - 20 kHz, 0.05 % THD)

Surround .................................... 170 W + 170 W (8 ohms, 20 Hz - 20 kHz, 0.05 % THD)

Surround back .............................. 170 W + 170 W (8 ohms, 20 Hz - 20 kHz, 0.05 % THD)

■ Preamp Amplifier Section

Input sensitivity/impedance

2.5 mV/47 kohms

THD figures are power amp stage values.

Output level/Load impedance

Front/LR, CENTER, SURROUND L/R, SUBWOOFER<br>1.2 V/100 kohms

Surround back ................................ 0.5 V/100 kohms

■ General

Power supply ................................ AC 230 V, 50 Hz

Power consumption ........................ 1 W

Dimensions .................................. 434 (W) x 216 (H) x 486 (D) mm

Weight ........................................ 28.0 kg

RC-871

Distance ..................................... Approximately 7 meters (22 feet)

Battery services life ....................... Approx. 3 months

(alkaline batteries, under standard usage conditions)

Dimensions ................................ 96 (W) x 38 (H) x 168.5 (D) mm

Weight ........................................ 242 g (not including batteries)