

DENON

A/V Surround Receiver

## AVR-5805

The AVR-5805 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 AVR-5805 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 AVR-5805 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 AVR-5805 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 AVR-5805 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 MultEQ 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

##### • 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 A/V 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	*THD figures are power amp stage values.	
Front.....	170 W + 170 W	(8 ohms, 20 Hz - 20 kHz, 0.05 % THD)
Center .....	200 W + 200 W	(6 ohms, 20 Hz - 20 kHz, 0.05 % THD)
Surround (A, B).....	170 W + 100 W	(8 ohms, 20 Hz - 20 kHz, 0.05 % THD)
Surround Back.....	200 W + 200 W	(6 ohms, 20 Hz - 20 kHz, 0.05 % THD)
	170 W + 170 W	(8 ohms, 20 Hz - 20 kHz, 0.05 % THD)
	200 W + 200 W	(6 ohms, 20 Hz - 20 kHz, 0.05 % THD)

• Preamplifier Section

Analog	
Input sensitivity / impedance	200mV/47kohms
Frequency response .....	10Hz-100kHz: +0,-3dB (Direct mode)
S/N .....	105 dB(Direct mode)
Rated output .....	1.2 V
Digital	
D/A output .....	2.0 V
Phono	
Input sensitivity / impedance..	2.5 mV
RIAA deviation .....	+/-1dB(20Hz to 20kHz)
Rated output .....	150 mV

• Video Section

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

• FM Section

Tuning frequency range.....	87.5 - 107.9 MHz
Usable sensitivity.....	1.0 μV (11.2 dBf)

• AM Section

Tuning frequency range.....	520 - 1710 kHz
Usable sensitivity.....	18 μV

General

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Power supply .....	AC120V, 60Hz
Power consumption .....	13 A
Dimensions .....	434 (W) x 280 (H) x 505 (D) mm (17-3/32" x 11-1/32" x 19-7/8")
Weight .....	44.0kg (97 lbs)



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