

A/V Surround Receiver

# DENON AVR-3805

## Latest DSP technology employed in DENON's critically acclaimed D.D.S.C-Digital circuitry for the finest in multi-channel audio performance

D.D.S.C-Digital (Dynamic Discrete Surround Circuit) is a circuit configuration designed by DENON in which all elements of the Surround Processor are optimized to the highest standards by the use of selected high performance and discrete components, particularly the A/D and D/A converters and the sophisticated DSP surround decoder. DENON has developed with Analog Devices, a new 32-bit Floating Point DSP processor for decoding and processing the various digital signals with the highest level of accuracy, so this new D.D.S.C-Digital circuit will provide the ultimate in multi-channel performance.





























#### ■ DENON LINK multi channel digital audio input

The AVR-3805 incorporates DENON LINK 3rd Edition\*, this new edition now allows the input of uncompressed Super Audio CD digital signals as well as DVD-Video/Audio. To transfer high resolution, multi-channel digital audio signals, DENON has developed a unique digital transmission technology, known as DENON LINK. This digitally balanced transfer technology permits jitter-less data transfer and ultra-low noise. The AVR-3805 incorporates this latest digital audio interface, so the end user will experience the absolute finest in audio playback between the AVR-3805 and a DENON LINK featured DVD player. \*The 3rd Edition for DVD/Super Audio CD output for DVD players is currently awaiting verification.

Component Video Conversion
High-grade Up Conversion
This video transcoding technology lets you enjoy highest picture quality from all video gear connected to the AVR-3805. Since composite and S-video signals are converted up to component video signals and output to the monitor, all you need to do is connect a monitor that can display component video images.

#### • 3 Sets of Component Video Inputs

The AVR-3805 is equipped with 3 sets of assignable, component video inputs and 1set of monitor outputs (all RCA terminals)

#### High Definition Quality Video Switching

The high-performance relay that is used to switch component video signals, features an extended bandwidth range up to 100 MHz.

#### ■ Auto Setup and Room EQ Function with Optional Microphone

The AVR-3805 is equipped with an Auto Setup and Room Equalization function, to achieve the most ideal sound field for your room. With the optional microphone placed at your listening position, the powerful new 32bit floating point DSP automatically and accurately analyzes, adjusts and sets the speaker configurations of your system. Also, the AVR-3805 analyzes and adjusts the frequency response of the speakers to the room with an 8 band parametric equalizer. The optional microphone (DM-S305) is a specially designed, high performance unit with a heavy duty base to suppress vibrations for accurate analyzing.

#### ■ Pure Direct and AL24 Processing Plus

DENON's Pure Direct mode was designed for those who want the ultimate in sonic quality from their audio sources. Depending on input signal type, Pure Direct will turn off any unneeded circuitry of the AVR-3805.

• When listening to PCM based sources, DENON's waveform technology

AL24 Processing Plus brings out all the delicate nuances of the source material.

## ■ New EL Backlight Touch Panel Remote

The AVR-3805's remote controller is a completely new design, focusing heavily on ease of use. It features Electro-Luminescence technology which offers sophisticated design and extraordinary control. This remote will automatically activate the backlighting when the user picks the remote up



**DVD Player Commands** 

### ■ Fully Discrete, Equal Power Seven Amplifier Channels, 120 Watts Each

120 W + 120 W (8 ohms, 20Hz - 20kHz, 0.05 % THD) 120 W (8 ohms, 20Hz - 20kHz, 0.05 % THD) Front Center 120 W + 120 W (8 ohms, 20Hz - 20kHz, 0.05 % THD) 120 W + 120 W (8 ohms, 20Hz - 20kHz, 0.05 % THD) Surround Surround back

The AVR-3805 features an equal power 7-channel amplifier section, with identical amplifier design featuring high current discrete output devices on all 7 channels. Each of the 7 amplifier channels is rated at 120 watts, into 8 ohms, from 20 Hz - 20 kHz with no more than 0.05% THD.

## ■ Designed for high sound quality

• Hefty Power Transformer for Stable Supply of Power
A huge power transformer has been connected in the power section where it is combined with a rectifier diode and an oversized block capacitor to ensure a large, stable supply of electrical current. Accordingly, this design allows the AVR-3805 to achieve high output power of 120 W for each of the 7 channels.

#### Block Capacitor

A large-capacity block capacitor was developed for the AVR-3805 to ensure a rock stable supply of power.

#### Detachable AC Power Cord

## DENON

#### ■ Support for Multi Zone Configurations

- The AVR-3805 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 an additional zones, in addition to the main room. Multi-room Zone 2 can have variable pre-amp output along with a composite video feed. And an independently selected audio source can be output to Multi-room Zone 3 with a fixed pre-amp output. The AVR-3805's Power Amplifier Assign function lets you assign the 2 Surround Back (SB L/R) amplifier channels when the system is not configured for 7.1, to instead drive the Multi-room Zone 2, or 3, speakers, with 120 Watts per channel output power, while still providing 5 discrete amplifier channels to drive all speakers in a 5.1 configured home
- +12 V Trigger Output x2 (Assignable)
- Remote In/Out Ports
- RS232C Control Port to support an AMX, Crestron integrated control system
- DENON's Latest Surround Technology Faithfully Recreates the Surround Sound Produced at the Dubbing Stage.
- DTS 96/24 Decoding for DVD-Video
- DTS-ES Discrete 6.1 and Matrix 6.1
- DTS NEO:6
- Dolby Digital EX
- Dolby Pro Logic IIx

#### Auto Surround

The AVR-3805 can automatically store the surround mode for any of four inputs signals: (1) Analog and PCM 2 channel, (2) Bit stream 2-channel (Dolby Digital, DTS) and (3) Bit stream multi-channel and (4) DENON LINK multichannel. If the type of input signal changes, the most appropriate surround mode is automatically selected for the signal.

#### ■ Other Features That Enhance Operating Ease

• 1 Set of 8-Channel External Analog Inputs

#### • New Front Panel Design with Trap Door

Larger display area is now capable of displaying a broad range of information including character icons for an intuitive recognition of input signal channels and output speaker channels.

All settings can now be made using the controls on the main unit.



### Audio Delay Function

The Audio Delay function corrects slight lags between sound and picture that can occur when a video signal is processed, such as in a Progressive Scan DVD player or outboard video processor.

## Variable Gain Volume

S/N in the useable area has been improved. Finer adjustments are also possible in 0.5 dB steps across the extended range of -80 dB to +18 dB.

#### • Adjustable Cross-Over Switching

The AVR-3805 supports subwoofer cross-over switching with a choice of 8 cross-over frequencies: 40, 60, 80, 100, 120, 150, 200 and 250 Hz. This lets you more accurately match the performance characteristics of the subwoofer to the main speaker system.

#### A/B switching between surround speakers



- Frequency Synthesis Tuning
   56-Station AM/FM Random Preset Memory Tuning
- Auto Preset Memory

#### Input/Output Terminals For Every A/V System

#### ■ Audio Inputs

| 11 Analog Input                |        | PHONO, CD, (Tuner), DVD, VDP, TV, DBS, VCR-1, VCR-2, V.AUX(FRONT), CDR/TAPE |
|--------------------------------|--------|---|
| 8-ch Analog EXT. I             | nput   | FRONT L/R, CENTER, SURROUND L/R, SURROUND BACK L/R, SUBWOOFER               |
|                                |        | OPTICAL x 5 (FRONT x 1) (Assignable)  |
| 2 Digital (Coaxial) Input      |        |   |
|                                |        | Denon Link (Assignable)   |
| ■ Audio Outputs                |        |   |
| 8 Analog PRE Out               | put    | FRONT L/R, CENTER, SURROUND L/R,  |
|                                |        | SURROUND BACK L/R, SUBWOOFER  |
| 3 Analog REC Out               | put    | VCR-1, VCR-2, CDR/TAPE  |
| 1 Analog Multi Zone PRE Output |        |   |
| 1 Analog Multi Zone Output     |        | ZONE 3 L/R  |
| 2 Digital (Optical) (          | Output | OPTICAL x 2   |
| ■ Video Inputs                 |        |   |
| 3 Component Video              | Input  | VIDEO-1, VIDEO-2, VIDEO-3   |
| 7 Composite Input              |        | DVD, VDP, TV, DBS, VCR1, VCR2, V.AUX(FRONT)                                 |
| 7 S-Video Input                |        | DVD, VDP, TV, DBS, VCR-1, VCR-2, V.AUX(FRONT)                               |
| ■ Video Outputs                |        | ,   |
| 1 Component Video C            | Output | MONITOR   |
|                                |        | VCR-1, VCR-2, MONITOR   |
| 3 S-Video Output               |        |   |

#### Specifications

#### ■ Power Amplifier Section

| Rated output  | *THD figures are power amp stage values. |                                    |
|---------------|--|------------------------------------|
| Front         | 120 W + 120 W                            | (8 ohms, 20Hz - 20kHz, 0.05 % THD) |
|               | 160 W + 160 W                            | (6 ohms, 1 kHz, 0.7 % THD)         |
| Center        | 120 W                                    | (8 ohms, 20Hz - 20kHz, 0.05 % THD) |
|               | 160 W                                    | (6 ohms, 1 kHz, 0.7 % THD)         |
| Surround      | 120 W + 120 W                            | (8 ohms, 20Hz - 20kHz, 0.05 % THD) |
|               | 160 W + 160 W                            | (6 ohms, 1 kHz, 0.7 % THD)         |
| Surround back | 120 W + 120 W                            | (8 ohms, 20Hz - 20kHz, 0.05 % THD) |
|               | 160 W + 160 W                            | (6 ohms, 1 kHz, 0.7 % THD)         |

#### ■ Preamplifier Section

■ FM Section

Input sensitivity/impedance

200 mV/47 kohms
FRONT L/R, CENTER, SURROUND L/R, SURROUND BACK L/R, 200 mV/15 kohms

1 Multi Zone Composite Video output ..... ZONE 2 VIDEO x1

Output level/Load impedance FRONT L/R, CENTER, SURROUND L/R, SURROUND BACK L/R, SUB WOOFER MULTI ZONE L/R ......VCR-1, VCR-2, CDR/TAPE ...... 1.2 V/10 kohms 200 mV/47 kohms Frequency response..... 10 Hz - 100 kHz; +0, -3 dB Signal-to-noise ratio...... 102 dB RIAA deviation..... ± 1 dB (20 Hz - 20 kHz) Tone control ...... Treble: ± 6 dB. Bass: ± 6 dB

#### 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

#### AC 120 V, 60 Hz Power supply ....

Power consumption .....

7.1 A 434 (W) x 171 (H) x 429 (D) mm Dimensions... 17.1" (W) x 6.7" (H) x 16.9" (D)

Weight ..... 17.0 kg, 37 lbs 8 oz

#### \*Black version is available.



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