

## in the lab

	JVC RX-8040	SONY STR-DE897	YAMAHA RX-V750
<b>DOLBY DIGITAL PERFORMANCE</b> All data obtained from various test DVDs using test signals incorporating dither, which sets limits on measured distortion and noise performance. Reference input level is -20 dBFS, and reference output level is 1 watt (2.83 volts) into 8 ohms. All speakers set for "large" except for subwoofer and high-pass-filter measurements. All are worst-case figures where applicable.			
<b>Volume-control setting for reference output</b> from all channels with reference -20-dBFS input	49	61	-7.5 dB
<b>Output at clipping</b> (1 kHz) one channel driven into 8/4 ohms five channels driven (8 ohms)	154/124 W (21.8/20.9 dBW) 63 W (18.0 dBW)	149/227 W (21.7/23.6 dBW) 76 W (18.8 dBW)	159/202 <sup>1</sup> W (22.0/23.1 dBW) 61 W (17.9 dBW)
<b>Distortion at 1-watt output</b> (1 kHz, THD+N, 8/4 ohms)	0.03/0.04%	0.03/0.04%	0.07/0.07%
<b>Noise level</b> (16-bit signal, A-wtd)	-70.1 dB	-74.5 dB	-74.3 dB
<b>Excess noise</b> (16-bit, with sine tone)	+3.8 dB	+0.5 dB	+0.7 dB
<b>Frequency response</b> (20 Hz to 20 kHz)	+0, -0.2 dB	+0, -0.4 dB	+0, -0.2 dB
<b>Channel balance</b> (5 channels)	0.7 dB	0.2 dB	0.4 dB
<sup>1</sup> Rear-panel switch in 4-ohm position; 243 watts with switch set to 8 ohms.			
<b>BASS-MANAGEMENT PERFORMANCE</b> Measured results obtained with Dolby Digital signals.			
<b>Subwoofer-output frequency response</b>	24 dB per octave above -6-dB rolloff point of 82 Hz	12 dB per octave above -6-dB rolloff point of 101 Hz	24 dB per octave above -6-dB rolloff point of 84 Hz
<b>High-pass-filter frequency response</b>	12 dB per octave below -3-dB rolloff point of 80 Hz	6 dB per octave below -3-dB rolloff point of 100 Hz	12 dB per octave below -3-dB rolloff point of 80 Hz
<b>Maximum unclipped subwoofer output</b> (6-channel, 30-Hz, 0-dBFS worst-case signal at reference settings; sub trim at 0)	8.3 volts	4.2 volts	7.4 volts
<b>Subwoofer distortion</b> (THD+N with worst-case signal)	0.03%	0.04%	0.18%
<b>Source/media consistency</b>	same for all digital inputs and analog stereo; none for multichannel analog input	same for all digital inputs and analog stereo; none for multichannel analog input	low-pass filter slightly steeper for analog sources; none for multichannel analog input
<b>Speaker-size selection</b>	all channels can be set to "small"	all channels can be set to "small"	all channels can be set to "small"
<b>MULTICHANNEL PERFORMANCE, ANALOG INPUTS</b> All speakers set to "large," subwoofer off. Reference input level is 200 mV. Reference output level is 1 watt.			
<b>Volume-control setting for reference output</b>	49	62	-2.5 dB
<b>Noise level</b> (A-wtd)	-80.8 dB	-84.3 dB	-89.3 dB
<b>Distortion at 1-watt output</b> (1 kHz, THD+N, 8/4 ohms)	0.02/0.03%	0.01/0.02%	0.02/0.03%
<b>Frequency response</b>	10 Hz to 168 kHz +0, -3 dB	10 Hz to 200 kHz +0, -1.4 dB	10 Hz to 160 kHz +0, -3 dB
<b>STEREO PERFORMANCE, DIGITAL INPUT</b> Same measurement conditions as for Dolby Digital.			
<b>Volume-control setting for reference output</b>	49	60	-3 dB
<b>Output at clipping</b> (1 kHz, 8/4 ohms, both channels driven)	145/120 W (21.6/20.8 dBW)	128/181 W (21.1/22.6 dBW)	132/102 <sup>2</sup> W (21.2/20.1 dBW)
<b>Distortion at 1-watt output</b> (1 kHz, THD+N, 8/4 ohms)	0.04/0.05%	0.03/0.04%	0.04/0.05%
<b>Linearity error</b> (at -90 dBFS)	>20 dB <sup>3</sup>	0.6 dB	0.6 dB
<b>Noise level</b> (A-wtd) 16-bit signals 96-kHz/24-bit signals	-71 dB N/A (see comments)	-74.3 dB -80.9 dB	-74.3 dB -81.2 dB
<b>Excess noise</b> (with/without signal) 16-bit (EN16) quasi-20-bit (EN20)	+4.8/+4.0 dB +22.3/+22.4 dB	+1.4/+1.6 dB +15.2/+15.4 dB	+0.9/+1.0 dB +14.0/+13.8 dB
<b>Noise modulation</b>	1.6 dB	0.4 dB	1.2 dB
<b>Frequency response</b> (tone controls off) 20 Hz to 20 kHz (16-bit signals) 96-kHz/24-bit signals (10 Hz to 44 kHz)	+0, -0.1 dB N/A (see comments)	+0, -0.5 dB +0, -2.2 dB	+0, -0.2 dB +0, -1 dB

<sup>2</sup> At -90 dB. Linearity measured ±0.5 dB down to -80 dB (see comments). <sup>3</sup> Rear-panel switch in 4-ohm position; 243 watts with switch set to 8 ohms.