

# Harman/Kardon AVR 630

A sweet deal. **BY MARK FLEISCHMANN**



**A** The EzSet microphone is built into the top of the silver-finished, backlit, learning remote.

**If you're shopping for a deal,** you might find one on this stylish two-tone receiver. Its list price is not the lowest in this group. Search the Internet, though, and you'll find good deals on the AVR 630 from authorized dealers. (To make sure you buy from an authorized dealer, with a valid warranty, check the "where to buy" page at [www.harmankardon.com](http://www.harmankardon.com).) The street-price differential between the AVR 630 and the others in this roundup is many hundreds of dollars. For some, that may prove to be the deciding factor.

Basic black seems to be losing its luster among trend-conscious

manufacturers. For disappearing in the dark, it's the strongest color; however, for users of front-panel controls, it's often the most frustrating. H/K compromises by sticking with black for the top half of the front panel, including the display, and lightening up the bottom. That makes it easier to read the legends for (or just to find) the row of front-panel buttons provided in lieu of a jog dial. You can select inputs and surround modes using 1.5-inch-long, two-sided rocker switches. Finding the volume knob is easy because it's outlined by a cute, round, blue LED glow.

This one's got the staple surround modes, plus a few more. There are two different modes for simulating surround-like effects from two speakers: Dolby Virtual Speaker, which acts directly on signals in Dolby's formats, and Harman's own VMaX. For headphone listeners, Dolby Headphone

performs various feats of DSP magic seemingly in your head; it changes the quality of the space occupied by voices and instruments, although it also adds a processed feeling. A free software update via the RS-232 port will upgrade Dolby Pro Logic II to IIx. Harman's Logic 7 converts 2.0 to 7.1 with its own distinctive matrixing circuitry, which also appears in Lexicon products; H/K's are the only receivers to feature it.

H/K was the earliest adopter of the auto-setup process, and they include it here. But wait, where's the mic? Doesn't H/K supply one? Look carefully for three holes at the top of the remote, and there it is. The EzSet routine spits out test tones and adjusts each channel's level accordingly. It affects speaker levels only; it doesn't detect the speakers' size and placement. But it's still a whole lot easier than having to raid the kids' college fund

HARMAN/KARDON AVR 630					OVERALL RATING
Build Quality	Value	Features	Performance	Ergonomics	91
→ With holes at the top and sides, it's the best ventilated in the roundup	→ When you look at the specs and features on paper, the value proposition seems iffy	→ There's no room EQ, component-out conversion, or digital interface for SACD and DVD-Audio	→ Better dynamics than expected from a receiver that's rated at 75 watts per channel	→ Few receivers are this easy to set up	
→ It's nice to find a detachable power cord at this street price	→ When you look at the street price, your attitude changes dramatically	→ You do get basic auto setup and Logic 7	→ Turn it up all the way, and it doesn't turn nasty	→ The EzSet routine doesn't require an SPL mic or meter	
91	95	90	89	90	<p>Pioneering use of remote-driven auto setup and competitive pricing make the AVR 630 easy to set up and easy to afford.</p>
<b>General information</b> AVR 630, \$1,299 Harman/Kardon, (516) 496-3400, <a href="http://www.harmankardon.com">www.harmankardon.com</a> Dealer Locator Code HAR					

for \$40, go out to RadioShack, buy an SPL meter, load it with a nine-volt battery, learn how to use it, actually use it, and then put it in a drawer to remain untouched for years—if in fact you ever use it again or even remember it's there.

Also missing from the AVR 630 is room EQ. However, it would be unjust to say that Harman hasn't got this angle covered. At least for the time being, the company's institutional point of view is that EQ is best limited to bass frequencies. For that purpose, Harman's Infinity brand offers the CWS-10 and SW-12 subwoofers with adjustments for EQ frequency, level, and width—and the street-price differential would just about pay for the sub. For more information on why equalizing frequencies above 250 hertz might be a bad idea, read the white paper from Meridian (not part of the Harman empire): [www.meridian-audio.com/w\\_paper/Room\\_Correction\\_scr.pdf](http://www.meridian-audio.com/w_paper/Room_Correction_scr.pdf).


The Harman sound is as familiar to me as my sisters' voices. The slightly warm, carefully sculpted midrange is designed for maximum intelligibility. Dynamics are better than you'd expect, given the manufacturer's conservatively quoted 75-watts-per-channel power rating. Most manufacturers quote at least 100 wpc even for their lowest priced weaklings, but this one doesn't insult the intelligence with magic numbers; instead, H/K provides an "all channels driven" spec. A 41-pound receiver with ventilation holes on three sides should muster a fair amount of current.

All surround receivers—including the four reviewed here—are subject to some degree of clipping when asked to produce more power (aka higher volume levels) than they're capable of. Even if you

are routing all bass below 100 Hz to your subwoofer (I actually used a more-taxing 80-Hz crossover), feeding seven woofers and seven tweeters will challenge a power supply that's small enough to share a box with a lot of other circuitry. The secret strength of

Harman/Kardon receivers is the manner in which they clip on relentless material like *The Matrix Revolutions*. Run this receiver near the top of its volume capability, and it maintains its character. The sculpted midrange doesn't suddenly lose its shape. 📡

## AT A GLANCE HARMAN/KARDON AVR 630



### FEATURES:

<p><b>Processing Modes:</b></p> <p><b>THX Certification:</b></p> <p><b>Audio D/A Converter:</b></p> <p><b>Number of Amp Channels:</b></p> <p><b>Amp Power (per channel):</b></p> <p><b>Amp Frequency Response:</b></p> <p><b>Dimensions (H x W x D):</b></p> <p><b>Weight (in pounds):</b></p>	<p>Dolby: Digital 5.1, EX, Pro Logic II, Virtual Speaker, Headphone</p> <p>DTS: DTS, ES, 96/24, Neo:6</p> <p>Other: HDCD, Logic 7, VMaX, MP3</p> <p>No</p> <p>Cirrus CS 42528</p> <p>7</p> <p>75 watts, into 8 ohms, all ch. driven</p> <p>10 Hz—130 kHz</p> <p>6.5 x 17.3 x 17.1</p> <p>41</p>
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These listings are based on the manufacturer's stated specs; the HT Labs box below indicates the gear's performance on our test bench.

### CONNECTIONS:

**Inputs:**

Video: component (2), S-video (5), composite (5)

Audio: coaxial digital (3), optical digital (3), eight-channel analog (1), stereo analog (7)

**Outputs:**

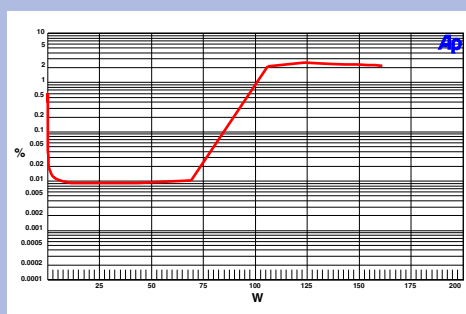
Video: component (1), S-video (3), composite (3)

Audio: coaxial digital (1), optical digital (1), stereo analog (4), preamp (1), main room (2), second zone (2)

**Additional:**

A-BUS (1), RS-232 (1), infrared jack (2), switchable front-panel jacks may serve as inputs or outputs

## HT Labs Measures: Harman/Kardon AVR 630



driving 8-ohm loads, reaches 0.1% distortion at 84.6 watts and 1% distortion at 100.6 watts. Into 4 ohms, the amplifier reaches 0.1% distortion at 146.9 watts and 1% distortion at 170.8 watts.

Response from the multichannel input to the speaker output in direct mode measures  $-0.23$  dB at 10 Hz,  $-0.08$  dB at 20 Hz,  $-0.12$  dB at 20 kHz, and  $-0.66$  dB at 50 kHz. THD+N from the amplifier was less than 0.027% at 1 kHz when driving 2.83 volts into an 8-ohm load. Crosstalk at 1 kHz driving 2.83 volts into an 8-ohm load was  $-84.29$  dB left to right and  $-83.15$  dB right to left. The signal-to-noise ratio with 2.83 volts driving an 8-ohm load from 10 Hz to 24 kHz with "A" weighting was  $-96.52$  dBra.

From the Dolby Digital input to the loudspeaker output, the left channel measures  $-0.20$  dB at 20 Hz and  $-0.26$  dB at 20 kHz. The center channel measures  $-0.17$  dB at 20 Hz and  $-0.45$  dB at 20 kHz, and the left surround channel measures  $-0.18$  dB at 20 Hz and  $-0.39$  dB at 20 kHz. From the Dolby Digital input to the line-level output, the LFE channel is  $-0.10$  dB at 20 Hz when referenced to the level at 40 Hz and reaches the upper 3-dB down point at 109 Hz and the upper 6-dB down point at 116 Hz. —MJP

⚡ **Five channels driven into 8-ohm loads:**  
0.1% distortion at 79.7 watts; 1% distortion at 93.3 watts

⚡ **Analog frequency response in direct mode:**  
 $-0.35$  dB at 10 Hz;  $-0.12$  dB at 20 Hz;  $-0.13$  dB at 20 kHz;  $-0.72$  dB at 50 kHz.

⚡ **Analog frequency response with signal processing:**  
 $-0.85$  dB at 10 Hz;  $-0.27$  dB at 20 Hz;  $-0.45$  dB at 20 kHz;  $-28.64$  dB at 50 kHz.

This graph shows that the AVR 630's left channel, from CD input to speaker output with two channels