

Receivers – Why Harman Kardon?

Many things have changed in the world of audio since 1954, when Harman Kardon combined a tuner, preamplifier and amplifier to create the world's first receiver.

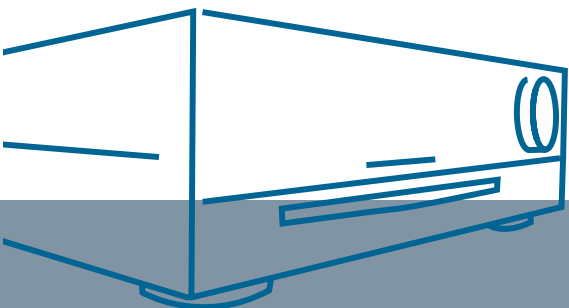
In the last fifty years, we have seen the introduction of two-channel stereo, transistors replacing tubes (which in turn were replaced by integrated circuits), and multichannel decoding and digital processing becoming commonplace. A wide range of other features, such as multiroom systems, advanced remote controls and more powerful amplifiers, has joined the list of standard equipment. Through it all, Harman Kardon has remained true to a series of core beliefs that guides our receiver design. Our designs must result in accurate, powerful amplifiers that sound better than the competition's, have the flexibility to accommodate the widest variety of sources while remaining easy to use, and have their technology packaged in an elegant design that complements, rather than competes with, the user's décor and taste.

Harman Kardon's commitment to superior engineering, sound and design is unmatched within the industry.

Power

While FTC regulations set a benchmark for some aspects of amplifier power-rating statements, the lack of a successfully implemented industry-wide standard of measurement has allowed some manufacturers to "adjust" the measurement process to their benefit, resulting in power ratings that are unrealistic and not truly representative of "real world" requirements. Harman Kardon's approach to power measurements mirrors that of the high-end world, fully disclosing how the amplifier will perform in homes, and with a wide range of speakers. Our power ratings are based on real-world-performance levels and, more important, they take into consideration the way products are used and listened to, rather than by simply choosing a measurement technique that inflates the power on paper, albeit at the risk of degrading actual performance.

For example, it would be easy to use the widely accepted notion of measuring the output of only one channel, and measure the response at a single 1kHz frequency. Yes, that delivers a higher power rating, but when was the last time you listened to only one speaker, rather than to the five or seven in today's multichannel systems? Instead, Harman Kardon's power measurements are based on simultaneous operation of all available channels in a receiver with a full-range 20Hz–20kHz signal to simulate listening to music or movie soundtracks. After all, isn't that what you do at home with modes such as Dolby® Digital or DTS-ES®? Our power ratings are based on real-world impedances that are representative of those employed on the majority of loudspeakers sold today, and we take the measurements at a THD level that is far below the range of audibility for humans. The result is a receiver that meets and exceeds the expectations of its owner by delivering on the promise of better sound.



Multiroom/Multisource Operation

Purchasing a separate audio system for every room of the house is costly and confusing and, outside the main room, the audio quality often suffers. Harman Kardon makes it easy to deliver high-quality sound anywhere in a house with the fidelity and ease of use that has won us countless awards during the past fifty years. Imagine pressing a button or two and having your favorite radio station begin to play in the dining room or a bedroom. Better yet, imagine having the kids watch their favorite movie in glorious surround sound in the den, while you're able to wind down to the sound of your favorite artist in a separate room, all the while maintaining full control of the volume.

Harman Kardon receivers offer a number of solutions that let you take your music from one room to another. The simplest option is to use the assignable rear surround channels available in all 7.1 Harman Kardon products, along with the standard Zone II remote and the built-in multiroom control system, to power a set of speakers in a second room. Or, use an A-BUS Ready® AVR and an in-wall A-BUS control module, along with speakers, for a self-powered single room installation. When you want sound in more than one room, along with more power for outdoor applications or inefficient speakers, use our PA 4000 and KP 1 keypad connected to your AVR or DPR. With Harman Kardon's multiroom solutions, your source material stays in one place, instead of being transported from room to room, and you get the expandability and performance you want, without the extensive cost of separate systems for each room.

Bass Management

Remember when having the best sound possible meant large speakers all over the room?

Although speaker technology has advanced substantially in the last decade, the laws of physics limit the low-frequency capability of smaller speakers. To solve this problem, subwoofers have become a popular way to deliver bass information too low for the front, center and surround speakers. The end result is great sound from small bookshelf speakers and a floorstanding subwoofer to handle the low frequencies. However, in order for the smaller satellite speakers to work properly with the subwoofer, your receiver's bass-management circuit must act as a traffic cop, sending the right signals to the proper speaker locations. Errors in this area can result in speaker damage, poor overall performance and greatly reduced bass output.

Harman Kardon AVRs and DPRs use advanced digital bass-management circuits so that customers may set up their systems to deliver the best possible performance from smaller speaker systems. On the AVR 7200, AVR 525, AVR 325, and DPR series receivers, bass management is taken to the next level, allowing you to choose separate crossover points for the front, center, surround and subwoofer outputs to maximize the performance of the entire system. To compensate for the lack of bass management on many DVD-Audio and SACD players, the AVR 7200, AVR 525 and all DPR models add full digital bass management for products connected to the 6-/8-channel direct inputs.

|||||EzSet™ Automated Speaker-Level Calibration

The more channels you add to a home theater system, the more critical it is that they be properly calibrated so that the output levels match. Unfortunately, most consumers overlook this important process due to their reluctance to purchase a sound pressure level meter (which cost upward of \$100) and take the time to carefully balance the system. That is, until now. Harman Kardon's patented EzSet remote builds the SPL meter right into the remote, and automates the process so that it takes only one or two button presses and two or three minutes to complete the process. Even better, Harman Kardon receivers allow you to calibrate each surround mode independently so, no matter how you use your receiver, it will sound its best.

Logic 7®

More channels of sound equal more realism, even when the original material is two-channel stereo. There is no better process for creating accurate multichannel sound than Harman's own Logic 7. Developed by Harman International and found in products from such high-end companies as Lexicon® and JBL®, as well as in luxury automobiles from BMW and Mercedes-Benz, Logic 7 creates 5.1- or 7.1-channel surround sound from any stereo or matrix-encoded material. The result is performance that's closer than ever to being there in person. With specific modes for Music and Cinema, Harman Kardon receivers are able to deliver unequalled surround sound performance. In addition, it is possible to use Logic 7 on all devices you connect to your receiver, including video games, for the ultimate in gaming action.

Color-Coded Inputs/Outputs

This is a remarkable simple reason to look to Harman Kardon receivers, and one your customers will thank you for later on. Harman Kardon was the first brand to offer color coding of the inputs and outputs on all of their AV receivers for easy set-up and channel identification. By using separate colors for different types of connections, it is easy to quickly determine what type of cable is required, and which device, channel or speaker it should be connected to. This includes speaker connections.

Front-Panel Digital Connections

On the front panel of every Harman Kardon AVR and DPR, you'll find both video and audio connections for portable devices such as game consoles, camcorders, digital cameras and MP3 players. Although these devices are normally used outside the home or in different rooms, they benefit from the power and quality of a home theater system.


While many of these devices might be playback-only products, an increasing number of them are able to record. This is why many Harman Kardon AVRs and all DPR models have front-panel connections that may be used as inputs or outputs, making it even easier to create your favorite recordings for your time on the go.

This Harman Kardon exclusive feature delivers a higher level of performance and flexibility, along with a surefire way to ensure that connecting portable devices to a home theater system doesn't require the user to remove connections from the back panel for a temporary connection. Now, that's ease of use!

Putting It All Together

To many consumers, buying a digital A/V receiver may seem like a puzzle, but only Harman Kardon makes it a simple decision by providing all the pieces and fitting them together with power and elegance in a system that combines both flexibility and ease of use. No one knows receivers better than the company that invented them, Harman Kardon.

Visit the Harman Kardon Web site at
www.harmankardon.com.

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