

DVD Players

DVD Video players entered the market in the US around March 1997, instantly becoming the fastest adopted new technology yet released, with over 4 million players sold in the US market alone by the year 2000.



As the fastest growing consumer electronics product in history, DVD players offer picture quality that clearly surpasses the

VCR. The CD-sized discs can contain a complete two-hour-plus movie with a six-channel Dolby Digital or DTS soundtrack. They also provide bonus materials such as multiple languages, interviews, different camera angles, and also behind the scenes commentary by the director (Consumer Reports).

DVD players are undergoing rapid evolution as manufacturers seek to differentiate their products and come up with a winning combination of features. Models are consoles or portables. Some consoles offer built-in karaoke features, MP3 playback, or the ability to play video games. Panasonic, RCA, Sony, and Toshiba are among the biggest-selling brands.

Single-disc consoles. Console models can be used with just a TV or with an entire home entertainment system. More and more low-end models include all the video-output jacks you might want. Price range: \$90 to \$800 and more.

Multi-disc consoles. Like CD changers, these players accommodate two to five discs and even carousal. DVD jukeboxes that hold up to 300 discs are also available. Price range for multi-disc models: \$250 to \$2,000.

Portables. These DVD players generally come with small but crisp wide-screen-format LCD screens and batteries claimed to provide three hours or more of playback. Some low priced models do not come with screens; they're intended for users who plan only connections to TVs. You pay extra for the portability either way. Price range: \$500 to \$1,500.



How to Choose

Video Outputs

The type of video output you use with your DVD player depends upon the type of input that your TV has. DVD players come with standard Composite Video outputs; however, both S-Video and Component Video provide a significant increase in picture quality. In Composite Video, luminance and chrominance are broken into separate signals for increased video quality.

Secondary Component Video — indicates that a second Component Video output is available on the player.

Progressive Scan — A high-end video output that delivers super sharp film-like images to your TV, even when objects onscreen are in motion. Flicker lines are virtually eliminated because all 480 lines of vertical resolution are drawn 60 times a second instead of every other line being drawn each 1/60th of a second as with standard 480i, or 480 line interlacing video.

Surround Sound Formats

Surround sound refers to the ability of your DVD player to play theater-quality sound through your home entertainment system.



Several different formats exist that you can choose from in order to get this high-quality sound. Each one has distinct advantages and disadvantages.

Dolby Pro Logic — The default standard that comes on all DVD players and which is supported by all DVD movies. It converts the audio signal into two channels.

Dolby Digital — Dolby Digital (DD) refers to a way of delivering sound by means of anywhere from one to six channels, depending upon the sound configuration of the DVD. Dolby Digital 5.1 specifically provides six discrete sound channels for playback through dedicated speakers — two front, two back, one center, and one LFE (low frequency effect) speaker, often the sub-woofer. The five surround speakers each output full-frequency sound while the LFE outputs low-frequency bass for sound effects such as thunder and explosions.

DTS Audio — DTS delivers six channels of 20-bit audio and uses one channel for the data reduction of Digital Dolby. This provides for a theater-quality sound experience.

Digital Audio Output Type

Digital audio outputs allow you to send surround sound signals from the DVD player to either an external decoder or an audio receiver. Two types of digital audio outputs exist — coaxial and optical. Coaxial outputs send their signals through standard RCA connector cables.



Optical outputs send their signal through fiber optic cables. Most DVD players have one output type or the other, while some have both.

Options: Coaxial, Optical, Optical and Coaxial.

Six Channel Decoder

A six-channel decoder is an important component of any home theater system. You will need a six-channel decoder as well as five surround speakers (center, two front, and two back) and a sub-woofer in order to hear surround sound. There are two types of six channel surround sound — Dolby Digital 5.1 and DTS. Decoders process the six digital channels of discreet surround sound into six channels of analog sound for output to a receiver, which is either DD 5.1 or DTS ready, as needed. This sound is then passed on through speakers. Purchasing a DVD player with a built-in six-channel decoder eliminates the need for a separate decoder or receiver with built-in decoder.

Dolby Digital 5.1 Decoder — In order to hear Dolby Digital 5.1 sound, you will need a Dolby Digital 5.1-encoded DVD disc and a decoder, either built in to your DVD player or your receiver, or as a separate component. A decoder processes the six digital channels of discrete surround sound into six channels of analog sound for output to a Dolby Digital-ready receiver (with six inputs, one for each channel of sound) and then on to the speakers.

DTS Decoder — At this time, only a few DVD players have the ability to decode DTS sound as well as Dolby Digital 5.1 sound. DTS decoders convert the six channels of DTS digital audio into six channels of analog sound for output to a DTS-ready receiver, and then on to the speakers. In order to hear DTS sound from DTS-encoded discs, it is necessary to have a player with a built-in DTS decoder, a receiver with a built-in DTS decoder, or a separate DTS decoder component.

Decoder Options: No Decoder, Dolby Digital 5.1 Decoder, DTS and Dolby Digital 5.1 Decoders.

For most users, even a low-end DVD player will provide excellent video and audio. A multi-disc console makes the most sense, if it's part of a combination audio/video home entertainment system in which you also play music CDs.

What may influence your decision is if your audio/video setup includes a receiver with built-in Dolby Digital and DTS encoding; these start at about \$250 if you're shopping for both a DVD player and an audio receiver simultaneously. A receiver thus equipped could make your decision to avoid splurging an easier one, as you could (again, if you have the speakers) enjoy six-channel surround sound with even a low-end DVD player. If you plan to buy a digital TV soon, choose a progressive-scan DVD player. "DVD players are too new for reliability information by brand. Most recent surveys suggest, however, that reliability is comparable to players, which have historically needed few repairs" (Consumer Reports).

References

Active Buyer's Guide. DVD Players. <http://www6.activebuyersguide.com>

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Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture, Chester P. Fehlis, Director, Texas Cooperative Extension, The Texas A&M University System.