

# marantz®

## DVD Player

### DV7600



Also black available

### DV7600 Multi format DVD player

The DV7600 universal multiplayer is compatible with virtually all of today's digital video and audio disc formats and makes it the ideal source for a high quality home entertainment system for music and movies in stereo and multi-channel surround sound. It plays DVD-A, DVD-V, DVD-R/RW, SACD and CD-R/RW discs, including MP3 files. Inspiring video performance is guaranteed by the latest 216MHz/12-bit digital to analog converter for video processing and NSV precision video. Utilizing video upconversion via the available HDMI with PAL Progressive Scan provides an unsurpassed picture quality for any HD compatible screen or projector. Audio excellence is assured with a 24-bit/192kHz converter, the unique HDAM and other Marantz specific sound modifications in the audio sections.

## NEW



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because music matters

## Features

- High quality playback of DVD-V, DVD-A, SACD, SVCD, CD, MP3, JPEG, DVD-R/RW
- 216MHz/12-bit video DAC
- PAL/NTSC progressive scan
- HDMI video output
- High definition video scaling on HDMI
- Noise Shaped Video
- Marantz HDAMs for audio
- 192kHz/24-bit DAC for all 6 channels

## Benefits

- Ultimate disc compatibility; regardless which disc you put in, this dream machine will play it
- Faithful and accurate high quality video performance
- Offers improved picture resolution and eliminates virtually all motion artifacts
- For a high quality, full bandwidth, uncompressed digital video signal transmission to a HD display or projector
- Creating a perfect match with any high resolution video display device
- Provides the most accurate signal representation and enhances the picture quality
- Achieving a more dynamic, accurate and detailed sound reproduction regardless the amount of channels
- Faithful and accurate high quality performance for multichannel playback

## Technological glossary

### For audio and video connoisseurs

To enjoy all of the video and audio materials, the DV7600 provides ultimate versatility with high quality video and audio performance. It plays SACD, DVD-Audio, and DVD-Video with Dolby Digital and DTS surround sound in either 2 channel or multi channel formats. It also plays DVD-R/RW and CD-R/RW and is even compatible with MP3 and WMA formats. For the ultimate in video performance the DV7600 features an Analog Devices' NSV Precision Video 216MHz/12-bit video DAC. For both PAL and NTSC source material progressive scan is available ensuring higher resolution pictures. This is the player that embodies high quality convenience.

### A true multi format player

Enjoy the fabulous world of stereo and multi channel audio! The DV7600 provides ultimate versatility with high quality video and audio performance from virtually any 12cm disc. Finally you can enjoy an incredible live-experience in your home as it was in reality. Not only the total ambience is reproduced, but also the natural 'sound' of the instruments is being preserved. The DV7600 plays among others SACD, DVD-Audio, DVD-Video and of course CD DA discs. SACD is based upon the DSD conversion principle that links excellent specifications like a frequency range of 100 kHz and a dynamic range of 120 dB, to superb sound quality. It adds essential resolution and detail to the Multi channel audio setup, necessary for accurate correlation between front and rear channels. This combination of top-end audio performance and Multi-channel sound will give you a sensation that will totally change the way you experience music. DVD-Audio is one of the latest format of high standard audio. It provides ultimate 2ch performance of 24bit/192kHz or 24bit/96kHz in six channel format. The DV7600 will allow its owner to benefit from the full performance of DVD-Audio.

### Superb video performance

The DV7600 uses an advanced 216MHz/12-bit video digital/analog converters and Analog Devices' Noise Shaped Video (NSV) for high-quality picture reproduction. As a continuation of Analog Devices' development of enhanced picture quality, in a wide variety of applications and for many different video standards, the technology of Noise Shaped Video has been developed. This technology allows video images to be displayed at resolutions and lower effective signal to noise ratios well beyond what would be expected from the data converter by making use of the latest technological advances. The improvement takes place in parallel with the increased support to higher definition video standards including HDTV and progressive scan.

The DV7600 provides top quality progressive scanning for both NTSC as well as PAL material. Compared to a conventional interlaced picture, progressive scanning creates a picture signal with double the scan lines, resulting in a noticeably sharper image. The progressive image offers higher picture resolution and eliminates virtually all motion artifacts. Even on large screens, the progressive scan lines are barely noticeable and picture flickering is greatly reduced, so you can enjoy extended viewing without eye fatigue. The progressive conversion of the DV7600 is optimized for the high resolution and low noise of the DVD-Video format for both PAL and NTSC software. This enables the unit to preserve DVD-Video picture quality for display on all screen sizes from direct-view CRT to projectors. Progressive Scan is provided on both the HDMI as well as on the component output.

### High-Definition Multimedia Interface (HDMI)

HDMI assures that pristine high-definition images retain the highest video quality from the source all the way to the display. HDMI combines high-definition video and superb audio in a single digital interface with a bandwidth of up to 5 Gigabits/second. Benefits include uncompressed digital quality, fewer cables and a small, user-friendly connector suitable for a wide range of components. HDMI on the DV7600 complies with High-bandwidth Digital Content Protection (HDCP) technology protecting high-value content from unauthorized reproduction and distribution. Marantz gives the consumer full digitalized interconnection from source to display and projectors with HDMI on the DVD players, AV Receivers and on our latest generation projectors and flat displays.

### Video scaling on HDMI

A video scalar combines the information in the odd and even fields of an incoming video signal into a combined, non-interlaced picture. Taking advantage of the latest electronics technology, the video scalar uses sophisticated, processing algorithms to manipulate the image, changing its resolution, refresh rate, and even aspect ratio, to exactly match the desired output specifications. When using a video scalar, a projector or display device is not forced to crop, distort, or further process the image in order to display it. The video scalar used in the DV7600 allow you to generate an output that exactly matches the native resolution of for example the Marantz DLP projectors or flat panel displays. It produces display-optimized video at a several output resolutions.

Performing precision resolution upconversion on 576i (or 480i) DVD's, the DV7600 provides output video quality approaching High Definition (HD). Outputs spanning from 480p, 720p and all the way to 1080i are supported. The scaling is done within the digital domain and therefore exclusive for the HDMI output.

#### **A touch of Marantz**

The strength of each Marantz design can be found in the attention to detail and cohesiveness of the different elements. The DV7600 is a clear example of benchmark engineering and craftsmanship and features a number of Marantz sound enhancements. The DV7600 DVD player is built on a solid metal chassis and shock-absorbing feet result in minimized internal vibration and mechanically induced jitter. It incorporates leading edge digital signal processing, along with a Crystal 192 kHz/24 bit D/A converter in each of the channels. This design configuration is capable of a clear and powerful reproduction of the most demanding action movie soundtracks and full range (multi channels) music discs.

#### **Marantz HDAMs audio**

Audio devices are usually equipped with Op-Amps (operational amplifiers) for which Integrated Circuit (IC) are commonly used. Unfortunately these IC's do not match the very high requirements of Marantz. Marantz developed it's own discrete circuit boards to replace the IC's. These HDAM's consists of discrete surface mount components with short mirror image L/R signal paths. Those devices are doing exactly the same thing as the Op-Amps, but outperform the regular IC Op-amps dramatically in terms of the Slew Rate, resulting in a much more dynamic, accurate and detailed sound.

#### **Build in multichannel decoders**

In order to benefit from the top grade analogue audio performance from the DV7600 we have incorporated DD and DTS multichannel DVD-V audio decoders. Dolby Digital is an advanced form of digital audio coding that makes it possible to store and transmit high-quality digital sound, far more efficiently than was previously possible. Apart from the Dolby Digital information, DVD software can also contain Digital Theater System (DTS) audio information. The compressed digital information offers five fully independent high quality channels, together with a sixth subwoofer channel. DTS offers superb live experience and adds breathtaking effects to film.

#### **CI Friendly**

To optimize equipment in terms of ease of use, Marantz has designed the D.Bus system. Individual devices inform each other in order to automatically tune to the customers demands. Also received remote control commands are communicated via this bus. This enables equipment without IR-receiver to be controlled via a Marantz Remote control. The addition of the RS232c port allows the DV7600 to be integrated with a number of control systems such as AMX and Crestron. Via this interface two-way communication is possible to control and get status feedback for example.

## **Bypacked accessories**

- User manual
- Power cable
- Remote control
- Batteries
- AV cable
- D-Bus cable

**RC7600DV (no picture available)**

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## FEATURES

<b>MULTICHANNEL/SURROUND</b>	
Built-in decoders: DD / DTS / MPEG / DTS96/24	*/-/-
Virtual surround: DPL / DPLII / TruSurround / other	-/-/-
Headphone surround	-
<b>AUDIO/VIDEO ENHANCEMENTS</b>	
Pal 60 Conversion	*
Progressive Scan: PAL / NTSC	*/-
Digital Video Scaling (HDMI output only): 480p / 576p / 720p / 1080i	*/*/*/-
CD Compatibility: CD / CD-R / RW / HDCD / SA-CD / WMA / MP3	*/*/*/-/-
VCD Compatibility: VCD / VCD 2.0 / SVCD	*/*/-
DVD Compatibility: DVD-V / DVD-A / DVD-R / DVD-RW (video) / DVD-RW (VR) / DVD+R/RW	*/*/*/-/-
Image Disc Compatibility: JPEG / Picture CD	*/-
HDAM: Standard / SA / Current Feedback	*/-/-
HDAM cover: Gold plated / Copper plated / Metal / no shield	-/-/-
Audio ex.	-
Display On/Off	*
Dedicated High Grade Audio Power Supply	-
Power Transformer: Toroidal / EI	-/-
High Grade Audio Components	*
Customised Components	-
Copper Plated Chassis	-
System block shielding: Copper plated / Metal / none	-/-/-
Chassis : Die-cast / Copper plated / Metal	-/-/*
Double Layer Bottom Plate	-
Low Noise LCD display	-

## OTHERS

HDMI adjustments	*
Selectable HDMI output level (normal / expand)	*
DVI adjustments	-
Selectable DVI output level (normal / expand)	-
Selectable Filters for SA-CD	-
Speaker config (SA-CD/DVD-A)	*
Lip sync control	-
External sync control	-
Auto Aspect Ratio	*
Still Picture	*
Multi Language OSD	*
Multi Channel Down Mix: MPEG2 / DD / DTS / DVD-Audio / SA-CD	*/*/*/-
Video Adjustment	*
Bi-directional control via RS232C	*

## INPUTS/OUTPUTS

<b>VIDEO</b>		
Composite Out	2	
S-Video Out	1	
Component Out	1	
Gold Plated Cinch	*	
BNC output: Component / RGBhv / selectable	-/-/-	
Scart (RGB)	1	
DVI-D (with HDCP)	-	(compatible via HDMI)
HDMI (with HDCP)	1	
<b>AUDIO</b>		
Scart	1	
Analogue Out (Cinch)	2	
Multi channel out (5.1)	*	
Digital Coaxial Out / In	1/-	
Digital Optical Out / In	1/-	
Digital AES/EBU out	-	
IEEE 1394	-	
Gold Plated Cinch	*	
<b>OTHER</b>		
D.Bus In/Out	*	
RS232C	*	

## SPECIFICATIONS

D/A conversion (video)	216 MHz/12-bit
D/A converter (video)	ADV7314
D/A conversion (audio)	192 kHz/24-bit (all channels)
D/A converter (audio)	CS4398
Frequency response	4 Hz - 44 kHz (DVD fs 96kHz)
Frequency response	4 Hz - 100 kHz (SACD); 4 kHz - 88 kHz (DVD-A)
Signal to Noise Ratio	125
Dynamic Range: CD / DVD	110
Total Harmonic Distortion (THD)	0,0012%

## GENERAL

Available colors: Platinum/Gold/ Silver/Black	-/-/*
Metal Front Panel	*
Remote Control	RC7600DV
Power Consumption	29W
Detachable Power Cable	*
Maximum Dimensions (W x D x H)	440 x 96.3 x 305.5 mm
Weight	4.6 Kg

Design and specifications are subject to change by Marantz without notice.

[www.marantz.com](http://www.marantz.com)

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