





Section 3

DVD Players & Recorders

Introduction to DVD	90-91
JVC	92-105
LG	106
Onkyo	107-109
Panasonic	110-115
Pioneer	116-120
Samsung	121-123
Sony	124-129
Toshiba	130-135
Yamaha	136
DVD Accessories	137-141

Choosing a DVD Player

The essential home theater source component, a DVD player is also one of the best entertainment values today. It delivers digital picture quality that until recently you would only have seen in a TV broadcast studio. You'll hear digital-quality surround sound. You'll enjoy over thirty thousand titles including movies, concert videos, children's programs and more. Plus today, more and more DVDs include not only the original movie, but also extra content like director's cuts, behind-the-scenes documentaries, interviews, outtakes, and more. Of course, compared to videotape, DVDs are more compact, more durable and offer much faster access to individual movie scenes—no rewinding and precise search features. Features to look for:



Progressive Scan

This feature effectively doubles the picture quality. To get the benefit of progressive scan, you'll want to connect your DVD player to a "high scanning," "High Definition monitor" or "High Definition upgradeable" television. If you own or you're thinking of buying one of these televisions, then a progressive scanning DVD player is a must.

3:2 Reverse Conversion

After you've selected a progressive-scan player, be sure to choose a model with 3:2 pulldown processing 3:2 reverse conversion is a technology employed in the better progressive scan DVD players. It retains the integrity of the movie's original film frames. You'll see a clearer picture, especially on scenes with movement.

Component Video Outputs

Component (Y/PB/PR) outputs are a must for progressive scan DVD—and they're highly desirable for all other players. They do the best job of preserving the picture quality. Component video outputs (Y/PB/PR) are the best way to convey the full quality of the signal from the DVD player to the television.

DVD-R/RW, CD MP3/JPEG Playback

Most of today's DVD players can handle all the different types of discs you'll want to play. Newer DVD players have added the capability to play DVD formats like DVD-R/RW and DVD+R/RW. These are the formats usually associated with DVD burners for your computer and DVD recorders. You'll also want to make sure that they player can play back CD-R and CD-RW discs embedded with MP3 or WAV music files and JPEG photos—because it is this ability that will turn your DVD setup into a true entertainment center.

Super Audio CD Playback

Higher-end models are also able to play either DVD-Audio discs or Super Audio CDs (SACDs) — and a few can play both. The perfect complement to multi-channel home theater speaker systems, these high resolution discs provide the best sound quality available today—capturing subtle details that make music sound richer and more real. Both are capable of delivering 5.1-channel music that places you in the center of the performance when you listen through a home theater system. There are thousands of DVD-Audio and SACD titles available.

DVD Changer Capability

This lets you load any mix of up to 5, 100, 300 or 400 CDs and DVDs for pushbutton access to all your music and movies. No more rummaging through the shelves. No more fumbling with jewel boxes. You can save a lot of shelf space by simply storing your CDs and DVDs in the changer. Plus, DVD players are so good at playing music CDs that you'll no longer need a separate CD player. Choose from carousel models that hold a handful of discs, or bulkier mega changers with room for up to 400 discs.

Picture Zoom

Some players feature a picture zoom capability, with different magnification levels, so you can study the scene in detail. Some will even allow you to pan up/down and left/right in order to enlarge specific areas of the screen. If you have a conventional 4:3 aspect ratio TV, some DVD players have a 4:3 TV zoom feature that will enlarge the letterbox format picture to get rid of the black bars at the top and bottom of your TV screen. Just like "full screen" DVD version of widescreen movies, you lose about 33% of the picture area due to cropping of the sides, but at least you will no longer have those black bars that can be annoying to some viewers.

Digital Audio Outputs

For utmost flexibility in a home theater system, be sure your DVD player includes both optical and coaxial digital audio outputs. This allows the player to pass the "raw" digital audio signal for outboard Dolby Digital and/or DTS surround sound decoding by a receiver or preamplifier. A digital audio connection is best, as the digital audio signal is less subject to degradation and interference than the analog counterpart. The optical digital connection uses laser (light) pulses to transmit data in a fiber optic cable. In contrast, the coaxial digital audio connection uses a modulated radio frequency (RF) signal and a specialized cable that looks like an RCA-type connection.

On-Board Decoders

Some DVD players can perform on-board decoding of the Dolby Digital or DTS signal and pass out the 5.1-channel decoded analog signals (five full frequency channels and one low frequency effects "1" channel). This feature is worthwhile only if you have a "digital ready" or "5.1-channel ready" receiver. If you have a Dolby Digital receiver, then you should use one of the digital audio outputs and let the receiver perform the decoding. One reason is that the digital signal is less likely to be degraded when passing between the DVD player and the receiver or preamplifier.

Choosing a DVD Recorder

DVD recorder machines have come a long way in the past year or so. The prices on these stand alone units have dropped from around \$800 to 200 - \$300. There are many different brand names available (JVC, Panasonic, Pioneer, Sony and Toshiba) for a DVD recorder-and most of them are going to be an excellent choice. Finding the right

DVD recorder for you isn't as hard as you might think. Although the choice is bewildering (and becoming more so each day) you'll find it hard to buy a bad machine - and if you look around you'll find a great machine at a cheap price. Record TV shows and home movies and then watch them on a DVD player, or on your computer's DVD-ROM drive. Like a VCR, a DVD recorder has a built-in TV tuner, and a clock/timer for unattended recording.



Advantages of Recording to Disc

- ◆ The advantages of recording video to DVD versus tape is the same as recording music to CD instead of cassette. You don't have to fast-forward or rewind to find an unused section of tape, or worry about unintentionally recording over another segment. The DVD recorder keeps track of the size and location of any available space on the disc. To start recording, you simply push the Record button. Arranging and editing video segments with a DVD recorder is as easy as creating a mix CD on a CD recorder.
- ◆ DVD discs are a much more durable and robust medium than magnetic tapes. This makes them ideal for archiving programs recorded on tape, or for transferring precious camcorder footage. Disc-based recording eliminates worries about old or worn tapes getting stuck in your VCR or degrading over time. And although the technology in DVD recorders is very advanced, they actually have fewer moving parts than a VCR, for better long-term reliability.
- ◆ DVD recorders provide anywhere from one to six hours of recording time on a regular 4.7GB single-sided blank DVD. There are differences depending on which recordable DVD format you use, but you can generally expect to record 1-2 hours of studio-quality video, or up to 6 hours at VHS quality. The highest-quality mode yields recordings with picture and sound quality that are virtually indistinguishable from the original.

DVD Formats

The major DVD formats are DVD-R, DVD-RW, DVD+R, DVD+RW and DVD-RAM. DVD-R/RW is backed by Pioneer and supported on the computer side by Apple; DVD-RAM is backed by Panasonic with support by Toshiba; DVD+R/RW is backed by Sony and Philips, with support from Hewlett-Packard.

DVD-R and DVD+R are write-once formats, while DVD-RW, DVD+RW and DVD-RAM are reWritable i.e. you can record more than once onto the same disc. DVD-RW and DVD+RW discs can be erased and re-recorded about 1,000 times, while DVD-RAM discs can be re-recorded up to 100,000 times! The + and - varieties are not compatible, however, there is no difference between + and - in terms of quality, although for some reason, - discs tend to be cheaper. DVD+R/RW recordings are always DVD-Video compatible. With a DVD+RW video recorder, you don't have to worry about the various recording modes and options. All discs that are produced by the DVD+RW video recorder, both DVD+R and DVD+RW, regardless of their playing time or picture quality setting, are written in a compatible mode and therefore can be played in the vast majority of standard DVD-Video players.

DVD-R is the format that's most compatible with current players and drives. DVD-RAM is the least compatible — it will only play on DVD players specifically designed to handle it. However, DVD-RAM does offer some unique capabilities; the discs are double-sided and therefore have a greater capacity. They also allow 'time-shifting', watching the beginning of a recording while still recording the end, pausing live TV etc.

HDD Recorders

DVD HDD recorders offer flexibility and convenience: they allow you to record directly onto a high-capacity hard drive disk—perfect as a temporary storage and the ability to record to DVD disc, ideal for more permanent storage. The greater the size of the hard disc, the more TV you can record, so go for the biggest you can afford. It's bound to fill up quicker than you think.

The hard drive is normally accompanied by DVD-RAM, or DVD-R compatible recording capability. In addition to more flexibility in storing the programs, there is also greater flexibility in viewing the shows with most of these recorders. For example, you can watch a recorded program and simultaneously record a new program into the disc. Also, you can stop live picture and the recorder keeps on recording, and you can resume to watch the program as you please.

DVD hard disc drive recorders work much like the computer drives used in personal computers. The amount you can store in the hard drive unit of broadcast programming depends on how big the storage space is and what type of recording mode you use. For example, an 80 GB hard disc drive in select Toshiba models gives you up to 75 hours of recording time on a LP mode. The quality of the recording is deteriorated somewhat from the original in this mode, however.

Most DVD hard drive recorders also have smart recording unit, which will record, if the DVD disc hasn't got enough space, the remainder of the program onto the hard drive.

XV-N320B/322S • XV-N420B/422S

DVD Players

JVC's DVD players offer high-end video performance with style and convenience. Sporting an ultra-slim profile and stylish design the XV-N320B (black) / XV-N322S (silver) feature 11 visual effects during still

image (JPEG) playback and the option to save any desired image as a custom start-up screen. Vari-Speed Playback allows you to watch a DVD up to 1.5x faster while audio and subtitles play at normal speed. Additional features include Express Play Start, high-resolution graphical user interface (GUI), Direct Digital Progressive Scan Output, Video Fine Processor, 10-bit/54MHz video digital-to-analog (DAC) converter, 192kHz/24 bit audio DAC, 3-step Zoom Play, 10-disc memory and one-touch replay that instantly replays the last ten seconds viewed.

The XV-N420B (black) / XV-N422S (silver) steps-up with an illuminated disc tray, Windows Multimedia (WMA) playback and AV Compulink for one-touch control of an entire JVC A/V system. Both offer playback compatibility with the full range of formats: DVD, CD, CD-R/RW, DVD+R/+RW, DVD-R/RW, VCD, SVCD and MP3(CD-R/RW)/JPEG digital stills. Outputs include coaxial digital for Dolby Digital and DTS pass-through, as well as component, composite and S-Video. Each includes a newly-designed, slim full-function remote control.

Top: XV-N320B; Bottom: XV-N420B



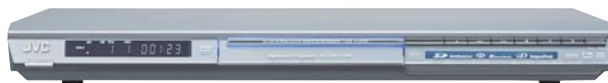
FEATURES

- ◆ They play DVD Video, DVD-R/RW (Video Format), CD, CD-R/RW, VCD, SVCD, and MP3/JPEG Digital Still (CD-RW)
- ◆ JVC's high-performance Rolling Pickup follows wandering tracks and plays warped discs with impeccable precision. Plays discs that other brand DVD players can't.
- ◆ Coaxial digital outputs for PCM, Dolby Digital and DTS
- ◆ DTS analog 2 ch. downmix output
- ◆ Digital Direct Progressive Scan output delivers smooth, sharp, high-resolution images in progressive format
- ◆ 10-bit/54MHz video D/A converter and 192kHz/ 24-bit audio D/A converter
- ◆ Component, composite and S-Video output plus analog L/R front output
- ◆ Zoom play (3 steps)
- ◆ Variable-speed playback with sound and subtitles (1.5x/1.2x/1.0x/0.8x/0.6x)
- ◆ Turn on the system and load a disc into the DVD player. The first movie scene appears on screen with virtually no waiting. Express Play Start has a unique algorithm to identify media and optimize parameters, the wait for the show to start is over.
- ◆ One-touch instant replay (10-seconds)
- ◆ Variable search/slow in forward/reverse
- ◆ VFP (Video Fine Processor): 7 parameters with 2 presets and 2 manual settings let you control image quality according to your personal preferences. I
- ◆ 1.5x Quick playback with sound lets you catch up to the real-time broadcast schedule. You can speed up playback or slow it down to half-speed. Either way the picture is distortionless and soundtrack audible.
- ◆ Bookmark function memorizes where the DVD stopped playing and resumes playback at that position (up to 10 discs).
- ◆ High resolution GUI (Graphic User Interface) with PC-like tool bars overlaid at the top of the TV screen, with drop-down menus, for simple point and click operation.
- ◆ On-screen languages (English, Spanish)
- ◆ Supplied full-function remote control
- ◆ N420B/422S step-up with a transparent disc tray elegantly illuminated in blue (with dimmer control), lending an even sleeker look to these stylish units. Also offers AV COMPU LINK for one-touch control of an entire JVC A/V system.

XV-NP10S DVD Player/Memory Card Player

Very similar to the XV-N322S, the XV-NP10S features a versatile interface for a

wide range of memory cards, including SD, Smart Media, MMC, Memory Stick, Compact Flash and xD-Picture Card. It directly loads, reads and plays stills, moving pictures, and audio programs stored in a mounted memory card. JPEG (digital still images), WMA, MP3, and MPEG-4 (digital video images, Simple Profile) can be played back, whether the files are saved on a CD/DVD disc or in a memory card. MPEG-4 (Advanced Simple Profile) and DivX file playback is also possible from a CD/DVD disc.



HR-XVC18B/19S • HR-XVC37**DVD Player/VHS Hi-Fi Recorder Combos**

JVC's DVD/VCR combo's offers outstanding performance combined with convenience features that make operation quick and easy. With JVC's Auto Select feature all that's required to begin DVD or VHS playback is to insert a cassette or disc – it's that simple, and works with both the RF and video outputs. The HR-XVC18B (black)/HR-XVC19S (silver) offer DVD, CD-R/RW, MP3/JPEG (CD-R/RW), Video CD, SVCD and DVD-R/-RW (video format) playback. Other DVD

features include a high performance one-chip AV decoder with adaptive geometrical chroma mapping, coaxial digital audio output, 5.1-channel Dolby Digital/DTS output, component video output and multi-session CD playback. Other features include Express Play Start that initiates program play about five seconds after the tray is closed, S-VHS Quasi-Playback (SQPB) and a multi-language color on-screen display. For convenience, one-touch replay (on the remote) replays the last 10 seconds of DVD or seven seconds of VCR programming –

ideal when a bit of dialog was missed or that funny moment needs to be replayed immediately.

The HR-XVC37 steps-up with JVC's VHS Progressive Scan, which allows VHS playback in 480p for an image with improved edge detail, less flicker and higher density. This in turn makes possible a unique convenience – a single set of component outputs for progressive DVD

and VHS playback, which eliminates the need to manually change TV inputs when switching between sources.



Top: HR-XVC18B; Bottom: HR-XVC19S



HR-XVC37

DVD Section

- ◆ Digital Direct Progressive Scan
- ◆ DVD component video output
- ◆ 192kHz/24 bit audio D/A converter
- ◆ Front AV inputs; composite, S-Video output
- ◆ Dolby Digital/DTS digital coaxial output
- ◆ Variable Search and Variable Slow
- ◆ Video Fine Processor (7 parameters)
- ◆ 3-D Phonic for virtual surround sound
- ◆ Full-Function Remote Control
- ◆ They play DVD Video, CD Audio, CD-R/RW, Video CD/SVCD, DVD-R/RW, (Video Format), MP3 & JPEG Playback (CD-R/RW)
- ◆ Turn on the system and load a DVD into the player. The first scene appears on screen with virtually no waiting. Express Play Start identifies the media and optimizes parameters, the wait for the show to start is over.
- ◆ Multi-session CD playback means you can playback both audio and data content recorded in one media.

Conveniences

- ◆ In DVD mode, if you insert a cassette with its safety tab removed, the deck will automatically switch to the VHS mode. Conversely, when you load a DVD disc with automatic playback function in the VHS mode, the deck automatically switches to output the DVD program.
- ◆ Missed an important scene? Hit the "One-Touch Replay" button on the remote and the deck will rewind and play back scenes from 10 sec. (on DVD) and 7 sec. (on tape) before.

VHS Section

- ◆ Hi-Fi VHS Stereo with MTS Decoder
- ◆ SQPB (S-VHS Quasi Playback)
- ◆ Auto Tracking
- ◆ Auto Clock Set and Active Channel Memory
- ◆ 1-Month/ 8 Event Programmable Timer
- ◆ DVD playback while recording on VCR
- ◆ Composite video output
- ◆ Information on the programs you record is stored in VCR memory – up to 2000 titles! To watch something you've recorded, just browse through the program lists. These can be listed by the tape number assigned to each cassette, date of recording or program category (like movies, sports, news, etc.)
- ◆ Simply follow the instructions on the on-screen menu and set-up starts automatically.

DVD RECORDERS

JVC's expertise in video technologies has been optimally applied to digital technologies to deliver superior picture quality. JVC DVD recorders provide astounding quality of recorded and played back pictures, and offer an array of user-friendly functions. DVD recorder combinations – with either a built-in Hard Disk Drive (HDD), DV or VHS recorder—or all three—are also available, offering more than triple the benefit of each medium.

JVC recorders give you the options of recording in DVD-RAM, DVD-RW or DVD-R format, letting you choose the most suitable option depending on the purpose or content. As for playback, the lineup is compatible with a vast majority of audio and video disc formats: DVD-Video, DVD-RAM, DVD-R/RW, DVD+R/RW, VCD/SVCD, CD, and CD-R/RW. You can also enjoy MP3 music files or JPEG (baseline JPEG format is supported) files burned on a CD-R or CD-RW. The Slide Show function enhances the fun of viewing JPEG digital still images.

Advanced Technologies for Recording and Playback of High Quality Pictures

JVC DVD recorders incorporate two very advanced technologies for high resolution and effective noise reduction – Super MPEG Encode Pre-Processor and Super MPEG Post-Processor – which improve the quality of pictures in recording and playback; respectively.

Super MPEG Encode Pre-Processor

The Super MPEG Encode Pre-Processor ensures superior quality of images when recording from analog sources, like the tuner or a connected video source, conducting effective noise reduction before MPEG-2 encoding. The 3-step process starts with the Time Base Corrector (TBC) which eliminates jitter contained in analog input signals. Then, the Frame Synchronizer corrects frame crossover jitter and processes any deviant frames. These two processes ensure that the video signals conform to the NTSC standard. Finally, the Motion Active Noise Reduction system reduces the noise of moving pictures by precisely detecting the motion and applying the algorithm between the moving pixels. This selective noise reduction ensures that encoded images – especially moving subjects that are likely to draw the viewer's attention – are free of edge smear and image lag.

Super MPEG Post-Processor

The Block Noise Reduction Circuit reduces annoying 'block noise' caused by MPEG-2 compression. The Color DigiPure conducts 3D noise reduction and enhances the color and details to provide sharp, yet natural pictures, while the Hadamard Noise Reduction system eliminates 'mosquito noise' from any DVD you play.

JVC's DVD recorders are able to output NTSC Progressive (480p) signals from any DVD being played. Motion Active Progressive Scan output generates a progressive scan signal from interlace sources, such as TV programs recorded on DVD. Digital Direct Progressive Scan Output outputs the original progressive data – a movie on prerecorded DVD, for examples – without converting to interlace data, so there is no quality loss and the picture remains true to the original film source.

Library Database DVD Navigation and Animated Thumbnail (DVD-RAM/DVD-RW VR Format)

JVC DVD recorders can memorize information of up to 2,000 programs including their titles, disc numbers, dates of recording and so on, and when you choose one, the player tells you which disc to load.

Once loaded, choosing the right program on the disc is as easy as clicking on a thumbnail image, it even animates [the movies] complete with sound for sure selection.



Longer Recordings with High Resolution Pictures (DVD-RAM/DVD-RW VR Format)

JVC's DVD recorders boast superior quality of recorded pictures, particularly with long recordings, delivering the best quality for each recording mode.

With conventional DVD recorders, the quality can become degraded with longer recordings, because of the trade-off between reducing noise and maintaining resolution. Not with JVC recorders. For example, in the 3-hour recording mode (FR180), they attenuate MPEG noise while maintaining high horizontal resolution of 400 lines, compared to conventional technology that can reduce resolution to 250 lines.

Maximum quality is available with the XP mode's 500 lines of resolution. To assure recordings that fit precisely on the disc while offering the best possible quality, you can also manually adjust the sampling rate from among 63 steps (max. 16-hour recording with dual sided disc in FR480 model), or set the deck to record a program on a blank or partially recorded disc with automatic sampling rate optimization.

DR-M100S

DVD-R/RW and DVD-RAM Recorder

The DR-M100S records in DVD-RAM and DVD-R/RW formats (up to 16 hours of recording time using a dual sided disc), and includes an array of innovations that makes it easy to record high picture quality.



In addition to recording, it offers true multi-format compatibility on playback, with the ability to play the DVD-RAM, DVD-R/RW and DVD+R/RW formats, as well as CD, VCD, SVCD, JPEG and MP3 files.

Conveniences include live memory, which allows fast forward, rewind and slow replay during recording (DVD-RAM only), and DVD Navigation, which can accommodate information on 2,000 recorded programs, including disc number, title and other details, without loading a disc. Load the disc, and DVD Navigation displays a thumbnail of recorded programs so content can be easily identified, and the thumbnail image can be animated with sound when selected with the cursor. Other features include quick skip for jumping 30 seconds forward, instant/one-touch replay that replays the last seven seconds, natural reverse playback, and a multi-brand remote control. Connections include front DV input; front and rear composite and S-Video inputs; component, composite and S-Video and outputs; front audio input; and digital coaxial and analog audio outputs.

FEATURES

Video

- ◆ Plays DVD-Video, DVD-RAM, DVD-RW, DVD-R, CD, SVCD, VCD, CD-R/RW, MP3/JPEG Digital Still (CD-R/RW)
- ◆ Recordable onto DVD-RAM, DVD-RW (VR and Video Formats), DVD-R
- ◆ Motion Active Progressive Scan output for video source)
- ◆ Digital Direct Progressive Scan output for film source)
- ◆ Super MPEG Encode Pre-Processor and Post-Processor (see previous page)
- ◆ 16-Hour DVD recording on a dual-sided disc
- ◆ Library database DVD navigation with animated thumbnail (see previous page)
- ◆ PAL playback on NTSC TV (DVD)
- ◆ Instant Replay, Quick Skip, Live Check
- ◆ "Undo Finalization" capability (DVD-RW)
- ◆ Auto 16:9 recording and playback
- ◆ Variable search/slow (±4 steps forward/rev)
- ◆ Natural Reverse Playback (-1x)
- ◆ Resume Function (30-Disc/Bookmark)

Audio

- ◆ Dolby Digital/DTS Digital output
- ◆ MTS decoder
- ◆ Linear PCM audio recording (XP Mode Only)
- ◆ 192kHz/24-bit audio D/A converter

Conveniences

- ◆ On-disc timer programming (DVD-RAM/ DVD-RW VR format) lets you pre-program desired timer recording content on the disc, as well as use conventional timer programming on the unit. You can complete timer setting just by loading a programmed disc into the recorder. It's a way to record your favorite TV series on the same disc.
- ◆ DVD-RAM's superior rewriting capability allows Live Memory (simultaneous recording and playback) like a hard drive. You can play scenes you missed without stopping current recording or waiting until the end. Since the scene being recorded in real-time can be displayed in a window using the Live Check function, you'll know exactly when to stop recording.

General

- ◆ 181-channel frequency synthesized tuner
- ◆ Power save mode and 60-minute power backup
- ◆ Permanent Program Memory
- ◆ AV COMPU LINK
- ◆ VCR+C3 (DVD)
- ◆ Auto Tuner Preset
- ◆ High-resolution GUI (English/French/Spanish)
- ◆ 1-Month/8-Program timer
- ◆ Includes multi-brand TV/DVD/DBS compatible remote control

Inputs/Outputs

- ◆ Front DV input/output
- ◆ Front composite and S-Video inputs
- ◆ Front L/R analog audio inputs
- ◆ Rear component out, composite and S-Video input/output,
- ◆ Rear L/R analog audio input/outputs
- ◆ Rear coaxial digital audio output

DR-MV5S

DVD Recorder/VHS Hi-Fi Combo

For those with a collection of VHS recordings that they would like to continue using or to archive onto DVD, JVC offers the DR-MV5S, which combines all of the features of the DR-M100S DVD recorder (previous page) with a VHS Hi-Fi VCR featuring



JVC's VHS Progressive Scan and a one-touch intelligent dubbing system between the VHS and DVD sections for easy archiving and editing. The dubbing system includes three new features: auto record speed optimizer which calculates the total recording time on the VHS tape and then automatically selects the most suitable recording speed for dubbing to DVD; auto thumbnail creation which automatically creates video thumbnail chapter references when dubbing to DVD based on the number of recordings on the tape; and auto blank-cut dubbing that eliminates blank space between recordings on the tape being dubbed when recording to DVD or HDD.

The DR-MV5S includes twin tuners that allow DVD and VHS recording to be performed separately or simultaneously from different TV channels. The live memory feature when using DVD-RAM allows simultaneous recording and playback. In addition, VHS playback is possible during DVD recording, and DVD playback is possible during VHS recording.

STEP-UP FEATURES FROM THE DR-M100S

- ◆ Twin tuners in the DR-MV5S allows tape recording and DVD recording to be done separately. You can record programs from different channels simultaneously onto DVD and VHS tape.
- ◆ The benefit of progressive flickerless and high picture quality images for DVD is now available for VHS via the unified progressive component output on the DR-MV5S
- ◆ VHS Progressive scan allows VHS playback in 480p. The result is an image with improved edge detail, less flicker and higher density.
- ◆ VHS Progressive also allows VHS signals to pass from the deck to the TV using the same outputs used by the DVD. As a result, the DR-MV5S requires only a single cable to connect to a TV. Playback is easier, too, because with VHS and DVD connected to the same TV input, there's no confusion about which input selects which source.
- ◆ Pictures from VHS tapes can look better than the original because the Time Base Corrector effectively reduces jitter contained in the original images during the recording process.

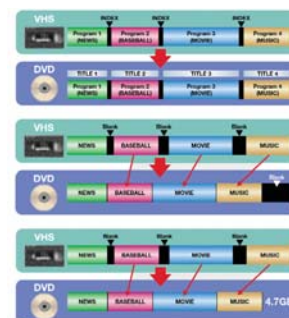
VCR Section

- ◆ DA-4 head Hi-Fi stereo playback/recording
- ◆ SQPB (Quasi S-VHS) lets you playback S-VHS tapes (in standard VHS resolution).
- ◆ Active video calibration picture system
- ◆ On-screen display (English, French, Spanish)
- ◆ Auto SP/LP timer recording
- ◆ Variable search and lows
- ◆ Instant Review and Index Search

One-Touch Expert Dubbing (VHS → DVD)

The DR-MV5 comes with "One-Touch Expert Dubbing" button. Simply press the button, and the unit starts VHS-to-DVD dubbing with the following advanced functions:

- 1) Auto Thumbnail Creation Dubbing:** The JVC recorder automatically creates thumbnails by detecting the tape-encoded signals that indicate program changes. This allows easy access to each dubbed program.
- 2) Auto Blank-Cut Dubbing:** The unit skips any blank space on the tape. This results in DVD discs free of the unwanted blank spaces typically seen between VHS-recorded programs.
- 3) Auto Recording Mode Optimizer:** Press and hold the "One-Touch Expert Button" for 2 seconds, and the unit automatically selects the optimum bit rate to ensure the best picture quality possible while precisely fitting the whole content to a 4.7GB disc. Dubbed pictures are free of unwanted blank space.



DR-MH300S

DVD Recorder/Hard Disk Combo

JVC's DR-MH300S combines the DR-M100S DVD recorder with a 160GB hard disk recorder and HDMI digital output into a single deck to provide extraordinary versatility. It allows high speed dubbing up to 64x normal speed between the hard drive and DVD recorder. It also offers flexible editing capabilities, made even easier thanks to the navigation system. The quality of digital-to-digital dubs from the hard drive to DVD is enhanced by JVC's Bit-Rate Optimizer, which, in contrast with conventional recording, recognizes that fast-motion scenes need to be recorded differently than other scenes for the best possible quality, and makes these adjustments on the fly. The DR-MH300S can pause a live recording and provides several simultaneous recording and playback options—recording on the hard disk while playing back from the hard disk or DVD, or recording on DVD while playing back from the hard disk.



STEP-UP FEATURES FROM THE DR-M100S

- ◆ Huge 160 GB hard disk lets you record up to 34 hours of programming in the highest-quality XP mode or 209 hours in the EP mode. You can save a large number of TV programs or other video content, and transfer as much as you want to DVD for archiving and/or playback. It's also convenient when you have to be away for an extended period of time, but you don't want to miss any of your favorite TV programs.
- ◆ Drive automatically activates 'Temporary Loop Recording' when the unit is turned on. This function lets you 'go back' and watch or record a program you missed without loading a disc or setting the timer, because it records TV programs up to a specified number of minutes/hours in a continuous loop.
- ◆ High-speed dubbing from Hard Drive to DVD can be completed at incredibly high speed—up to 64x the normal speed. A one-hour program can be copied to a DVD disc in less than a minute.
- ◆ The best possible dubbing and archiving solution, the Bit-Rate Optimizer analyzes the content as it is recorded on the hard drive and then intelligently assigns optimum bit rates—low for simple scenes, high for complicated scenes—to provide the best picture quality while calculating disc capacity, similar to what studio engineers do to author their content for DVD movies.
- ◆ Editing is a snap with its navigation system with thumbnail images. Editing from the hard disk to DVD is as simple as creating a playlist. The thumbnails make it easy to find the desired scenes. Dubbing is just as easy - just select the desired scenes and press "OK".
- ◆ Fail-safe recording feature during DVD recording automatically moves an entire program to the hard disk should the program run longer than the DVD's available space.
- ◆ With simultaneous recording/playback, you can watch a program recorded on the hard disk, while recording another on HDD or DVD. You can also watch a DVD, while recording another on the hard drive.
- ◆ If you like the TV show you're watching and want to save it for reviewing, Live Memory lets you "go back" and start recording it from the beginning or from any previous points during the show.

TVGOS '04 Function

The DR-MH300 permits easy recording timer setup with the TVGOS (TV Guide On Screen) '04 function. The unit automatically receives and displays an electronic TV program guide, which shows titles and program information for analog broadcasts to be aired in the coming seven days. Setting the recording timer is as easy as clicking on the desired program — no need for guide pages in newspapers or magazines. A brief description of a selected program is displayed for easy confirmation.



- **Category Search/Keyword Search:** Picking your favorite category or entering a keyword presents a list of corresponding programs by time and date. You can pick from categories such as MOVIES, SPORTS, CHILDREN'S or others, or your favorite actor, for example.
- You can **confirm the timer recording information** before completing the timer setting.
- Automatically, **titles and categories of selected programs are recorded** and displayed with Animated Thumbnails to aid recognition.

DR-MX1S DVD/HDD/VHS Triple Recorder Combo

For those who want the flexibility of multiple formats, the DR-MX1S is the ultimate in convenience. It offers DVD, hard drive and VHS— with recording and playback capability, and the ability to dub between any two— that's 6-way dubbing. Take advantage of the 80GB hard drive to record up to 18 hours of programming in the highest-quality XP mode or 105 hours in the EP mode. As you watch shows stored on the hard drive, you can delete them as you go, or transfer any material you want to keep onto DVD discs or VHS tapes.



- ◆ The three combined recorders provide six dubbing options. You can dub video content between any two of HDD, DVD, and VHS.
- ◆ The DR-MX1S has dual TV tuners so you can actually record two different television shows at the same time. And while recording with the hard drive or DVD-RAM disc you can control live TV — pause, rewind and catch all the action with your own slow-motion instant replays.
- ◆ When dubbing from VHS to HDD/DVD, the DR-MX1S automatically creates thumbnails by detecting tape-encoded signals which indicate program changes. This allows easy access to each dubbed program. It also skips blank spaces on the tape. This results in DVDs free of unwanted blank space.

DR-MX1S and DR-DX5S Both Feature

High-Quality Picture

- Bit-Rate Optimizer (Intelligent Dual-Pass Encode Dubbing System) (HDD—DVD)
- Motion Active Progressive Scan Output (for Video Source)
- Digital Direct Progressive Scan Output (for Film Source)
- Super MPEG Encode Pre-Processor: Time Base Corrector, Frame Synchronizer and Motion Active Noise Reduction
- Super MPEG Post-Processor: Block Noise Reduction Circuit, Color DigiPure and Hadamard Noise Reduction System

Recording/Viewing

- 16-Hour DVD Recording (Double-Sided Disc)
- Live Memory (HDD/DVD-RAM)
- Simultaneous REC/Playback (HDD/DVD-RAM)
- Relief Recording (HDD)
- Linear PCM Audio Recording (XP Mode Only)
- 1.5x Quick Playback with Sound (HDD)

Editing/Dubbing

- 6-Way Dubbing
- High-Speed HDD to DVD dubbing (up to 32x (DR-MX1S and 64x on the DR-DX5S)
- Freezless editing for DVD Disc (HDD - DVD)
- Just Dubbing (HDD DVD)
- Playlist-Based Editing (HDD/DVD)
- Easy Program Dubbing (HDD/DVD)

User-Friendly

- Library Database DVD Navigation
- Animated Thumbnail on HDD/DVD Navigation (DVD-RAM/DVD-RW VR Format)
- High-Resolution GUI (English/French/Spanish)
- DVD-R menu screen with thumbnail (18 designs)

DR-DX5S DVD/HDD/MiniDV Triple Recorder Combo



Combining a 250GB hard disk drive, DVD recorder and MiniDV recorder into a single deck, the DR-DX5S is ideal for camcorder users looking for a simple editing and DVD burning option or even just a convenient way to play back Mini DV recordings. It offers dubbing between any two of its drives for six-way dubbing.

For example, it offers the convenience of recording TV programs to its hard disk drive (HDD) for time shifting, and the option of copying the material from the HDD to DVD for archiving. Or, MiniDV footage can be recorded onto the HDD for editing and then the edited footage easily dubbed onto DVD. Or go directly from MiniDV to DVD for archiving home video.

- ◆ A triple combo unit — large-capacity 250GB hard drive which stores up to 473 hours of programs, multi-format DVD recorder and MiniDV recorder, The DR-DX5S allows six-way dubbing — between any two of the three recorders. Edit and dub footage from your camcorder in native DV format. Transfer footage over to hard disk in original DV format. Edit the scenes as you like on hard disk and dub the result back to MiniDV while retaining high resolution. This function is also available when the unit is connected with a MiniDV camcorder via i.LINK terminal.

HR-DVS3

Mini DV/S-VHS VCR Combo

The HR-DVS3 is the ultimate solution for easy editing and viewing of high quality digital and analog video. A double deck, HR-DVS3 incorporates a Mini DV VCR and an S-VHS VCR, allowing direct playback of S-VHS or DV tapes, direct dubbing from S-VHS to DV and vice versa, or connect directly to your DV camcorder for DV-to-DV edits—no cable

connections necessary. To watch and dub DV footage, the deck offers one-touch viewing and dubbing of DV recordings. Integration also enables a variety of advanced features like automatic DV-to-S-VHS Random Assemble Editing.



FEATURES

DV VCR

- ◆ Play back and watch DV footage without any cables to connect. Perform DV-to-S-VHS editing, DV-to-DV dubbing via its DV input terminal, or analog-to-DV recording from an external source
- ◆ Records digital audio with a choice of two modes: two-channel 16-bit, 48kHz for maximum quality or four-channel 12-bit 32kHz, allowing another stereo channel to be added (background music or narration for example)

S-VHS VCR

- ◆ Incorporating JVC's exclusive DigiPure technology, the S-VHS VCR section delivers over 400 lines of horizontal resolution for quality that approaches digital.
- ◆ DigiPure technology uses a digital wide TBC and 3-dimensional circuitry for clearer color separation, improved S/N ratio, enhanced detail, and elimination of dot crawl.
- ◆ Hi-Fi stereo audio with MTS decoder delivers wide dynamic range for maximum impact, while the built-in MTS decoder lets you record stereo and SAP TV broadcasts.

S-VHS ET

- ◆ S-VHS ET recording allows S-VHS signals to be recorded on regular VHS High Grade cassette. This allows you to enjoy high resolution images with more affordable, more widely available VHS tapes.

Editing Features

- ◆ One-touch dubbing from DV to S-VHS or S-VHS to DV
- ◆ Insert editing and audio dubbing (32kHz for MiniDV) on both DV and S-VHS
- ◆ Equipped with DV (IEEE1394) input/output, so you can connect directly from your DV camcorder to make DV-to-DV lossless-quality dubs, or to download to a DV-equipped PC for non-linear editing.
- ◆ Random Assemble (RA) editing lets you choose up to 8 segments at a time (in any order) from your DV tape, and at the touch of a button the HR-DVS3 will automatically put them in the order you want.

Conveniences

- ◆ Active Video Calibration optimizes recording and playback by monitoring S-VHS/VHS head and tape performance.
- ◆ During real-time recording, you can take advantage of the double-deck design by watching DV playback while recording on S-VHS/VHS. This is the kind of viewing versatility not possible with ordinary video decks.
- ◆ Repeat playback (up to 50X), 60-minute power back-up, and tape position indicator (S-VHS)
- ◆ Multiple speed search (two speeds in DV, five speeds in S-VHS)
- ◆ Includes Multi-Brand TV/Cable/DSS compatible remote control with large jog/shuttle dial

Programming

- ◆ Simply hook up the antenna and plug in the VCR and the HR-DVS3 automatically takes care of clock and tuner setting (even daylight savings time). And since the clock time is kept accurate by time data found in PBS broadcast signals, set-up is literally a one-time operation.
- ◆ Features VCR+ with "Cable Eye" Cable Box Controller. Just punch in the PlusCode number to program the timer automatically. There is no lengthy set-up process either, because VCR+ guide channels are set "on-the-fly". And with the supplied "Cable Eye" cable box controller, you can also count on correct timer-recordings of cable TV.
- ◆ 1-year/12 event timer (6 events each for DV and S-VHS)
- ◆ Hate missed endings? Auto SP/EP Timer recording automatically switches from SP to EP mode, if necessary, to fit the entire program on the tape
- ◆ Express Programming for easy manual timer setting just by following a single row of buttons on the remote control.
- ◆ Multi-lingual on-screen programming (English, Spanish and French)

Inputs/Outputs

- ◆ S-Video input on front and back panel
- ◆ Two S-Video outputs on back panel
- ◆ Two A/V outputs

DVD Recorders Comparison Chart

DVD RECORDER COMPARISON DVD	DR-M100S DVD	DR-MV5S DVD VHS		DR-MH300S HDD DVD	
Playable Formats					
DVD-Video	Yes	Yes			Yes
DVD-RAM/-RW/-R/+RW/+R	Yes/Yes/Yes/No/No	Yes/Yes/Yes/Yes/Yes			Yes/Yes/Yes/Yes/Yes
SVCD/VCD	Yes/Yes	Yes/Yes			Yes/Yes
CD-DA	Yes	Yes			Yes
CD-R/RW	Yes	Yes			Yes
MP3 on CD-R/RW	Yes	Yes			Yes
JPEG on CD-R/RW	Yes	Yes			Yes
Recordable Formats					
DVD-RAM/-RW (VR & Video Format) /-R	Yes/Yes/Yes	Yes/Yes/Yes			Yes/Yes/Yes
HDD Capacity				160GB	
PAL Playback on NTSC TV	Yes	Yes			Yes
Audio					
Recording Audio Format	Dolby Digital / Linear PCM (XP Mode Only)	Dolby Digital / Linear PCM (XP Mode Only)	NTSC VHS HiFi	Dolby Digital / Linear PCM (XP Mode Only)	Dolby Digital / Linear PCM (XP Mode Only)
Audio D/A Converter	192kHz/24-bit	192kHz/24-bit		192kHz/24-bit	192kHz/24-bit
Dolby Digital/DTS/MPEG Digital Out	Yes/Yes/Yes	Yes/Yes/Yes		Yes/No/Yes	Yes/Yes/Yes
Virtual Surround	No	No			Yes
Output Level	2.0V RMS	2.0V RMS		2.0V RMS	2.0V RMS
Video					
Approximate Recording Time XP	1 hour	1 hour		1 hour	34 hour
Approximate Recording Time SP	2 hours	2 hours	2 hours (T-120 Tape)	2 hours	69 hours
Approximate Recording Time LP	4 hours	4 hours		4 hours	138 hours
Approximate Recording Time EP	6 hours	6 hours	6 hours (T-120 Tape)	6 hours	209 hours
Approximate Recording Time FR	1-8 hrs (63 Step)	1-8 hrs (63 Step)		34-300 hrs (63 Step)	1-8 hrs (10-1.2Mbps)
Live Memory	Yes (DVD-RAM)	Yes (DVD-RAM)		Yes	Yes (DVD-RAM)
RetroActive Recording/Relief Recording				Yes/Yes	
Library Database DVD NAVIGATION	Yes	Yes		Yes (Max 600 Discs/ 2,000 Titles)	
Animated Thumbnail on HDD/DVD Navigation	(DVD-RAM/ DVD-RW VR)	(DVD-RAM/ DVD-RW VR)		Yes	(DVD-RAM/ DVD-RW VR)
Variable Search (Forward/Reverse)	±4x Steps	±4x Steps	±2x Steps	±4x Steps	±4x Steps
Quick Skip (30-sec. FWD Skip)	Yes	Yes	Yes	Yes	Yes
Instant (One-Touch) Replay	(7 sec.)	(7 sec.)	(7 sec.)	(7 sec.)	(7 sec.)
HDD-DVD High-Speed Dubbing				RAM 5x,-RW 4x,-R8x	
DVD-R MENU		Yes		w/Thumbnail	w/Thumbnail
Auto 16:9 Record & Playback	Yes	Yes		Yes	Yes
Terminals					
Front Inputs	Yes	Yes	Yes	Yes	Yes
S-Video in / Composite in / Audio L/R in	Yes/Yes/Yes	Yes/Yes/Yes	---/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes
Rear Inputs	Yes	Yes	Yes	Yes	Yes
Component out / S-Video out / Composite out	Yes/Yes/Yes	Yes/Yes/Yes	Yes/ --- /Yes	Yes/Yes/Yes	Yes/Yes/Yes
Audio L-R out / Optical out / Coaxial Digital out	Yes/Yes/Yes	Yes/Yes/Yes	Yes/ --- /Yes	Yes/Yes/Yes	Yes/Yes/Yes
DV In - Cable Box Control - 3.5 mini	Yes	Yes		Yes	Yes
General					
On Screen Display Graphical User Interface	Yes	Yes	Yes	Yes	Yes
On Screen Languages (English/French/Spanish)	Yes	Yes	Yes	Yes	Yes
Multi-Brand Remote	Yes	Yes	Yes	Yes	Yes
Power Backup Time	5 Sec.	5 Sec.		5 Sec.	
Dimensions (W x H x D)	17.1 x 2.8 x 11.8"	17.1 x 3.8 x 13.8"		17.1 x 2.8 x 11.8"	

DVD Recorders Comparison Chart

DVD RECORDER COMPARISON	DR-MX1S			DR-DX5S			HR-DVS3	
DVD	HDD	DVD	VHS	HDD	DVD	Mini-DV	Mini-DV	VHS
Playable Formats								
DVD-Video		Yes			Yes			
DVD-RAM/-RW/-R		Yes/Yes/Yes			Yes/Yes/Yes			
SVCD/VCD		Yes/Yes			Yes/Yes			
CD-DA		Yes			Yes			
CD-R/RW		Yes			Yes			
MP3/WMA on CD-R/RW		Yes/Yes			Yes/Yes			
JPEG on CD-R/RW		Yes			Yes			
Recordable Formats								
DVD-RAM/-RW (VR & Video Format) /-R		Yes/Yes/Yes			Yes/Yes/Yes			
HDD Capacity	80GB			250GB				
PAL Playback on NTSC TV		Yes			Yes			
Audio								
Recording Audio Format	Dolby Digital / Linear PCM (XP Mode Only)		NTSC VHS HiFi	Dolby Digital / Linear PCM (XP Mode Only)		PCM Digital	PCM Digital	NTSC VHS HiFi
Audio D/A Converter	192kHz/24-bit	192kHz/24-bit		192kHz/24-bit	192kHz/24-bit			
Dolby Digital/DTS/MPEG Digital Out	Yes/---/Yes	Yes/---/Yes		Yes/---/Yes	Yes/Yes/Yes			
Virtual Surround		Yes			Yes			
Output Level	2.0V RMS	2.0V RMS		2.0V RMS	2.0V RMS			
Video								
Approximate Recording Time XP	18 hours	1 hour		60 hours	1 hour			
Approximate Recording Time SP	35 hours	2 hours	2 hours (T-120 Tape)	120 hours	2 hours			2 hours (T-120 Tape)
Approximate Recording Time LP	70 hours	4 hours		240 hours	4 hours			
Approximate Recording Time EP	105 hours	6 hours	6 hours (T-120 Tape)	300 hours	6 hours			6 hours (T-120 Tape)
Approximate Recording Time FR	18-147 hrs (63 Step)	1-8 hrs (63 Step)		60 -350 hrs (63 Step)	1-8 hrs (10-1.2Mbps)			
Live Memory	Yes	Yes (DVD-RAM)		Yes	Yes (DVD-RAM)			
RetroActive Recording/Relief Recording	Yes/Yes			Yes/Yes				
Library Database DVD NAVIGATION		(Max 600 Discs /2,000 Titles)			(Max 600 Discs /2,000 Titles)			
Animated Thumbnail on HDD/DVD Navigation	Yes	(DVD-RAM/ DVD-RW VR)		Yes	(DVD-RAM/ DVD-RW VR)			
Variable Search (Forward/Reverse)	±4x Steps	±4x Steps	±2x Steps	±4x Steps	±4x Steps			
Quick Skip (30-sec. FWD Skip)	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Instant (One-Touch) Replay	(7 sec.)	(7 sec.)	(7 sec.)	(7 sec.)	(7 sec.)			
HDD-DVD High-Speed Dubbing	RAM 2x, -RW 2x,-R4x			RAM 5x, -RW 4x,-R8x				
DVD-R MENU	w/Thumbnail	w/Thumbnail		w/Thumbnail	w/Thumbnail			
Auto 16:9 Record & Playback	Yes	Yes		Yes	Yes			
Terminals								
Front Inputs	Yes	Yes	Yes	Yes	Yes		Yes	Yes
S-Video in / Composite in / Audio L/R in	Yes/Yes/Yes	Yes/Yes/Yes	---/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	---/Yes/Yes
Rear Inputs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Component out/S-Video out/Composite out	Yes/Yes/Yes	Yes/Yes/Yes	Yes/ --- /Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/ --- /Yes
Audio L-R out/Optical out/Coaxial Digital out	Yes/Yes/Yes	Yes/Yes/Yes	Yes/ --- /Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/ --- /---	Yes/ --- /---	Yes/ --- /---
DV In - Cable Box Control - 3.5 mini	Yes	Yes		Yes	Yes	Yes	Yes	
General								
On Screen Display Graphical User Interface	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
On Screen Languages (English/French/Spanish)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Multi-Brand Remote	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Power Backup Time	60 Minutes	60 Minutes	60 Minutes	60 Minutes	60 Minutes	60 Minutes		
Dimensions (W x H x D)	17.1 x 3.8 x 15.1"			17.1 x 3.8 x 15.1"			17.1 x 4.1 x 15"	

HM-DH5 • HM-DT100

D-VHS Player/Recorders

The HM-DH5 and HM-DT100 are D-VHS machines that record, play back and archive high-definition content, and play D-Theater HD movies. They are also the first D-VHS Hi-Def digital recorders equipped with a digital High-Definition Multimedia Interface (HDMI), which provides the highest quality, uncompressed digital pictures and sound through a single connection. Since HDMI is all-digital, there is virtually no signal deterioration, resulting in pristine, "lossless" images just like the original. For maximum convenience and full access to high-definition programs, the HM-DT100 is equipped with an integrated digital HDTV receiver. This allows you to receive, record, and view all forms of digital programs, including HD broadcasts, without an extra set-top box.



FEATURES

HDMI With HDCP Protection

- ◆ HDMI's integrated High-bandwidth Digital Content Protection (HDCP) copyright protection technology supports secure one-way transfer of digital content between a source, such as D-VHS and projectors, monitors and digital TVs (DTVs). HDMI plays back high definition D-Theater software, prerecorded high definition material available from five Hollywood studios and other providers, and even standard definition analog tapes. It transfers analog and S-VHS signals after conversion to 480p (progressive) digital video for greatly improved image quality.
- ◆ Moreover, since a single HDMI cable carries all video and audio signals, it is easier to set up and enjoy today's most advanced home theater performance than it is to set up a conventional system. HDMI makes ugly tangles of cables a thing of the past.

Motion Active Progressive Scan

- ◆ Today, demand for large-screen displays has never been higher. Unfortunately, there is an inverse relationship between screen size and picture quality; a poor quality signal looks even worse on a large screen. This is especially true for lower resolution analog sources. To offset this problem, JVC's advanced Motion Active Progressive Scan circuit upconverts 480i interlace signals to 480p (progressive). It uses sophisticated motion detection circuitry for pixel compensation. This eliminates jitter and flicker to produce smoother, cleaner images that come close to matching the quality of true progressive scan sources. Since this minimizes the perceived picture degradation that normally appears as the display screen gets larger, you'll experience better picture quality than before when playing back S-VHS and VHS tapes.

Three Recording Modes

- ◆ HS mode (28.2 Mbps) for up to 4 hours HDTV recording; STD Mode (14.1 Mbps) for up to 7 hours SD recording; LS3 Mode (4.7 Mbps or 400 TV lines) for up to 24 hours long-time recording per DF-420 cassette

Super MPEG Encoder

- ◆ To enable high-quality digital recording of analog sources, the HM-DH5 and HM-DT100 use JVC's exclusive Super MPEG Encode Pre-Processor to prepare analog signals for digital conversion so that digital recordings appear to surpass the quality of the original analog sources. Incorporates a Time Base Corrector (TBC) to eliminate jitter, a Frame Synchronizer to correct frame crossover jitter and process any deviant frames, and a 3-Dimension Noise Reduction circuit to remove noise from both still and moving parts of video pictures.

i.LINK Terminals

- ◆ They offer front and rear i.LINK (IEEE-1394) terminals to conveniently connect to i.LINK-compatible DV or HD camcorders for editing. The IEEE 1394 compliant connection converts DV to MPEG-2 for editing of camcorder footage. It can also receive and transfer 720p MPEG-2 Transport Stream data signals from an HD camcorder for editing and dubbing.

What sets D-VHS apart from other digital systems is that it is the only format that can record HDTV in full quality and without further compression or decoding and re-encoding stages. Because D-VHS's 28.2 Mbps HS mode far exceeds the 19Mbps specification of ATSC MPEG-2 HD broadcasting formats, and because a single DF-480 D-VHS cassette stores up to 50 GB of data, D-VHS records high-definition sources such as 1080i or 720p digital broadcasts complete with 5.1-channel surround sound. Of course, D-VHS also records standard definition (SD) sources such as 480p and 480i digital broadcasts thanks to its 14.1 Mbps STD and other LS modes. There's even a built-in MPEG-2 encoder to easily make high-quality digital recordings from analog NTSC sources in the high quality HS, STD, or extended-time LS3 modes.

XL-FZ158BK**5-Disc Carousel CD Changer**

The XL-FZ158BK five-disc carousel changer provides hours of uninterrupted musical enjoyment. A fiber optic digital output makes it easy to connect to a CD-R/CD-RW or Mini Disc for great digital recording. Continuous play, "Smart" random play, and program play of up to 32 steps provide flexible listening options.

XL-FZ258BK**5-Disc Carousel CD Changer**

Add convenience to your CD entertainment with the JVC XL-FZ258BK. It includes a full function remote, and a 10-key pad on the front of the unit for easy track selection. A fiber optic digital output makes it easy to make great digital recordings. Continuous play, "Smart" random play, and program play provide flexible listening options. A headphone output with volume control is included for private listening.

**CD CHANGERS****XL-FZ700BK****7-Disc Carousel CD Changer**

Add convenience to your CD entertainment with the JVC XL-FZ700BK, which used JVC's exclusive 7-disc carousel changer with play and exchange. It includes a full function remote, and a 10-key pad on the front of the unit for easy track selection.

A fiber optic digital output makes it easy to make great digital recordings. Continuous play, "Smart" random play, and program play provide flexible listening options.

XL-MC2000**200-Disc CD Changer**

The JVC XL-MC2000 200 Disc CD Changer features an optical digital output for easy connection to a digital recording device such as a CD-R, CDR-W or Mini Disc. The Play & Exchange feature makes it possible to change up to 25 of the 200 discs without stopping playback. A jog control makes selecting tracks and discs simple.

KENWOOD**Single-Disc DVD Players**

The DVF-3080-S and DVF-8100 are packed with features and performance that let you enjoy a wide variety of media on your home theater system.

Their progressive scan video output produces stunningly realistic DVD images on HD-capable TVs, while their 24-bit/96kHz D/A converters give you amazingly life-like music from CDs. They can also play MP3- and WMA-encoded CD-R/RWs and features a JPEG photo CD viewer, so you and your family can look at your digital photos on your TV! A full compliment of video and audio outputs let you connect them to just about any TV or audio system. They

both include full-function 10-key remote and on-screen menu system that is simple to use. In fact, the only difference between them is the DVF-8100's accented brushed aluminum front panel.



HR-S2902 • HR-S3902/S3912 • HR-S5902/S5912

S-VHS Hi-Fi Stereo VCRs

JVC's S-VHS VCRs feature over 400 lines of horizontal resolution, plus they offer Super VHS ET recording. This lets you use inexpensive high grade VHS tape while enjoying nearly the same picture quality as with much more expensive S-VHS tape.

They also feature Hi-Fi VHS stereo with MTS Decoder, Active Video Calibration and Picture Control. Ensures easy installation and operation by utilizing Plug & Play, Shuttle Plus, Express programming and more.



- ◆ S-VHS "high-band" recording technology delivers 400 lines of horizontal resolution and supports separate luminance (Y) and chroma (C) input/output for purer signal transmission when recording from a high resolution sources or viewing on a high-resolution big-screen TV.
- ◆ Super VHS ET (Expansion Technology) allows the wider bandwidth S-VHS signal to be recorded on standard VHS tapes (HG tapes are recommended). This allows you to enjoy high resolution images with more affordable, widely available VHS tapes.
- ◆ Express Programming for easy manual timer setting just by following a single row of buttons on the remote control.
- ◆ Hi-Fi stereo recording and playback with wide dynamic range and full frequency response. Built-in MTS decoder lets you record stereo and SAP TV broadcasts.
- ◆ Hate missed endings? Auto SP/EP Timer recording automatically switches from SP to EP mode, if necessary, to fit the entire program on the tape
- ◆ 1-year/8-event programmable timer
- ◆ Instant ReView for simple playback of timer-recorded programs. Auto Index
- ◆ Ease of use is boosted by Plug & Play installation. It sets the tuner and gives you Auto Clock Setting (current time, date and bi-annual DST adjustments).
- ◆ Frame advance, variable speed slow motion, and multi-speed search ($\pm 21\times$ normal speed in 19 steps).
- ◆ Repeat playback up to 100x
- ◆ Picture Control with selectable modes to best match the material you're viewing. Modes include Auto for optimum picture; Edit to minimizes picture degradation during recording and playback; Soft to reduce image coarseness when watching overplayed tapes; and Sharp for a clear, sharp-edged picture, ideal for viewing images with lots of flat, same-colored surfaces, like cartoons.
- ◆ Front A/V and S-Video inputs, S-Video and A/V rear outputs



HR-S3902 (Black) and HR-S3912 (Silver) STEP-UP FEATURES

The HR-S3902/HR-S3912 step-up with VCR Plus+, Rec Link, advanced jog shuttle, AV Compu-Link and a multi-brand remote control

- ◆ VCR Plus+ for instant programming by just inputting a PlusCode number. For added convenience a Cable Box Controller (available with a mail-in coupon) automatically switches channels on a set-top box. Minimal set-up is necessary since the VCR Plus+ Guide Channels are set "on-the-fly" while you program.
- ◆ Multi-Brand TV/Cable/DBS compatible remote gives you total control over the VCR, TV, cable or satellite receiver in a single unified remote.
- ◆ Advanced jog dial on the deck allows you to precisely control everything from frame-by-frame playback to variable-speed slow motion and search.
- ◆ Shuttle Plus gives you all the flexibility of a traditional jog/shuttle control plus more. Enjoy fingertip control of frame advance, variable slow motion, multiple speed search and index search.
- ◆ A/V Compu Link provides one-touch operation with matching JVC components.
- ◆ Rec Link makes it easy to detect when a connected cable box or DBS (with timer) turns on and to start recording from it.
- ◆ Child Lock allows you to disable the operation of the unit to prevent timer recordings from being disturbed.
- ◆ Multi-Brand TV/Cable/DBS compatible remote gives you total control over the VCR, TV, cable or satellite receiver in a single unified remote.

HR-S2902 • HR-S3902/S3912 • HR-S5902/S5912

HR-S5902 (Black) and HR-S5912 (Silver) Step-Up Features

The HR-S5902/HR-S5912 step up with professional-style editing capabilities with insert editing, flying erase head, audio dubbing and more.

- ◆ Insert editing lets you replace the original picture without affecting the audio. The flying erase head makes sure that transition points between recordings are distortion-free.
- ◆ Audio dubbing enables you to dub your own soundtrack over the original sound (the mono linear track—not the Hi-Fi tracks), leaving the picture as it is.
- ◆ Instant Review turns the VCR on, rewinds to the beginning of the last recording and starts playback.



- ◆ Video Stabilizer corrects vibration when playing back unstable EP recordings made on another VCR.
- ◆ If two timer-programmed shows have overlapping times, a Timer Overlap Warning displays the conflicting programs on-screen so you can choose which show gets priority.
- ◆ Regardless of which programming option you choose, a Permanent Program function keeps program timer information in the deck's memory even if power is interrupted. You won't have to re-program the timer after a power outage.
- ◆ Glow key multi-brand remote control

HR-S9911 Step-Up Features



The top-of-the-line HR-S9911 steps-up with DigiPure Technology with 4MB Frame Memory, smooth Slow Motion, and a Video Navigation feature to easily locate your favorite recordings.

- ◆ DigiPure Technology incorporates exclusive JVC technologies to maximize S-VHS performance. These include a Digital Wide TBC (Time Base Corrector) which digitally removes jitter from fluctuating video signals, and the Digital R3 Picture System which applies edge correction to the Y (luminance) signal to enhance detail. Last, a 3-Dimensional Digital Circuit with massive 4MB Frame Memory provides a solid foundation for additional technologies including:
 - Precision 3-D Color Circuit provides clear color separation without bleeding and sharpens image edges
 - Digital 3-D YNR/CNR removes video noise and improves S/N ratio by approximately 3dB
 - Precise Digital 3-D Y/C Separation improves S/N over a wide range, reduces stationary image border dot interference and improves moving images with its Digital Comb Filter
- ◆ Audio record level control with audio level meters
- ◆ Surge protection circuitry absorbs and grounds power surges to protect the VCR's internal circuits from unstable power.
- ◆ Video Navigation function makes program access and tape library management a breeze. This function builds a table of contents on every tape you record, assigning a unique number to each tape, and lets you input tape and program titles (up to 2000 titles). The HR-S9911 stores all data in memory, allowing tapes to be sorted by tape number, date, and category, for pinpoint location of the program you're looking for. Just choose the desired program from the on-screen list, and the VCR will rewind and play it.
- ◆ Equipped with 4MB of frame memory, enables smooth, seamless slow motion—like you're used to seeing on TV. Or you can speed up the playback picture (up to 7x normal speed) without the distracting horizontal noise bars you normally get during high-speed playback. This is a great time saver, as it lets you catch the day's news and other programs, with clearly legible captions and subtitles, in a fraction of the time it normally takes. And since the Digital Audio Memory helps keep the soundtrack comprehensible, you can quickly and effectively search for any scene you want to watch based on the sound as well as the picture.

LDA-511 • LDX-514

1080i Up-Conversion DVD Players

The sleek and superbly designed LDA-511 is a powerful DVD player that plays back DVD Video, DVD-R/RW, DVD±R/RW, Audio CD, and CD-R/RW discs. Super slim, it stands only 1.4" high for convenient addition to home theater systems. It is compatible with WMA, JPEG, MP3, DivX and MPEG-4 formats. Fast Loading Vacuum Slot means it quickly inserts and ejects discs with no tray opening or closing. It also incorporates a special video processing circuit to upconvert all signals to high-definition 1080i via HDMI output for use with compatible HDTV. For the ultimate in convenience, it also offers a 7-in-2 Memory Card Slot including SD (Secure Digital), MMC (Multi-Media Card), Compact Flash), Micro Drive, Memory Stick and Memory Stick Pro. Outputs include optical and coaxial digital, and composite, S-Video and component video.

Not quite as sleek, the LDX-514 (3.3" high) has all the same features as the LDA-511, but also adds a 4-head VHS Hi-Fi VCR. It features SP/SLP, SQPB (Super Quasi Playback), automatic head cleaner, Counter Reset, Just Fit Record and Auto Tracking. Also offers Still/Slow Motion and fast rewind time.



LG-DVB418 Multi-Region DVD Player



The LG DVB418 is a state-of-the-art code free DVD player with 1080i HDTV upconversion circuitry.

Dynamic picture quality, plus the

ability to play DVD-Audio discs, Media slots, HDMI output with upconversion, WMA, DivX, and MP3 compatible, in addition to CDs, makes this the "universal" player for audiophiles and videophiles. Also HDMI to DVI cables can be purchased to connect this player to TVs that have DVI inputs instead of HDMI. The player's progressive-scan mode uses one of the most advanced de-interlacing systems around: ColorStream circuitry. Capable of processing an astonishing picture in 480i, 480p, 720p, and 1080i, this player delivers DVD images with pixel-perfect clarity and fluid motion. It has a 7-in-2 Multi Memory Card Slot compatible with MMC, SD, SMC, Memory Stick and Memory Stick Pro, Micro Drive and CompactFlash. Best of all this player is completely region free (Plays region 1, 2, 3, 4, 5, 6 discs) so it can play and DVD from anywhere in the world.

LRA-516 • LRY-517 Multi-Format DVD Recorders

Super slim (less than 2" high), LG's LRA-516 multi-format DVD recorder supports all available DVD recording formats — offering a wide array of recording options. It is compatible

with DVD Video, DVD-R/RW, DVD±R/RW, Audio CD, CD-R/RW discs. Plus, it plays DVD+R Double Layer. It has an integrated 8-in-2 memory card reader, supporting a wide range of memory cards to display digital photos. For added convenience a IEEE1394 DV input provides enhanced connectivity to a wide-range of audio/video products. The unit also incorporates progressive-scan technology and 3D surround sound, providing clear images and robust sounds for an excellent home theater experience.

The LRY-517 stands only 3.1" high and adds a 4-head Hi-Fi VCR. With an innovative "one-touch dubbing" function, it allows you to transfer content from VHS to DVD disc recording or from un-copyrighted DVD disc to VHS with just one touch of a button.



DV-SP502

DVD-Video/Audio/SACD Player

The DV-SP502 is a progressive scan DVD player that is compatible with nearly every disc format in use today, including DVD-Audio and multichannel SACD high-resolution

audio formats. It features 192-kHz/24-bit audio DACs with Onkyo's Vector Linear Shaping Circuitry (VLSC) for smoother, more detailed analog output. Onkyo's exclusive Direct Digital Path ensures maximum integrity of Dolby Digital, DTS and PCM audio signals to the rear-panel digital outputs. There is a complete multichannel analog audio output, including a defeatable second set of surround channel connections for use with 7.1-channel home theater systems.

For video, it features a sophisticated 108-Mhz/12-bit video D/A converter for superior video clarity and detail, and advanced progressive scan component video output with 3-2 pulldown capability. In addition to component video, there is composite and S-video connections for compatibility with nearly all televisions, and all video outputs are continuously active. Fully compatible with DVD, DVD-R/RW, DVD+R/RW, and CD-R/RWs encoded with JPEG, MP3 or WMA files.



Same features as the DV-SP303 and DV-CP702 (respectively) Plus—

- ◆ DVD-Audio's data-loss-free reproduction of 192 kHz/24-bit 2-channel stereo or 96 kHz/24-bit 6-channel surround sound recreates music with such clarity, it sounds as if it were played live in your own home. Add on a super-high frequency rate of 192,000 samples per second—4.3x greater than an audio CD—and you have a musical experience that goes beyond just listening.
- ◆ Super Audio CD gives you the next step in the evolution of pristine sound. All channels provide for up to 100 kHz frequency response and a sampling rate 64x that of a regular CD! A multi-channel Super Audio CD provides you with up to 6 channels of high-resolution audio in addition to a regular CD layer for playback on any existing CD player.
- ◆ 108MHz/12-bit Video D/A converter
- ◆ Program Playback (24 tracks, title, chapter)
- ◆ Optical and coaxial digital outputs
- ◆ Selectable (48/96 kHz) digital output
- ◆ Multi aspect ratio (16:9 and 4:3)
- ◆ Illuminated disc tray
- ◆ Five language on-screen display
- ◆ Adjustable display brightness

DX-C390 6-Disc CD Changer

Those looking for the ultimate in CD playback from an audio-ophile-grade component will be impressed with a high-precision, multi-bit D/A converter and 128x oversampling. Those looking for convenience will thrill at the

sight of 6-disc capability, 6 repeat modes, 40 track programming—and no worries about interruptions to your music, with the ability to change 5 discs while the last one is still playing. Housed in a sturdy chassis graced with a brushed aluminum front panel, the DX-C390 delivers crystal-clear playback, enhanced by Onkyo's exclusive Vector Linear Shaping Circuitry, for a smoother sounding audio signal. In addition, Direct Digital Path, a heavily shielded, high-quality cable protects the delicate audio signal from noise emitted by the surrounding circuits.



TA-RW244 Dual Tape Deck



Dual autoreverse lets you copy both sides of a tape with the press of a button, or relay-play both sides of two tapes without interruption. The deck also includes Dolby B and C noise reduction to

eliminate tape hiss, auto-spacing to insert blank spaces between songs, high-speed dubbing, rec-level control, CD synchro recording, 8-segment peak level meters, an auto tape-bias selector, a 4-digit electronic tape counter, and a brushed aluminum front panel.

DV-SP1000

The Ultimate THX Ultra-Certified DVD-Audio/Video and SACD Player

The DV-SP1000 brings an entirely new dimension to the term "universal". Not only does it provide you with DVD Audio/Video and SACD playback, but also analog and pure digital reproduction with HDMI (High-Definition Multimedia Interface) and i.LINK (IEEE1394) to deliver high-quality movies and multi-channel music.

This reference-grade universal player features state-of-the-art circuitry and connectivity options for ultimate reproduction quality with virtually any disc format. Featuring a beautiful brushed aluminum front panel, it plays DVD-Audio and SACD, while Onkyo's exclusive ExperienCinema concept provides you with the finest visual and audio experience through Progressive Scan, Direct Digital Path, 192 kHz/24-bit audio DACs and Vector Linear Shaping Circuitry (VLSC). DVDs are further enhanced with lossless 108 MHz/12-bit D/A video processing.



Add Onkyo's VLSC and high-quality FlexScale from Oplus (which enables video scaling of DVD discs from 480i to 480p/720p/768p and 1080i) and you have the ultimate in DVD-video performance. For convenience, it offers Last Play Memory, Slow-motion DVD-Video playback, dedicated subwoofer output, DVD Quick Start Play, Bit-Rate Meter, Screen Saver and parental control.

FEATURES

- ◆ Only players capable of realizing the highest potential of DVD technology can bear the THX certification badge. It means the DV-SP1000 meets the standards of Lucasfilm, not only for sound and picture, but also for user convenience, basic quality and long-term reliability.
- ◆ Specifically designed for the smoothest delivery of your movies and music, it features extremely solid construction with a rigid aluminum chassis, integrated stabilizer network, and feet to reduce vibration for sonically superior playback.
- ◆ Built-in Dolby Digital and DTS decoder
- ◆ Plays DVD-Audio & Video, DVD-R/RW, SACDs, MP3 CDs, CD-R/RW, Video and Audio CDs
- ◆ Slow motion DVD-Video playback (without sound) at 1/2, 1/4, 1/8 or 1/16 normal speed
- ◆ Last play memory (5 DVDs)
- ◆ Program playback and memory (24 DVDs)
- ◆ Condition memory (15 DVDs) for audio and subtitle languages, multi-angle video adjust, onscreen display (position), and parental lock
- ◆ For SACD and DVD-Audio discs, the DV-SP1000 includes two iLink (IEEE 1394) connections for digital output of high resolution 5.1-channel audio signals. When combined with a compatible receiver, such as the Onkyo TX-NR1000, it delivers the ultimate in sound reproduction and simplifies bass management duties, all over a single cable. Additionally, there are 7.1-channel analog outputs for consumers wishing to take advantage of the player's high quality internal decoding circuitry.
- ◆ Employs an Analog Devices 216 MHz/14-bit video D/A converter, with high quality Silicon Images deinterlacing circuitry with 3:2 pulldown conversion.
- ◆ Front panel cursor control
- ◆ For analog component video, the need for menu selection of interlaced or progressive scan output is eliminated by the inclusion of dedicated connections for each.
- ◆ 4-level display dimmer (normal, dim, dark, or off)
- ◆ Includes a bidirectional RS-232 port and IR in and out jacks for compatibility with control systems.
- ◆ Full-time active video outputs (two component, two composite and two S-Video).
- ◆ For video reproduction, the rear-panel HDMI (High Definition Multimedia Interface) connection delivers digital video and audio signals on a single cable without the degradation caused by additional circuitry.
- ◆ Includes backlit pre-programmed learning remote control with scroll wheel
- ◆ Includes one A/V cable, HDMI and FireWire cable

DVD-S29 • DVD-S77 • DVD-S97 • DVD-F87

Single-Disc and 5-Disc DVD Players

Blending astounding performance with an elegant design, Panasonic's DVD players offer a host of advanced features to deliver an unsurpassed home theater experience. They feature Advanced Progressive Scan,

resulting in an extended frequency response, reduction of background noise and enhancement of depth. The higher-density video signal brings a film-like quality to DVD images, extraordinarily close to the way they originally appeared in the cinema, with rich detail, incredible depth of field, and precise color reproduction. The high resolution picture is also free of motion artifacts.

*The **DVD-S29S (silver)/DVD-S27K (black)** includes a one-touch AV enhancer for optimum picture and sound quality. The **DVD-S77** adds 5.1-channel DVD-Audio to the mix, and an HDMI (High-Definition Multimedia Interface) to provide high quality, uncompressed digital audio/video signal transmission. This avoids complicated and troublesome connection of components. The **DVD-S97** steps-up with a built-in Dolby Pro Logic II decoder, MPEG Digital Noise Reductions and Audio Navigation Menu. The **DVD-F87S (silver)/DVD-F87K (black)** 5-disc changer features DVD-Audio playback and enhanced access speed from disc to disc (only 10 seconds).*



Top: DVD-S29; Bottom: DVD-S77

FEATURES

Video

- ◆ Progressive Scanning (480P) creates a picture signal with double the scan lines of a conventional DVD interlaced picture (480i), resulting in higher picture resolution, sharper image quality, and the elimination of virtually all motion artifacts.
- ◆ Compatible with DVD Video, DVD-RAM, DVD-R/RW, DVD+R/RW, CD, HDCD and CD-R/RW (including JPEG, WMA, MP3 and HighMAT (see box).
- ◆ Twin laser pickup gives these player phenomenal ability to track discs that are warped, off center, or otherwise imperfect.
- ◆ 54Mhz/10-bit video D/A converter
- ◆ Picture Control (brightness, color, contrast, gamma correction, sharpness)
- ◆ Variable and auto zoom
- ◆ Picture Mode selection (Normal, Cinema 1, Cinema 2, Animation, Dynamic) selection
- ◆ Monitor select for optimum picture quality according to monitor type
- ◆ Black Level Control (depending on you connection); lighter when connected to TV via composite or S-Video, darker when connected via component video.

Audio

- ◆ High-end 192kHz/24-bit D-A converter for superb musical performance.
- ◆ Built-in 2-channel DTS & Dolby Digital decoders.
- ◆ Coaxial digital output
- ◆ Dialogue Enhancer boosts the volume of the center channel, from which most of the principal dialogue emanates.
- ◆ Headphone VSS (Virtual Surround Sound) provides simulated surround sound using regular headphones.

Conveniences

- ◆ Hi-Speed Smooth Scan enables fast-forward/reverse at up to 200x normal speed. This lets you scan a two-hour movie in 40 seconds, offering a quick way to access desired scenes.
- ◆ Audio/JPEG Navigation menu lets you quickly search for MP3 and WMA audio files or view JPEG images recorded onto CD-R or CD-RW discs via an on-screen menu. This feature also works with CD-Rs that feature multi-session recordings.



Co-developed by Panasonic and Microsoft, HighMAT (High-Performance Media Access Technology) significantly improves interoperability for digital media content between PCs and devices such as CD and DVD players. HighMAT is a digital-media standard that provides a dramatically improved method of storing, arranging and playing back digital photo, music and video collections on recordable discs such as CD-RW media. (At present, HighMAT-compatible Panasonic products have Level 2 functionality which includes compatibility only with audio files and JPEG still image files.)

DVD-S29 • DVD-S77 • DVD-S97 • DVD-F87

- ◆ Sleek, slim, and stylish, these DVD players are designed to integrate with Panasonic home theater receivers, both functionally and cosmetically. Plus, their slim design makes them a perfect fit for any system.
- ◆ Playlist Playback lets you perform simple non-linear video editing, such as rearranging the order of scenes, skipping over unwanted scenes, or copying selections, to create custom playlists of favorite scenes on a disc.
- ◆ Select from five video and audio playback speeds: 0.8x, 0.9x, 1.0x, 1.2x or 1.4x normal speed. The sound is smooth even with slow or fast playback. You can use faster playback when scanning through the contents of a disc and slower playback, when listening to a foreign language, for example.
- ◆ Additional conveniences include position memory (bookmark) for up to 5 discs, guide set-up, DVD-RAM speed control playback, progress indicator and quick replay.

Inputs/Outputs

- ◆ They feature component video, composite and S-Video output, as well as Dolby Digital and DTS coaxial digital output.

DVD-S77 & DVD-S97 Step-up Features:

- ◆ Built-in DTS & Dolby Digital 5.1 surround sound decoders
- ◆ Can playback six-channel DVD-Audio bringing 6 channels of incredibly powerful and realistic surround sound to living rooms everywhere.
- ◆ Can up-convert the video resolution of ordinary DVDs (480p) to 720p/1080i to more closely match the capabilities of today's high definition TV.
- ◆ HDMI interface carries high-quality digital video and audio over a single cable. Run just one cable from your DVD player to an HDMI-compatible TV or home theater receiver.
- ◆ An advanced picture noise reduction system, Depth Enhancer gives you sharp images with incredible depth. It only processes an image's background, leaving the details of the main subject intact. The end results are images with startling depth, true-to-life skin tones, and a soft, movie-like background focus.
- ◆ Double Re-Master Processing increases the data density in CD or DVD signals to reproduce even high-frequency sounds outside the audible range, creating incredible sound quality.
- ◆ DVD-S97 steps-ups with a built-in Dolby Pro Logic II decoder and MPEG noise reduction

DVD-F87 Step-up Features:

The DVD-F87 is a five-disc version of the DVD-S77, but without up-converter or HDMI output. It features a CD Mode

key for convenience. Press the button and it skips over the DVDs and only play the CDs when you have both of them loaded. Also features sequential CD playback, an audio only function, channel balance control, delay time control, Dolby Pro Logic II and a subwoofer out.

	DVD-S29	DVD-S77	DVD-S97	DVD-F87
Multi-Format Playback	DVD-Video, DVD-RAM, DVD-R, DVD-RW, DVD+R, DVD+RW, CD (CDDA), CD-R/RW (including MP3, JPEG, WMA, and HighMAT level 2)	DVD-Audio, DVD-Video, DVD-RAM, DVD-R, DVD-RW, DVD+R, DVD+RW, CD (CDDA), HDCD, CD-R/RW (including MP3, JPEG, WMA, and HighMAT level 2)	DVD-Audio, DVD-Video, DVD-RAM, DVD-R, CD (CDDA), HDCD, CD-R/RW (including MP3, JPEG, WMA, HighMAT level 2, and MPEG4 files)	DVD-Audio, DVD-Video, DVD-RAM, DVD-R, HDCD, CD, CD-R, CD-RW
Model Type	Single-Disc Player	Single-Disc Player	Single-Disc Player	5-Disc Rotary Changer
Video D/A Converter	54MHz/10-bit	216MHz/11-bit	216MHz/11-bit	54MHz/10-bit
720p/1080i Upconversion	No	Yes. Via HDMI output only	Yes. Via HDMI output only	No
Depth Enhancer	Yes	Yes	Yes	Yes
Audio D/A Converter	192kHz/24-bit	192kHz/24-bit	192kHz/24-bit	192kHz/24-bit
DTS Surround Sound Decoder	Yes (2-channel)	Yes	Yes	Yes
HDMI Output	No	Yes (HDMI-HDCP)	Yes (HDMI-HDCP)	No
Progressive Video Out (Y, PB, PR)	Yes	Yes	Yes	Yes
Component Video Out (Y, PB, PR)	Yes	Yes	Switchable (480P/480I)	Switchable (480P/480I)
S-Video Out / Video Out	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
5.1ch Surround Sound Audio Out	No	Yes	Yes	Yes
Subwoofer Out	No	Yes	Yes	Yes
2ch Audio Out	Yes	Yes	Yes	Yes
Digital Audio Out	Coaxial (1)	Coaxial (1), Optical (1)	Coaxial (1), Optical (1)	Coaxial (1)
Dimensions (H x W x D)	1 11/16" x 16 15/16" x 9 3/4"	2 3/16" x 16 15/16" x 9 13/16"	2 3/16" x 16 15/16" x 10 1/16"	2 11/16" x 16 15/16" x 16 1/4"
Weight	4.7 lbs	5.6 lbs	5.3 lbs	5.6 lbs

PV-D4745

Progressive Scan DVD Player/VHS VCR Combo

With the PV-D4745S (silver) or PV-D4745K (black) you get the high-end A/V excitement of DVDs in your home entertainment, while still being able to watch all your favorite movies from your VHS library. On the DVD side, it is compatible with DVD-RAM, DVD-Video, DVD-R, Video CD, CD, CD-R/RW, MP3 and WMA embedded discs. JPEG images burned to CD-

R/RW may also be viewed in a variety of play modes. It has a built-in Dolby Digital and DTS decoders, provide progressive scan output, and offer 5.1-channel simulated surround sound, high-speed scanning and front A/V input. The VCR section includes VHS tape position display, Auto Clock Set, Index Search and Commercial Skip. Best of all, it is the same width as standard audio components, so they'll fit right into any home theater system.



FEATURES

DVD Section

- ◆ Compatible with DVD-RAM, DVD, DVD-R, Video CD, CD, CD-R/RW, and MP3, WMA and JPEG embedded discs.
- ◆ Progressive scan output produces a much clearer DVD picture when used with a digital TV with 480p display capability or better.
- ◆ DVD Auto switching (Field/Frame Still)
- ◆ Virtual Surround Sound provides a cinema-like experience on systems with only two speakers when playing DVD discs.
- ◆ Supplied Multi-Brand Universal Light Tower Remote Control operates the various functions of most current VCRs and cable/DSS boxes to help reduce the number of remote controls needed to operate the components in your home theater system.
- ◆ Hi-speed smooth motion scan lets you search in forward/reverse with crystal clear quality in 5 different speeds, ranging from slow motion up to an incredible 100x normal speed, while locating desired locations on a disc. When scanning at the initial forward setting, you can hear the soundtrack.
- ◆ Built-in Dolby Digital and DTS encoder and optical digital output.
- ◆ Front A/V inputs make it easy to connect your camcorder, headphones, game system or other video equipment.

VHS Section

- ◆ Automatically sets the local time and channels when the VCR is plugged in.
- ◆ VHS Hi-Fi stereo provides top quality video and audio recording from your favorite stations and external source components.
- ◆ Dual Azimuth 4 Head system ensures jitter-free video performance even when using scan and still modes/speeds.
- ◆ Tape Position Display lets you see how much time is left when you are inserting a tape for recording, or are already in the process of recording
- ◆ Auto Clock Set with back-up via Extended Data Service signal from local PBS channel.
- ◆ Program End Search allows you to find the end of a recorded program without repeatedly pushing buttons.
- ◆ Commercial Skip lets you advance the tape playback in 1, 2 or 3 minute increments to skip unwanted scenes or commercials.
- ◆ By automatically placing a signal at the beginning of each recorded program, Index Search allows you the access to each program by entering the 2-digit number.

PV-V4525 • PV-V4624 4-Head Hi-Fi VCRs

For those who just need a quick replacement VCR, the PV-V4525 is an easy-to-use 4-head Hi-fi VCR featuring Rapid REW/FF, Jet Search up to

21x normal speed, Auto Clock Set with backup, Auto Channel Auto Set, Commercial Skip, front A/V input, Trilingual on-screen display and Tape Position Display. The PV-V4624 steps up with SQPB quasi S-VHS playback allowing you to play S-VHS tapes in the deck at VHS resolution. In addition, the PV-V4624 is the same width as standard audio components, so it will fit right into any home theater system. Both include full-featured remote control (Light Tower on the PV-V4624).



DMR-ES10 • DMR-ES30VS • DMR-EH50S

DVD-RAM/DVD-R Recorders

Panasonic's sixth generation of DVD recorders, the **DMR-ES10S (Silver)** and **DMR-ES10SK (Black)**, **DMR-ES30VS** and **DMR-EH50S** record onto both DVD-RAM and DVD-R discs. With a DVD-RAM disc



recording time is 16 hours in the EP mode on a 9.4 GB double-sided disc. They are also Progressive Scan players which ensure optimum picture quality when viewing DVD movies. A thumbnail display of contents is also possible for recording to disc. Since each scene is displayed with a thumbnail image, it's easy for users to select the sequence of scenes they want to playback. They can play back DVD-Video, music CDs, video CDs and CD-R/RW, and MP3 formatted discs. Direct Navigator simplifies the process of previewing recorded programs. Other features include Time Slip function which lets you replay a scene recorded 30 seconds earlier without disrupting the recording process, simply by touching a button on the remote, and Chasing Playback which lets you view the recorded portion of a live program, from the beginning, while continuing to record that program until its completion.



A dual deck DVD and VHS recorder, the **DMR-ES30VS** combines the features and benefits of two technologies allowing users to easily dub their home movies and recorded VHS tapes onto either a DVD-RAM or DVD-R disc, and from a DVD disc back to a VHS tape. The dual deck also includes one

touch dubbing, another feature geared to make the process truly user friendly.

The **DMR-EH50S** features the TV Guide On Screen (TVGOS) Electronic Programming Guide (EPG), it also includes SD slots, enabling faster, easier networking and file sharing between the DVD recorder PCs, digital still cameras and video camcorders.

FEATURES

Chasing Playback

Now you no longer have to wait for an entire program to be recorded before watching it from beginning to end. With chasing playback, an element of Panasonic's Time Slip feature, you can skip back to watch a program currently being recorded from any point that's already been recorded — while continuing to record the live program in progress.

Simultaneous Recording and Playback

The second part of the Time Slip feature, Simultaneous Recording and Playback lets you record a program onto a disc while you're watching any other program that's previously been recorded on the same disc.

Playlist Playback

Lets you perform simple non-linear video editing, such as rearranging the order of scenes, skipping over unwanted scenes, or copying selections, to create custom playlists of favorite scenes on a disc.

One-Touch Record and Play

If you own a VCR, it's almost certain that at some point someone has accidentally recorded over a movie or show that you wanted. One-Touch Record will save your favorite programs from the same fate by automatically scanning the disc for blank space before starting the recording process. No more worries that your favorite sitcom's season finale will be overwritten by a family member's Sunday fishing show.

Rapid Random Access

Jump directly to any spot on a DVD-RAM disc and begin playback or recording right away. Even if there is no sequential area of empty space available, the recorders can record data on available space throughout the rest of the disc. You will also avoid searching for a blank spot to start recording, or accidentally recording over desired material.

Selectable Recording Modes

They offer five recording speeds: EP mode yields the most recording time, LP & SP provide less recording time with higher quality recording, and XP for the highest quality recording. FR (Flexible Recording) mode lets you record with the best picture quality possible for the recording time and space on the disc.

DMR-ES10 • DMR-ES30VS • DMR-EH50S

Additional Features

- ◆ **Progressive Scan (480P)** provides higher picture resolution, sharper image quality, and elimination of virtually all motion artifacts.
- ◆ **Direct Navigator** makes it easy to find a previously recorded program on a disc. A list of recording dates, times, channels and (user-entered) titles are shown on screen. When you move the cursor to a recording, the segment is played in the background, so playback can begin immediately upon selection. Program deletion, protection, and title input are also easy to perform. Can handle up to 99 titles at once.
- ◆ **Built-in TBC (Time Base Corrector)**, 3D Y/C separation circuitry and 3D digital noise reduction ensure high-quality analog-to-digital transfer when recording from analog sources such as VHS or S-VHS VCRs. The TBC delivers highly stable, natural images. The 3D Y/C separation circuitry minimizes the dot crawl and color smearing. And, 3D Digital Noise Reduction removes noise components from the signal during playback.
- ◆ **Random access** makes it easy to perform non-linear editing using just a single DVD Video Recorder, with no need for additional editing equipment.
- ◆ **To ensure accurate reproduction of the original content** (in the case of DVDs, most of that content is film-based) the recorders utilize advanced progressive scan playback techniques and very accurate MPEG video decoders to provide images that faithfully represent the ones you've seen in the theater.
- ◆ **Picture Control** (brightness, color, contrast, gamma correction, sharpness)
- ◆ **Dialogue Enhancer** boosts the volume of the center channel, from which most of the principal dialogue emanates, when playing a movie featuring Dolby Digital 5.1 sound.
- ◆ **Cinema Mode** diminishes glare and improves the visibility of details in dark scenes by automatically adjusting picture contrast.
- ◆ **Advanced Virtual Surround Sound (VSS)** makes it easy for those who don't have the room or budget for a full-blown home theater system to still enjoy superb audio. Using Advanced VSS, a surround sound system can be simulated by using only the front two speakers.

About DVD-RAM Discs

- ◆ The ideal medium for long-term storage of your valuable video images, a DVD-RAM disc preserves quality over time, permits overwriting as desired, and takes up only about a third of the space of a VHS cassette.
- ◆ A DVD-RAM disc can be rewritten up to an incredible 100,000 times and come in the double-sided (9.4GB capacity) and single-sided (4.7GB) varieties in both cartridge (provides additional protection) and non-cartridge types, all of which can be used with the recorders. DVD-RAM discs can be played back on Panasonic's DVD-RAM-compatible DVD home players and portable players as well.
- ◆ Record up to 12 hours of video on 2-sided, 9.4GB DVD-RAM discs. These discs can also be played back on a DVD-RAM-compatible DVD home player or portable player.
- ◆ The smaller, 8cm DVD-RAM and DVD-R discs utilized for Panasonic's DVD camcorders can be used in the DVD recorders.
- ◆ The DVD-RAM disc format is supported by major hardware and media manufacturers and functions as the "bridge format" for compatibility with A/V and personal computing applications. Any DVD-RAM disc that is formatted for PC or other media use can be reformatted for use with a DVD recorder.



DMR-ES30VS DVD Recorder/VHS Recorder Combo
Step-up Features:

- ◆ All the features of the DMR-ES10, the DMR-ES30VS adds a built-in VHS VCR. This allows you to easily dub home movies and recorded VHS tapes onto either a DVD-RAM or DVD-R disc, and from a DVD disc back to a VHS tape. The dual deck also includes one touch dubbing, making the process truly user friendly.

DMR-EH50S DVD Recorder/Hard Disk Drive Combo ***Step-up Features:***



The DMR-EH50S features a 100GB hard drive, offering users up to 177 hours of recording time. Plus, it can record onto DVD-RAM or DVD-R discs as well, making it ideal for compiling personal movie libraries or for archiving, preserving, cataloging and enjoying favorite videos.

Your hectic schedule isn't always compatible with TV program schedules, so being able to quickly locate your favorite shows and record them for later viewing is important. The TV Guide On Screen Electronic Program Guide lets you easily find your favorite programs and set up your DVD recorder to record them unattended. Explore program listings up to 8 days in advance, searching by genre or keyword to help narrow down your choices. Once you've found what you want in the listings, simply select the program and your DVD recorder will automatically begin recording at the preset time. The TV Guide On Screen Program Guide makes recording TV programs as easy as using a PVR, only without subscription fees or telephone line hook-up.

DVD RECORDER SPECIFICATIONS

DMR-EH50S

Step-up Features (continued)

- ◆ The DMR-EH505HS records data from hard disk at up to 12x normal speed to a DVD-RAM disc or 24x speed to DVD-R (both in EP mode). So you can record a one-hour program to DVD-RAM in just 5 minutes or to DVD-R in just 2.5 minutes.
- ◆ The fastest DVD recorder in the industry, the top-of-the-line DMR-EH50S offers high-speed dubbing from hard disk drive onto DVD-RAM at speeds of 40x and onto DVD-R up to 64x in EP mode. Record a one-hour program onto DVD-R in under one minute!
- ◆ New, Smart Wheel user-friendly remote control to quickly find recorded programs and start playback faster than ever (200x quick search and fast-forward smooth search.)
- ◆ For convenience, it features Direct Navigator, an on screen guide that presents content stored on a disc in easy-to-review thumbnails. Pressing the Direct Navigator button brings up the thumbnails of all the programs on a disc for easy play selection.
- ◆ Simultaneous Record & Play lets you view a previously recorded program on a DVD-RAM disc or the hard disk drive while simultaneously recording a different program.
- ◆ Relief Recording (on the hard disk drive) automatically checks the remaining disc space when recording onto a DVD-RAM or DVD-R disc. If there's not enough space, the recorder shifts the recording to the hard drive. Other PVR functions such as Time Slip, Chasing Playback and Simultaneous Record & Play (see previous page) are available using either the hard disk drive or DVD-RAM.
- ◆ Has a built-in SD Memory Card slot enabling faster, easier networking and file sharing with PCs, digital still cameras and video camcorders and other SD-enabled devices, such as plasma displays.
- ◆ Taking an SD memory card from a digital camera and inserting it into the SD card slot, you can transfer JPEG or TIFF images to the recorder and view them on your TV. (Via the Image Viewer/Storage function which allows on-screen playback of JPEG or TIFF images, or recording to DVD). Once in the recorder, you can organize the images into folders and create photo albums that you can store on a DVD-RAM disc or hard drive.

	DMR-ES10	DMR-ES30VS	DMR-EH50S
Recordable Disc Type	DVD-RAM, DVD-R, DVD-RW, DVD+R		
Time Slip Function	Chasing Playback Time Slip Button	Chasing Playback Time Slip Button	Chasing Playback Time Slip Button
Rapid Random Access, Recording/Playback	Yes	Yes	Yes
Built-in Hard Disk Drive	No	No	100 GB
Relief Recording to Hard Drive	No	No	Yes
Playlist Playback	Yes	Yes	Yes
Direct Navigator	Yes	Yes	Yes
One-Touch Record and Play	Yes	Yes	Yes
Selectable Recording Modes	XP/SP/LP/EP/FR	XP/SP/LP/EP/FR	XP/SP/LP/EP/FR
Picture Quality Improvement Functions	Real-Time Variable Bit Rate Control Integrated Noise Reduction (NR) Visibility Modulation Technology		
PC Card Slot	No	No	No
DV Input Terminal	No	No	No
Built-in SD Card Slot	No	No	Yes
SD Card Playable File Formats	N/A	N/A	Still Picture: JPEG & TIFF
Dolby Digital (Dolby AC-3) 2ch Audio Recording	Yes	Yes	Yes
Bilingual Recording (DVD-RAM only)	Yes	Yes	Yes
Multi-Format Playback (Playable Disc Type)	DVD-Video DVD-RAM, DVD-R, DVD-RW, DVD+R DVD+RW; DVD-Audio; Video CD, CD, CD-R, CD-RW	DVD-Video DVD-RAM, DVD-R, DVD-RW, DVD+R DVD+RW; DVD-Audio; Video CD, CD, CD-R, CD-RW	DVD-Video DVD-RAM, DVD-R, DVD-RW, DVD+R DVD+RW; DVD-Audio; Video CD, CD, CD-R, CD-RW
Video D/A Converter	54MHz/12-bit	54MHz/12-bit	54MHz/12-bit
Power Consumption	23w	31w	31w
Horizontal Resolution	More than 500 lines	More than 500 lines	More than 500 lines
A/V Inputs Composite Video Inputs: S-Video Inputs:	3 (RCA) 3	2 (RCA) 2	3 (RCA) 3
Audio Inputs L/R	3 (RCA)	3 (RCA)	3 (RCA)
RF Inputs: (UHF/VHF)	1	1	1
Universal Remote Control (TV/DVD)	w/Smart Wheel	Yes	Yes
Audio Outputs L/R	1 (RCA)	2 (RCA)	2 (RCA)
Component Video Out (Y, PB, PR)	Yes	Yes	Yes
S-Video Outputs	1	2	2
Model Color	Silver	Silver	Silver
Optical Digital Output for DTS & Dolby Digital SS	Yes	Yes	N/A
Image Viewer/Storage (for memory cards)	N/A	N/A	JPEG & TIFF files
Dimensions (H x W x D)	2½ x 16½ x 13½"	3½ x 16½ x 13½"	2½ x 16½ x 10½"
Weight	7.94 lbs.	12.78 lbs.	9.92 lbs

DV-285-S • DV-588A-S

DVD and DVD-Audio/Video Player

Slim and stylish, the DV-285-S and DV-588A-S look great, play everything, and deliver exceptional video and audio performance.

They play DVDs, DVD-R/RWs, and CD-R/RWs with WMAs and MP3 files, while the Disc Navigator feature makes it easier

to browse and view JPEG picture files. For smooth, high-resolution video imagery, they feature a 12-bit/108MHz Video D-A converter, and offer Pioneer's PureCinema 2:3 Progressive Scan system. For great audio they are equipped with high-end 192kHz/24-bit D-A converters. For convenience Video Adjust Menu lets you fine tune the video image with adjustments to sharpness, brightness, and four other levels.



and SACD discs channel music, as well as the DivX format for viewing Internet video material.

FEATURES

- ◆ 24-bit/192kHz DAC means they are capable of delivering exceptional sound quality in terms of dynamic range, low-level resolution and high-frequency detail.
- ◆ Pure Cinema progressive scan video output for extremely stable, flicker free images, with the same frame refresh rate as the original movie.
- ◆ They are compatible with DVD-Video, CD-R/RW, Video CD, DVD-R/RW, WMA, MP3 and JPEG embedded discs.
- ◆ JPEG PhotoViewer enables you to create an ongoing slide show of digital images.
- ◆ Video Adjust Menu makes it easy to fine-tune picture settings, including Sharpness, Brightness, Contrast, Gamma (for picture 'warmth'), Hue (for red/green balance), and Chroma Level (for color saturation).
- ◆ Disc Navigator with moving pictures enables you play the first few seconds of each title or chapter in a thumbnail image on screen.
- ◆ Enjoy surround sound effects from just two speakers. Virtual surround can produce realistic 3D sound from a pair of stereo speakers using any source.
- ◆ When watching Dolby Digital DVDs at low volume, it's easy to lose the quieter sounds completely—including some of the dialog. Audio DRC (Dynamic Range) with High, Medium, Low and Off settings help by bringing up the quieter sounds, while controlling loud peaks.
- ◆ Using the zoom feature you can magnify a part of the screen by a factor of 2 or 4, while watching a DVD or playing a JPEG disc.
- ◆ Dialog Enhancer lets you set how much you want dialog to stand out from background sound in the soundtrack. Choose from High, Medium, Low or Off.
- ◆ Resume (bookmark) function memorizes the position you stopped playing a DVD and will resume playback at that position (up to 30 discs).
- ◆ Component video output (DVD), composite and S-Video output and audio output (RCA)
- ◆ Dolby Digital and DTS output
- ◆ Advanced GUI (Graphical User Interface) with Set-up Navigator makes operation fun and simple
- ◆ Zoom function (still picture)
- ◆ Random/Slow Play
- ◆ 10-key direct search and play (chapter/track)
- ◆ Title, Track/Time Search
- ◆ Screen Saver and Auto Power Off
- ◆ Slim design with cursor key on the front panel

DV-588A-S Only

- ◆ Built-in Dolby Digital and DTS 5.1 encoders
- ◆ Coaxial and optical digital output for Dolby Digital and DTS surround 5.1-ch. output
- ◆ FI Dimmer/Off (3 steps)
- ◆ Compatible with discs using DivX, the video compression technology that's the video equivalent of MP3 audio. Just create a DivX movie on your computer, burn it to DVD, and play it on the DV-588A-S.
- ◆ Can play DVD-Audio (DVD-A) and Super Audio CD (SACD) discs. These advanced formats represent the highest level of audio on disc: high-density, high resolution music miles ahead of regular CD. Recordings are bigger, more detailed, and more open.

DV-F727

301-Disc CD/DVD Player Changer

A high-end AV jukebox, the DV-F727 will play DVD's, Video CD's, audio CD's and CD-R's, storing 301 discs in all. Plus you can extend your universe of digital disc controlling possibilities by connecting two of them for access to an incredible 601 discs. Engineered for superb audio and video reproduction, the DV-F727 also offers great convenience. You can enter title/artist CD text with a keyboard and mouse, find a disc or artist alphabetically, or sort discs for playback by type. This serious piece of AV hardware will be the life of the party.



- 301-disc control and management
- Easy title/artist input using keyboard and mouse
- Easy alphabetical title/artist
- Easy disc sorting with 20 custom files (audio 10, video 10)
- Auto update of text and types for all discs
- Master/Slave allows two DV-F727's to be connected for control of up to 601 discs
- Advanced digital video noise reduction with film recognition and gamma control
- Virtual Dolby Digital with SRS TruSurround
- 24-bit/96kHz DAC for Superb Sound Quality
- Dolby Digital and DTS Output
- Joystick & Jog Remote Control Unit
- Component video output (DVD, Video CD)
- 2 digital audio outputs (coaxial and optical)

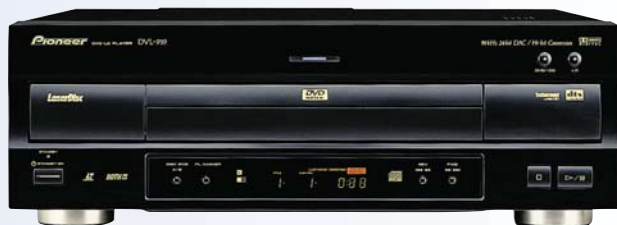
High-Capacity Disc Management with GUI

Managing such a vast library is surprisingly simple, thanks to two conveniences: Auto Update Function that registers information of all loaded discs automatically. And a Disc Identification Function that "tags" each disc, not by rack number, but by assigned disc name, making it easy to reload discs in the rack freely. You can input the disc title, artist name and /or the custom file name using a computer keyboard and mouse (not included) to edit the information by alphabetical order or by disc type such as DVD, VCD or CD so that you can find the disc you want to watch at once. The DV-F727 keeps the disc information of up to 330 discs including discs that have been removed from the rack. Moreover you can classify the discs by up to 10 groups and name each group. Using a mouse even lets you control the setup and player menus.

Advanced Digital Video Noise Reduction with Film Recognition

The Advanced Digital Noise Reduction stores the impact of images from film sources by compensating for the degradation in image quality that normally occurs in the film-to-video transfer process, and a high-quality video encoder allows viewers to tailor picture characteristics to their tastes. Two-dimensional (horizontal/vertical) edge control keeps object edges clean and sharp. Moreover, the Gamma Correction function adjusts the black level.

DVL-919 DVD/LD/CD Video CD Player



The DVL-919 is engineered to make all your discs look and sound their best, with one tray for laserdiscs, and another for DVDs and CDs. Pioneer added DTS capability for laserdiscs (there are 100+ titles) and DVDs (still only a few). The back panel has all the jacks you'll need for the best possible picture and sound quality from your system: component video, 2 S-video jacks, 2 sets of composite video, plus optical and coaxial digital outputs for Dolby Digital/DTS multichannel surround sound and PCM stereo for music CDs.

The DVL-919 delivers state-of-the-art laserdisc playback, with a sturdy auto-reverse mechanism so you'll never have to get up to flip an LD. Digital TBC (Time Base Corrector) and a 3-line digital comb filter guarantee razor-sharp, noise-free images. There's an 8-bit digital field memory for outstanding special effects on both CAV and CLV laserdiscs. An RF digital output is included so you can enjoy 5.1-channel sound from Dolby Digital-encoded laserdiscs (AC-3 RF input required on receiver, decoder, or outboard demodulator).

DVR-233-S

Slim Design DVD Recorder

The entry-level DVR-233-S delivers high-performance DVD playback plus easy DVD recording. Watch DVD movies and concerts in stunning audio and video detail. Plus, you can record your favorite TV shows and home movies to

DVD and watch them whenever you want. To simplify the recording process it utilizes VCR Plus+ and an intuitive on-screen navigator to walk you through it. To ensure high quality recording and playback, it offers a 10-bit/54MHz video digital to analog converter and Pioneer's high-quality PureCinema progressive scan output. It also features a built-in TV tuner, easy timer and one-touch recording, and an advanced GUI.



FEATURES

Advanced Disc Navigator

- ◆ The user-friendly menu makes all the key functions easy to operate. You can set up a Play List or move a chapter with this menu. Want to find and play a certain segment of your "My Kids" DVD? Select a thumbnail of that chapter and it will begin to play.
- ◆ Menu's thumbnail's are shown in full motion, with sound! These mini-movies make it easy to find what you're looking for, and make your DVD recordings look professional.



Chase Play

- ◆ You set the timer to record your favorite program, but get home early, while it's still recording. You don't have to wait until the recording is done to see the program from the beginning. With Chase Play, you watch the program as the rest of it is being recorded. It lets you watch, stop, or pause a show while you're recording. Chase Play is performed using a memory buffer and recording directly to DVD-RW discs (VR Mode).

TV Recording

- ◆ Includes a built-in TV tuner, so it's easy to find and record your favorite TV program. You can either use Pioneer's timer record system or the widely used VCR Plus+ system
- ◆ Smart VBR (Variable Bit Rate Recording) mode lets you choose the level quality/recording time (Fine, SP, LP, EP, and Auto) that suits you best.
- ◆ In Basic EP mode, you can record up to 10 hours on one disc.
- ◆ "Commercial Skip" button on the remote. When you encounter the first commercial, press "CM Skip" once and you jump ahead 30 seconds. Press again, another 30.
- ◆ Sometimes imperfections in blank DVDs cause the laser to lose accuracy, and you get less-than-perfect recording. Pioneer's virtual lens tilt mechanism with liquid-crystal technology corrects these imperfections, and ensures the most accurate recording possible.

Sophisticated Video Playback

- ◆ Features PureCinema 2:3 Progressive Scan for a more film-like presentation when watching movies. A full set of connections is provided, including a component video output for higher-quality signal transfer to your TV.
- ◆ Compatible with DVD-Video, CD-R/RW, Video CD, DVD-R/RW, WMA, MP3 and JPEG embedded discs.

- ◆ Equipped with Dolby Digital and DTS Digital surround sound outputs, along with high-quality audio and video D/A converters.

Editing

- ◆ With the DVR-233-S, dubbing your home movies onto DVD is a snap. Analog inputs for composite or S-video plus L and R audio are right there on the front panel.
- ◆ Once your movies are on disc you can use high-speed scanning (FWD or REV) to find the best parts quickly. And now, you've got a back-up copy of your best video memories, just in case something bad happens—like old age—to your original version on tape.
- ◆ Organize your footage and record it to DVD without using your computer. Basic editing in Video mode lets you name, erase, lock, and unlock titles before finalizing the disc.
- ◆ In VR mode (using a DVD-RW disc) you can do even more, such as erase part of a title or make detailed changes to chapters in a title. You can also set up a Play List—for example, a title for each city you toured—which adds further editing capabilities, such as moving the position of a chapter, combining it with another, or dividing it in two.
- ◆ In Video mode you can finalize the disc and then select a suitable wallpaper to appear behind the disc's menu during playback—so when you show your DVD it has a clean, professional look.

DVR-533H/DVR-633H

Dual-Layer DVD Recorders with Hard Disk Drive

Now it's easier than ever to record your favorite television programming directly to DVD.

The DVR-533H (80GB) and DVR-633H (160GB) recorders combine hard drive technology

with software and program guide upgrades to make the process of creating a DVD easy. They allow you to find all of your favorite TV shows through the TV Guide onscreen program guide; store programming on a hard drive; burn to DVD; and create home movies on DVD through the DV camera input on the front panel. For added convenience, Pioneer has created a 'Help' menu on screen for easy set up and use of the DVD recorder. The 'Help' button is located right on the remote control and offers information about what is currently scheduled for recording, how much space is available on the hard drive, and general operational instructions.



SAME FEATURES AS THE DVR-233-S PLUS—

Built-in 80GB or 160GB Hard Disk Drive

- ◆ The built-in 80GB (DVR-533H) or 160GB (DVR-633H) hard disk drive lets you record lots of home movies and TV shows for temporary storage. Once they're recorded you can watch them whenever you want, edit them, delete them, or burn them to DVD. The DVR-533H can hold up to 170 hours of content (recorded at lowest video quality - SEP mode). The DVR-633H can hold double that, or up to 340 hours in SEP mode.
- ◆ When burning your recorded content to DVD from the hard disk drive, an hour-long program recorded in SEP (lowest video quality) mode takes less than 30 seconds to burn — that's approximately 120x speed.
- ◆ Pioneer's exclusive Disc Backup lets you make a direct file transfer of your home-movie DVD back to the hard drive, and from that make as many copies of your home movie as you want, all at blazing speed. This is great for videophiles who do their editing on their home computer and burn their material to DVD that way. And unlike other HDD-to-DVD recorders, the DVR-533H/633H don't recompress the video to another format during the process. Instead, they make a perfect copy that is bit-for-bit identical to the original, every time.

HELP Button

- ◆ Here's another big "ease of use" feature. Let's say you're about to dub a home movie to the recorder, and you can't figure out what the next step is... So Pioneer put a HELP button right on the remote — it's for when you get stuck. Pressing HELP doesn't have you start over again; instead, it makes a recommendation on what to do next. Sometimes it will alert you if your remaining disk space is limited, or offer a hint about watching a show you've recorded.

Free Interactive Program Guide

- ◆ They include an 8-day Electronic Program Guide (EPG) from TV Guide that's incredibly easy to use. Just find your favorite programs and select them for recording, using the easy on-screen EPG and your remote. And here's the best part: there's no fee for this valuable service! Pioneer covers the usual program fee; you pay nothing up front and there's no monthly charge.

Front DV Input

- ◆ Front or i-LINK (or DV or IEEE1394) interface lets you transfer your DV movies smoothly to the hard disk drive. Just connect your camcorder's DV output the DV input on the unit's front panel to and begin.
- ◆ You can now use the recorder's remote to control key camcorder functions (Forward, Reverse, etc.) and easily find the scenes you want to transfer.
- ◆ i-LINK is not only a "smart" connection; it also lets you dub your DV movies without losing quality by keeping them in the digital domain during transfer.
- ◆ They can control most brands of DV camcorders, unlike many other DVD recorders that either don't offer i-LINK or don't allow camcorder control via the DVD recorder.
- ◆ And if your camcorder is analog, inputs for composite, S-Video and stereo audio are also provided for dubbing them to DVD.

What Is A DualDisc?: DualDisc has both a CD player side and a DVD side, allowing artists to create in exciting new ways using audio, video and computer content - all on a single two-sided disc. What's on it? One side is the full-length CD audio album. The other side offers DVD content. This may include enhanced album audio, 5.1 surround sound, music videos, artist interviews, behind-the-scenes footage, documentary films, photo galleries, lyrics, computer-ready digital song files, and Web links. It all depends on the artist.

HI-FI COMPONENTS

PD-M426

6-Disc Magazine CD Player

If you prefer to store your CD's in magazines, the PD-M426 is a perfect 6-disc CD player for you. Its magazines (sold as accessories) hold up to 6 discs and can be used to organize a CD collection by music type or by artist. For convenience, the PD-M426 features random play and several programmed play options.

PD-F407

25-Disc CD Player

Throwing a '60's party? Load 25 of your Hendrix, The Who, Country Joe, and Santana CD's into the PD-F407 and hit Random Play. If you just can't get enough of Santana, put that CD into Repeat Mode. To locate a specific Country Joe and the Fish song, use Hi-Lite Scan. See? The 60's were a lot of fun.

PD-F908

101-Disc CD Player

Holding enough music to go straight through a 4-day party, the 101-CD PD-F908 has two great features for recording: CD Synchro, for super-easy CD-to-tape recording, and an optical digital out for connection to a CD Recorder. Plus, Best Selection Memory remembers and plays your 15 favorite tracks.

PD-F1009

301-Disc CD Player

If you've assembled a big CD collection over the years, load your favorites- let's say, 301 of them- into the PD-F1009. It displays disc titles from text-encoded discs and has an optical digital output for connection to a CD recorder. This machine offers random play and Best Selection Memory functions, and also plays your CD-R's and CD-RW's as well.



CT-W208R

Double Auto Reverse Cassette Deck

You still have a big cassette tape collection, or maybe a family vehicle has a tape deck and not a CD player? The CT-W208R may be the perfect deck for you, with dual wells, dual motors, auto-reverse, tape-to-tape dubbing in normal or high speed, and Dolby B/C noise reduction for cleaner sound.

CT-W606DR

Double Auto Reverse Cassette Deck

The cassette tape format continues to add sonic improvements. The dual-well CT-606DR includes Digital Noise Reduction, Digital Noise Suppression, and Dolby HX Pro for clean recording and playback, and includes CD-Deck Synchro for easy recording from a CD player. So don't put those tapes into storage just yet- they'll still sound great with this deck.



DVD-HD850 • DVD-HD950

High-Def Conversion DVD Players

Designed for those who want to get the most out of their HD displays with their existing DVD collections, the DVD-HD850 and DVD-HD950 employ a digital process that upgrades the standard DVD resolution to high-definition resolution with 1080i, 720p, and 768p

signals (the latter is a Samsung exclusive in the category). They are the perfect solution for anyone who has upgraded to HDTV and want to get the most out of their DVD collections. In addition they include HDMI outputs for simple, single-cable connection of uncompressed digital video. The DVD-HD950 adds a white LCD screen, 6 channel out and DVI outputs, plus support for DVD-Audio and SACD playback.



FEATURES

High Performance

- ◆ Compatible with DVD, DVD-R/RW, DV+R/RW, Video CD, CD, CD-R/RW, and MP3, WMA and JPEG embedded discs.
- ◆ Their progressive scan output allows superior non-interlaced images to be sent to the latest digital TV receivers. The smooth, 480P progressive scan image eliminates blur and distortion, bringing new realism to DVD movies and DVD video selections.
- ◆ 3:2 pulldown system further improves progressive scan images that are converted from film at 24 frames per second. These features help make sure your television images look great.
- ◆ Component video output delivers the best video quality to your display.
- ◆ An important scene can be viewed in slow motion.
- ◆ Given the increasing growth of HDTV, many home theater aficionados find themselves with new digital televisions, but a lack of high-definition programming to make the best use of their new investment. Samsung's high-def conversion DVD players open a vast library of DVD material by up-converting a DVD's native resolution (480p) to output high definition formats (720p/768p/1080i). Significantly, this process takes place entirely in the digital domain (in the DVD player rather than in the TV) which eliminates data loss and other artifacts associated with analog conversion.
- ◆ They offer an HDMI (High-Definition Multimedia Interface) connection to stream multi-channel digital audio and video information on one cable to compatible digital TVs and monitors. An HDMI cable as well as DVI cable is included.

Conveniences

- ◆ EZ View Letter Box Eliminator enables the elimination of the black letterbox bars on 4:3 TV sets with the push of a button on the remote control.
- ◆ Advanced GUI (Graphic User Interface) provides clear on-screen icons and menus, making it easy to control their advanced features.
- ◆ Motion Zoom allows 2x or 4x magnification of selected screen areas, without distortion, even as the movie is playing
- ◆ Instant Replay/Skip function enables you to replay or skip 10 seconds back/forward with the push of a button on the remote control.
- ◆ Parental Control (DVD) allows you to set the level necessary to prohibit children from viewing harmful movies such as those with violence, adult subject
- ◆ Playback JPEG files recorded on a CD-R/RW as a slide show with selectable (6, 12 or 18 seconds) interval. You can zoom in on any selected image (2x or 4x) or rotate an image 90° clockwise. Each disc can have a maximum of 3000 files and 300 folders.

DVD- HD950 Step-up Features

- ◆ DVD-Audio and Super Audio CD (SACD) bring the high resolution multi-channel audio experience to your living room. These enhanced optical discs offer higher sampling rates, greater frequency range, and enhanced dynamic range when compared to conventional CDs. A multi-channel Super Audio CD provides you with up to 6 channels of high-resolution audio in addition to a regular CD layer for playback on any existing CD player.

DVD-V5500 • DVD-V8500 • DVD-V9500

Progressive-Scan DVD Player/VHS VCR Combos

An award-winning line with three enhanced combination players, the DVD-V5500, DVD-V8500, and DVD-V9500 offer the best in DVD and VHS capability in a sleek, space-saving design. Besides offering superior 480P DVD playback, they integrate a 4-head Hi-Fi VCR, ensuring uncomplicated hook-up and easy playback no matter the media type (except VCD). They are compatible with most DVD/CD formats and offer front A/V input jacks. The DVD-V8500 steps-up with a 10-in-2 multi-card reader for digital photo viewing that accepts virtually every popular format of memory card, including SD, Compact Flash, Mini SD, XD, MMC, Smart Media, Memory Stick and Memory Stick Pro. For HDTV owners seeking the same DVD/VHS versatility in a single package, the DVD-V9500 combines DVD and VCR capabilities along with advanced hi-def conversion technology that up-converts a DVD's native resolution (480p) to output high-definition formats (720p/768p/1080i). This allows HDTV owners to view their existing collections of DVDs and VHS tapes in high-resolution formats. An HDMI port facilitates connections between components. The DVD-V9500 also includes a multi-TV remote control.



FEATURES

DVD Section

- ◆ Dual-mode optical pick-up ensures compatibility with DVD, DVD-R/RW, DVD+R/RW, and CD-R/RW discs encoded with MP3, WMA and JPEG files.
- ◆ 10-bit/54MHz D-A video converter and carefully selected components ensure accurate recreation to the original DVD image.
- ◆ Component video and 480P progressive scan video output for connecting to the latest large-screen direct view and projection televisions without blur or distortion, bringing new realism to DVD movies.
- ◆ 2x Audio Playback delivers clear audio as the disc is played at double speed. This allows you to find the exact moment on the disc you are searching for.
- ◆ Analog left/right audio output provides Dolby Surround encoded audio for superb stereo, or complete surround sound when connected to a Dolby Pro-Logic receiver.
- ◆ Phantom Surround Processor delivers a rich simulated surround sound effect through just two speakers. Ideal when connected to a stereo TV or stereo system.
- ◆ Optical and coaxial digital audio outputs
- ◆ EZ View Letter Box Eliminator
- ◆ Motion Zoom allows extreme magnification of selected screen areas, without distortion even as the movie is playing.

VHS Section

- ◆ VHS Hi-Fi stereo provides top quality video and audio recording from your favorite stations and external source components.
- ◆ Dual Azimuth 4 Head system ensures jitter-free video performance even when using scan and still modes.
- ◆ Intro Scan locates the start of each separate recording on a tape and plays the first 5 sec. before fast forwarding to the next start point. Ideal way to identify unlabeled tapes.
- ◆ Jet Picture Search allows clear viewing of video at an incredible 7x normal play for SP tapes, and 21x SLP recordings.
- ◆ One Touch Recording lets you select up to four hour record periods in half hour increments from a single button on the remote.

DVD-V8500 Step-up Features

10-in-2 Multi-Card reader compatible with SD, Compact Flash, Mini SD, XD, MMC, Smart Media, Memory Stick and Memory Stick Pro. Now you can view digital pictures on a TV or listen to audio files on a main audio system, instead of having to rely on a computer.

DVD-V9500 Step-up Features

- ◆ Given the increasing growth of HDTV, home theater aficionados find themselves with digital televisions but a lack of high-definition programming to make the best use of their investment. The DVD-V9500 open a vast library of DVD material by up-converting a DVD's native resolution (480p) to output high definition formats (720p/768p/1080i). Significantly, this process takes place entirely in the digital domain (in the DVD player rather than in the TV) which eliminates data loss and other artifacts associated with analog conversion.
- ◆ Has an HDMI (High-Definition Multimedia Interface) connection to stream multi-channel digital audio and video information on one cable to compatible digital TVs and monitors. An HDMI cable is included.

DVD-R120 • DVD-VR320 • DVD-VR325

DVD Recorders

The perfect DVD recorder solution for everyday recording needs, the elegant, ultra-slim DVD-R120 records in DVD-RAM and DVD-R/RW formats with an Auto Chapter

Creator function for added convenience. A wide variety of video playback formats including DVD-RAM, DVD-Video DVD-R/RW and MP3 files on CD-R/RW discs give you assurance that your favorite music and video entertainment will be playable. For added flexibility and convenience, the DVD-R120 offers front composite video and DV-inputs.



The DVD-VR320 is a DVD recorder/VHS VCR combo that lets you record between VHS tapes and DVD discs. With both formats supported in the same machine, you can convert treasured VHS tapes to DVDs at the touch of a button, with no special wiring required. You can

also record directly from television to either format. It features multi-format playback and recording functions with a smooth, 480P progressive scan image that helps eliminates blur and distortion. It has an automatic chapter creator and front DV-inputs for true digital transfer from a digital camcorder. The unit's sleek and clean front panel design ensures it will look at home in all home theater settings.

The DVD-VR325 is also a DVD Recorder/VHS VCR combo but steps-up with High- Definition conversion from both DVD and VHS to output 480p/720p and 1080i HDTV resolution via single HDMI hookup.

FEATURES

- ◆ Powered by SMART RP technology, they support three recording formats (DVD-RAM, DVD-R and DVD-RW) and offer a 'Time Shift' function on the DVD-RAM. Simultaneous recording and playback is available as well as live picture 'Pause and Replay'.
- ◆ Time Slip provides two features that give you added flexibility and control when recording on discs: Chasing Playback and simultaneous recording & playback.
- ◆ Auto Fit Recording automatically detects remaining disc space and sets up the best recording mode. For instance, when recording a 90-min. program on a single side, it sets recording mode between XP and EP so that the program is recorded completely without any loss due to disc capacity.
- ◆ 'One-Touch' and timer recording options offer extra convenience:
- ◆ One Touch Recording lets you select up to four hour record periods in half hour increments from a single button on the remote.
- ◆ Timer Recording enables automatic recording of a favorite TV show when you're not home. Just set the time and the date and the recorder will automatically record it.
- ◆ 480p progressive scan output ensures pristine, flicker-free images with a compatible TV and sound quality is addressed with Digital Noise Reduction.
- ◆ In addition to front composite A/V inputs a IEEE 1394 DV input lets you connect and store video content from a DV camcorder.
- ◆ Use the integrated menu system to edit video content. You can perform basic (Title List) and advanced editing (Play List) on DVD-RAM and DVD-RW discs. For the Title List, you can rename, lock or delete a title. Also, create a Playlist and then play, edit (even modify/replace), rename the entries in the Playlist.
- ◆ Auto Chapter Creator function lets you record a TV show or video clips from a camcorder onto a DVD disc and chapters are automatically created. This means you will no longer have to spend time searching an entire DVD looking for just the right spot.
- ◆ DVD-R320/VR325 let you record on both the DVD and VCR players simultaneously.

DVP-NS50P • DVP-NS70H • DVP-NS90V • DVP-NC80V

Progressive-Scan DVD Players

Affordable, functional and reliable, Sony's elegantly designed DVD players also offer high performance and flexibility.

Incorporating Sony's Precision Cinema Progressive technology and Precision Drive 3 systems, they deliver a picture that is more faithful to the source and virtually free of errors that a warped disc can produce.

*The **DVP-NS50PS (silver)/DVP-NS50PB (black)** feature 3:2 pull-down 480p progressive scan output, 12-bit/108 MHz DAC converter, Dolby Digital and DTS coaxial output and DVD-R/RW DVD+RW/+R, CD-R/RW, JPEG and MP3 playback capabilities. For added convenience, it offers Picture Navigation, Sony's Quick Set-up, 10-second instant replay, Fast/Slow Playback with Sound, Virtual Surround Sound, custom parental control, and wireless remote control.*

*The **DVP-NS70H** steps-up with 720p/1080i upscaling video output through an HDMI connection to provide the clearest, most uncompressed picture to date, coaxial and optical outputs, and A/V Sync, which aligns audio and video playback.*

*The **DVP-NS90V** steps up with Super Audio CD (SACD) capability, Dolby Digital and DTS audio output and individual speaker settings for optimum sound reproduction. The **DVP-NC80V** DVD/CD changer also offers Super Audio CD (SACD) capability, but no upconverting or HDMI interface.*



DVP-NS70H top, DVP-NC80V bottom



FEATURES

Video

- ◆ Precision Drive 3 System compensates for warped discs by moving the lens-instead of the entire optical block-for faster and more accurate error correction in DVD discs.
- ◆ Other DVD players detect image changes at the scan line level, Sony's Precision Cinema Progressive (PCP) system detects them at the pixel level. The picture is more faithful to the source-whether film or video-because separate, optimized algorithms are used to handle the differing pixel behavior
- ◆ Component video output maintains the highest possible image quality by separating the color components. Offers composite and S-Video output as well.
- ◆ 480p Progressive Scan with full 3-2 Reverse conversion delivers beautiful, film-like images when used with the latest HDTVs.
- ◆ Digital Video Enhancer improves contrast and picture detail while controlling unwanted artifacts that degrade picture quality.

Audio

- ◆ Stellar 192kHz/24-bit audio adds breathtaking realism and impact
- ◆ Dolby Digital and DTS digital (coaxial) output for 5.1 surround sound when connected to an A/V receiver with built-in Dolby Digital and/or DTS decoder.
- ◆ TV Virtual Surround Sound generates the effect of surround sound, using just the speakers in your TV. Offers various surround modes including dynamic, wide, standard and night for sound reduction at late hours. Also creates a virtual center channel for clearer dialog reception.
- ◆ Playing MP3 files couldn't be easier. Just insert an MP3 encoded disc and press MENU. A blue screen pops up to display your folders. Scroll down the list using the remote or front panel cursor to select the folder you want. The green files screen pops up to show the files in the selected folder. Now just select the song you want to hear.

High Performance

- ◆ SmoothScan and SmoothSlow provide clean playback in slow motion and scan speeds. Using high-speed processing to read ahead and keep frames in memory, the system provides smooth, natural pictures in special effects modes, such as Frame Advance, Slow Motion (1/10 and 1/5 speed) and High-Speed Search (2x, 10x and 30x), in forward or reverse.
- ◆ CD Text and DVD Text display (using compatible CDs) shows song titles, artist name and disc titles. DVD text equipped discs will display titles, a jacket picture and other information.
- ◆ Sometimes you need to take a break, but when you come back to the movie, you don't remember where you left off. The multi-disc resume feature stores the point where you stopped and resumes playback at that point the next time you put the disc in your player (up to 6 discs).

DVP-NS50P • DVP-NS70H • DVP-NS90V • DVP-NC80V

Conveniences

- ◆ Custom Parental Control (up to 40 discs) "locks" mature-content discs with a 4-digit code, even if the discs don't carry and MPAA rating.
- ◆ Instant Replay (goes back ten seconds) at the touch of a button is great for those times when you miss a line of dialogue.
- ◆ As soon as you connect the player, Sony's Quick Set-up screen appears, guiding you through the initial menu set-up choices to optimize the DVD player for your particular system set-up.
- ◆ Fast/Slow playback with sound lets you play video at fast forward or slow motion with recognizable audio and compatibility with long-playing DVD+R Double Layer.
- ◆ Screen saver protects your TV from burn-in when a DVD is left in pause for too long.
- ◆ When you play "anamorphic" widescreen discs on a standard 4:3 TV, letterbox pictures are actually created by the player's internal filter. Sony's 4-tap weighted average design minimizes flicker and reduces jagged edges.
- ◆ Outputs include composite, S-Video, component video and analog stereo. Dolby Digital and DTS output are available via coax.
- ◆ Supplied multi-brand remote also operates Sony and other brands of TVs and the volume control for 8 brands of A/V Receiver.

DVP-NS70H Step-up Features

- ◆ Up-scales video to 1080i/720p high definition resolution and transmits high quality audio through a HDMI (High Definition Multimedia Interface). HDMI connections allow for the transfer of uncompressed digital signals to other HDMI equipped components such as Sony's Grand WEGA LCD rear projection high definition televisions.
- ◆ A/V Sync allows for the alignment of the audio tracks to match the video—necessary for some newer TVs that have video buffers or delays.
- ◆ Coaxial and optical outputs.

DVP-NS90V Step-up Features

- ◆ SA-CD playback and Dolby Digital and DTS audio output.
- ◆ Dolby Digital and DTS audio output and individual speaker settings for optimum sound reproduction.

DVP-NC80V 5-Disc DVD/SACD Progressive Scan Changer

Need more versatile home entertainment? The DVP-NC80VS (silver)/DVP-NC80VB (black) is an advanced five-disc DVD/SACD carousel changers that lets you play any mix of up to 5 CDs and/or DVDs — the answer for those with large and growing collections of DVD and CD titles.

It features Precision Cinema Progressive technology and Precision Drive 3 for high quality video output. With Fast/Slow Playback With Sound, A/V Sync, Dolby Digital and DTS 5.1 output and coaxial and optical digital outputs. Also delivers flexible playback with DVD-R/RW, DVD+R/RW, MP3, JPEG, CD-R/RW, VCD and SVCD compatibility.

DVP-CX995V 400-Disc Super Audio/DVD Changer

With enhanced technology and disc management tools the DVP-CX995V takes entertainment to the next level. It features Sony's proprietary Disc Explorer for ease of use when managing discs, so whether it's sorting, filing or categorizing, the DVP-CX995V provides an efficient solution. In addition, it uses an exclusive mechanism, giving it the ability to play single-sided discs or a selected side of dual-sided discs. With the touch of the "FLIP" button, the disc carousel is rotated 180° (or one-half revolution) and the disc is returned into the drive from the opposite side of the mechanism for playback.



The DVP-CX995V also up-scales video to high definition (1080i/720p) resolution and transmits high quality audio through a High Definition Multimedia Interface (HDMI). It features coaxial and optical Dolby Digital and DTS output. Offers DVD-R/, DVD+R/RW, MP3, JPEG, CD-R/RW VCD and SVCD playback. Additional convenience features include parental controls (400 discs), playback memory (400 discs) and a universal remote control.

The DVP-CX995V also up-scales video to high definition (1080i/720p) resolution and transmits high quality audio through a High Definition Multimedia Interface (HDMI). It features coaxial and optical Dolby Digital and DTS output. Offers DVD-R/, DVD+R/RW, MP3, JPEG, CD-R/RW VCD and SVCD playback. Additional convenience features include parental controls (400 discs), playback memory (400 discs) and a universal remote control.

Disc Explorer —400 Disc Management System

With libraries of DVD movies, shows and concerts, music CDs and image CDs growing rapidly, the DVP-CX995V is the perfect way for people to organize their entertainment life. But you have 400 discs loaded, you need a powerful system of organization. Equipped with the re-designed Disc Explorer, the on-screen graphic user interface provides intuitive access to an expansive disc library making it easy to locate your favorite movies and SA-CD music.

Disc Explorer brings up a full-screen, scrollable list of all loaded discs, including each one's format (CD or DVD), title, artist and genre (Comedy, Action, Classical, Jazz, Sci-Fi, Rock, etc.). There is also a thumbnail image that gets loaded automatically from DVDs that take advantage of the Jacket Picture extension. For other DVD discs and CDs, thumbnails are provided according to genre from a built-in library.

You can sort the entire collection alphabetically, by slot number or by genre. But that is just the beginning. You can organize discs by folder (just like the folders on your computer screen). Discs are assigned automatically to folders labeled DVD and CD; in addition, you can assign each disc to one of four folders, which can be named "Dad", "Jaz", "Kid", etc.

Titles and artists names are automatically picked up from discs with CD or DVD Text. Other discs can be assigned Disc Memo names up to 16 characters via an on-screen keyboard or by plugging a PC keyboard into the changer's keyboard port. You can sort the discs in each folder by name, slot number or genre.

SLV-D360P • SLV-D560P**DVD Player/VHS VCR Combo**

Easily fitting in any entertainment center, the versatile and convenient SLV-D360P and SLV-D560P are 2-in-1 combo players that combine a progressive scan DVD player with a highly-advanced Hi-Fi VCR and feature complementary WEGA TV styling and front A/V inputs for your camcorder or game system.

They provide superb sound with Dolby Digital and DTS surround output, and offer DVD, DVD+R/RW, DVD-R/RW (Video Mode), CD, SVCD, VCD, CD-R/RW and JPEG/MP3 playback. For convenience they offer Fast/Slow Playback with Sound and Flash Rewind for quick (60-sec.) rewinding of VHS tapes. With one easy connection to your TV, you just plug it in, and the clock and channels are automatically set—and you only need one remote to control both the DVD and VCR.

**DVD Section**

- ◆ Compatible with DVD, DVD+R/RW, DVD-R/RW (Video Mode), CD, SVCD, VCD and CD-R/RW with JPEG/MP3 embedded files.
- ◆ Progressive output for DVD (480P)
- ◆ Virtual Surround Sound
- ◆ Frame Advance (Forward)
- ◆ Screen Zoom Function
- ◆ Parental Lock
- ◆ Includes multi-brand TV remote control
- ◆ Multi-lingual on-screen display
- ◆ Fast/Slow playback with sound lets you play video at fast forward or slow motion with recognizable audio.
- ◆ Component and S-Video output for DVD
- ◆ Coaxial & optical digital output for DVD
- ◆ Front A/V inputs for camcorder or game system

VCR Section

- ◆ 4-Head Hi-Fi VHS video cassette recorder
- ◆ 19-micron wide heads for optimized EP recording
- ◆ S-VHS Quasi Playback
- ◆ Rewind a T-120 tape in 60 seconds
- ◆ Plug and play setup for tuner & clock
- ◆ Automatic head cleaner
- ◆ 1-Month/8-Event recording timer
- ◆ Auto Tracking for VHS playback
- ◆ Commercial Skip
- ◆ Screen Saver

SLV-D560P Step-up Features

- ◆ VCR Plus+ programming, plus a quickset timer dial that lets you program your VCR with just a quick turn of the wrist. Press the quickset timer dial to activate the system. Turn the knob to set the date, start time, stop time, and channel.

SLV-N750 • SLV-N900 VHS Hi-Fi VCRs

The SLV-N750 and SLV-N900 are 4-head VHS Hi-Fi VCRs made with your home theater in mind. They have 17" home theater size chassis and a silver finish that

complements your WEGA TV. They feature Flash Rewind, which can rewind a T-120 tape in about 60 seconds, and Quasi S-VHS playback. They also include a multi-brand TV remote control, Commercial Skip, and are plug & play, making it easy to quickly set-up and use them. The SLV-N900 steps up with Quickset Timer Dial, built-in cable box/satellite box control, Control S input and a jog shuttle dial.

- ◆ 19 microns-wide video heads achieve maximum picture quality from tapes recorded in EP mode.
- ◆ 4-head dual azimuth recording and playback allows crystal clear freeze frame, frame advance and high-speed search in forward and reverse.
- ◆ VHS Hi-Fi stereo recording and playback with wide dynamic range and full frequency response. MTS stereo tuner lets you receive stereo broadcasts, even if you don't own a stereo TV.
- ◆ Commercial Skip automatically skips forward in 30 second increments (up to 2 minutes).
- ◆ Autoclock set means no more flashing "12:00". VCR sets its own clock, using date and time signals from local PBS stations.
- ◆ Front A/V inputs so you don't have to turn the VCR around every time you want to connect your camcorder or game console.

SLV-N900 Step-up Features

- ◆ Press the Advanced Quickset timer dial to activate the system. Turn the knob to set the date, start time, stop time, and channel. You're done! No menus to navigate and you don't even have to have the TV on.
- ◆ Built-in cable box/satellite box control, Control S input and a jog shuttle dial.

Hi-Fi COMPONENTS

RCD-W500C CD Player/Recorder

Make your own music mixes and enjoy the sonic results. The RCD-W500C features a 5-CD/Dual Deck with 4x high-speed dubbing and CD, CD-R, CD-RW, and MP3 playback capability. It records to CD-R/RW and offers SBM - Super Bit Mapping recording and high-speed finalizing, and CD Text Entry. For convenience, it offers 24-Step Program Play, One-Touch Synchro Start/Record, and a supplied remote control.

CDP-CE375 5-Disc CD Changer

Your music has never sounded this good. Play your tunes on the CDP-CE375 for a superb sound experience. This 5-disc changer features CD-R/RW playback capability so you can enjoy your homemade music mixes as well as the latest industry releases. Additional features include a headphone jack & volume control, 20-track music calendar, and 32-step programming. Use the Jog Dial control with Direct Access track selection to control your listening experience and get ready to rock.

CDP-CX355 300-Disc MegaStorage CD Changer

Created for extensive CD collections of music connoisseurs and avid CD listeners alike. Featuring CD-R/CD-RW playback, it allows you to play your homemade music mixes as well as your commercial CDs. Additional features include Twin Jog Dial, Custom File Memo, CD Text, MegaChanger Control, optical digital output, two repeat modes (Disc or Track), and 32-step Program Play, providing all the tools you need to organize your CDs. Includes Remote Commander Remote Control.

CDP-CX455 400-Disc MegaStorage CD Changer

Perfect for your extensive CD collection. Access your CDs with ease using Twin Jog Dial and enjoy MP3 and CD-R/CD-RW playback. Utilize features like Custom File Memo, MegaChanger Control, optical digital output, CD Text, and two repeat modes (Disc or Track) to make the most of your music. Additional features include keyboard input, FL Display, 32 Step Program Play, Control A1 II, and a remote control.

- Advanced Mega Control for up to 400 additional discs
- Mega Control allows X-Fade Play/No-Delay Play between changers
- Custom File Disc Memo display 20 characters
- Classify discs according to artist name
- Jog Dial control with Direct Access Track Selection

SCD-CE595 Super Audio CD Player

Enhance your music experience. Featuring multi-channel Super Audio CD, the SCD-CE595 offers a superb sound experience. Additional features include CD/CD-R/CD-RW playback capability, multi-channel management system and multi-channel direct stream digital decoder. Use the Jog Dial control with Direct Access track selection to control your listening experience and get ready to rock.

- Multi-Channel Management System
- Direct Disc Selection plus Track Access via Jog Dial Control
- All Disc/All Track Repeat Function via Remote
- SACD Text/CD Text Capability
- Unbalanced Audio Output
- Optical and digital outputs for CD selection

RCD-W500C ▶

CDP-CE375 ▶

CDP-CX355 ▶

CDP-CX455 ▶

SCD-CE595 ▶

TC-WE305 ▶

TC-WE475 ▶



TC-WE305 Dual Cassette Deck

For easy dual recording, the TC-WE305 features a Dual Well Tape Deck, twin tape counters, high-speed dubbing, Dolby B Noise Reduction, and high-density Permalloy heads.

- Dual decks let you edit tapes from Deck A to Deck B
- LED record level meters
- Twin tape counters
- Separate motors: for Deck A and Deck B
- MPX Filter blocks the 19 kHz multiplex pilot tone of FM stereo broadcasts for proper Dolby NR tracking when you record off the air
- 7-segment LED peak level meters help you set record levels

TC-WE475 Cassette Player/Recorder

The TC-WE475 is packed with features that enable a great listening and recording experience. Utilize the Dual auto reverse feature as you listen, and hear the difference that Dolby B and C noise reduction makes as it suppresses high frequency noise. Also featuring Dolby HX Pro circuitry, Auto Record Level, Multi-AMS track search, Relay Play, and Full-logic feather-touch transport controls. Remote control capable with Sony A/V receivers.

RDR-GX315 DVD Recorder

Featuring a slim-line chassis, the RDR-GX315 is a high performance DVD recorder designed for both first time users as well as sophisticated time shifters to produce high quality DVD recordings from a variety of original sources. In addition to being compatible with a wide range of DVD formats including DVD-R/RW and DVD+R/RW discs, it is also compatible with the new DVD+R double-layer discs for longer recording time. Variable bit rate recording (60-360 minutes) gives added flexibility when recording your favorite programs, while picture improvement technologies create enhanced DVD recordings. For convenience, and easy-to-use graphical user interface (GUI) helps make recording from broadcast programs via off-air antenna, cable, or satellite receivers—very easy.



RDR-VX515 DVD/VHS Recorder Combo



For those with a large VHS collections, you can make digital archives of favorite content with the DR-VX515 DVD Recorder/VCR combo. Offering format flexibility with DVD+R/+RW/-R/-RW and +R Double Layer discs, recording compatibility and easy bi-direction dubbing from VCR to DVD recorder, sharing and archiving memories and onto a

digital format has never been easier. In addition, it has a front i.LINK DV input allowing dubbing of DV camcorder tapes directly to DVD. In addition to adding a VCR, the VX515 offers JPEG and MP3 playback (CD-R/RW) for multimedia compatibility and VCR Plus+ Programming for easy navigation and control.

RDR-HX715 DVD/HDD Recorder Combo

DVD recorder with a 160 GB hard disk drive, the RDR-HX715 features i.Link IEEE1394 input and a component output along with HDMI output. It is compatible with DVD+R/+RW/-R/-RW and +R Double Layer discs for longer recording time. formats. It also features a TV Guide On Screen® interactive program guide, making it easy to find and record programming without monthly fees. Other features include Intelligent Scene Chaptering that provides easy scene search and editing by indexing chapters at transition points and D-Matrix Noise Reduction System, which uses a combination of three types of noise reduction technologies to deliver excellent recording and playback levels. Also features Sony's new Fast Playback with Sound, so you can play video at fast forward speed with recognizable audio playback.



RDR-GX315 • RDR-VX515 • RDR-HX715

RDR-GX515 FEATURES

- ◆ Precision Cinema Progressive playback, which incorporates Pixel-by-Pixel I/P Conversion technology, augments and balances DVD-video elements. Additionally, a 12-bit/108MHz Video D/A Converter ensures exceptional picture quality for an unforgettable viewing experience.
- ◆ To further improve picture quality, Time Base Correction, Pre Frame Noise Reduction and Pre-video Equalizer technologies rebalance and equalize video content before it is recorded onto a DVD, improving the original source content before the encoding process begins. Very useful when recording from low resolution sources such as VHS tapes.
- ◆ In the output phase, Post Frame Noise Reduction, Block Noise Reduction and Video Equalizer technologies combine to produce a richly textured visual rendition while minimizing picture interference caused by background artifacts or distortion.
- ◆ For greater playback/record flexibility, the recorder includes 'chasing playback', allowing you to rewind the recorded material while it's still recording to view and catch up to the real time recording. Simultaneous recording and playback allows you to watch pre-recorded content while recording new content on the same disc.
- ◆ For added convenience, the RDR-GX315 has the ability to control satellite receivers and cable boxes through the it's IR blaster. Instead of fumbling with two remote controls when using the "timer" function to record your favorite program, the supplied remote control allows users to select the channel directly from the set top boxes.
- ◆ Variable bit-rate control achieves the bit-rate that most effectively improves picture quality. By varying the compression rate to match image data volume and scene complexity, it assures both high picture quality and efficient recording.
- ◆ CD Text and DVD Text display (using compatible CDs) shows song titles, artist name and disc titles. DVD text equipped discs will display titles, a jacket picture and other information.
- ◆ Digital Video Enhancer improves contrast and picture detail while also controlling artifacts that degrade picture quality.
- ◆ Seamless integration with DV camcorders through the front panel i.LINK IEEE1394 digital interface for easy transfer. Additionally, the i.LINK interface enables you to control the camcorder via the supplied remote control. Expediting the content transfer process, you can copy the entire contents of a DV tape by selecting the convenient one-touch dubbing feature.
- ◆ SmoothScan and SmoothSlow provide clean playback in slow motion and scan speeds. Using high-speed processing to read ahead and keep frames in memory, the system provides smooth, natural pictures in special effects modes, such as Frame Advance, Slow Motion (1/10 and 1/5 speed) and High-Speed Search (2x, 10x and 30x), in forward or reverse.

- ◆ Fast/Slow playback with sound lets you play video at fast forward or slow motion with recognizable audio.
- ◆ Dolby Digital and DTS digital optical and coaxial output
- ◆ TV Virtual Surround Sound generates a surround sound effect, using the speakers in your TV. Surround modes include dynamic, wide, standard and night, for late hour sound reduction. Also creates a virtual center channel for clearer dialog reception.
- ◆ Built-in TV tuner and timer recording function. Easy to use GUI (Graphic User Interface), on-screen electronic program-ming guide and IR blaster (for satellite and cable box control) make recording, editing and organizing video content a simple task.

RDR-VX515 STEP-UP FEATURES

- ◆ Now you can make digital archives of your favorite VHS tapes and copy your homemade DVDs to share with friends and family on VHS. The RDR-VX515 DVD/VCR recorder combo saves space while simplifying component hookups. Offering broad format flexibility through DVD+R/RW and DVD-R/RW versatility, the deck permits dubbing from VHS to DVD and from DVD to VHS (subject to Macrovision anti-piracy technology in the source media).

RDR-VX715 STEP-UP FEATURES

- ◆ WITH a 160 GB hard disc drive, you can record and store up to 204 hours of TV shows on the RDR-HX715 recorder. Exciting shows and programs can be stored on the hard disc drive to watch later, or conveniently burned onto any format DVD for archiving or sharing with family and friends. In addition, the timer recording feature takes the hassle out of recording TV programs through an easy on-screen program guide.
- ◆ The RDR-HX715 can record at HQ+ mode in the hard disk drive, which is approximately 1.5 times greater than the highest possible bit rate recording on DVD. The HQ+ mode, along with Dynamic Variable Bit Rate, provide outstanding picture quality and is especially beneficial when recording quick and complex motion images or playback from the HDD. In addition, the RDR-HX715 features 24x high speed dubbing from HDD in SLP recording mode to a DVD disc.
- ◆ The DR-HX715 up-scales video to high definition (1080i/720p) resolution and transmits high quality uncompressed digital video and audio signals through it's HDMI connection.
- ◆ TV Guide On Screen interactive program guide makes it easy to find and record programming without monthly fees.
- ◆ Intelligent Scene Chaptering provides easy scene search and editing by indexing chapters at transition points
- ◆ D-Matrix Noise Reduction System uses a combination of three types of noise reduction technologies to deliver excellent recording and playback levels.
- ◆ Sony's Quick Response graphic user interface improves the response time of the recorder's user's menu operation through simplified commands and faster processing.

SD-3980 • SD-4980 • SD-5980 • SD-6980

Single-Disc Progressive Scan DVD Players

Whether you desire reference-quality video playback, multi-disc compatibility, the sonic realism of DVD-Audio—Toshiba has the right solutions for you.

Designed for the style-conscious consumer, the **SD-3980** features Digital Cinema Progressive Scan, ColorStream Pro component video output, multi-disc compatibility, MP3 and WMA playback and a JPEG viewer in a super slim chassis.

Stepping up, the **SD-4980** incorporates an HDMI output with video upconversion to 720p/1080i in a slim 42mm chassis and features DivX playback.

The **SD-5980** incorporates HDMI output with video upconversion to 720p/1080i and a HD JPEG viewer. The combination of the HDMI output and specialized MPEG Decoder/Scaler chipset, provides a solution that maximizes viewing of high resolution digital images, up to six times greater resolution than component video on a 1080i display. For even more versatility, it features a 9-In-2 media card slot.

The top-of-the-line **SD-6980** steps up with the ability to play DVD-Audio and Super Audio (SACD) multi-channel audio formats, DivX playback and Memory Card slots supporting ten different formats.



SD-3980



SD-4980



SD-5980



SD-6980

FEATURES

Video

- ◆ DVD, DVD-R, Video CD, CD and CD-R/RW playback with MP3/WMA
- ◆ ColorStream Pro component video output allow the video signal to be sent to a component equipped interlaced (analog) or progressive scan (digital) TV. When utilized, typical artifacts-like video noise, dot crawl, and flicker—are virtually eliminated, resulting in a low-noise, highly detailed picture with unequaled color purity.
- ◆ Digital Cinema Progressive (3/2 Pulldown) delivers the smoothest, most film-like images to any progressive scan television, such as an HD-compatible one, and ensures maximum resolution.
- ◆ Toshiba JPEG Viewer enables you to display digital images on any TV. Plus, load the CD with your favorite photos and create custom slide shows. An intuitive onscreen display assists in the creation of customized slideshows with a few simple clicks of the DVD player's remote control.

Audio

- ◆ 24-bit/192 kHz PCM audio compatibility delivers warmer, more natural-sounding audio from many types of discs.
- ◆ MP3 and WMA compatible audio playback expands the players' functionality to include playback of custom music collections encoded via MP3 or Windows Media Audio (WMA) digital audio formats onto CD-R or CD-RW discs.
- ◆ Dolby Digital and DTS digital (coaxial) output for 5.1 surround sound when connected to an A/V receiver with built-in Dolby Digital and/or DTS decoder.
- ◆ 3D Virtual Surround Sound mode provides a simulated surround sound effect from sources that contain only a stereo soundtrack. Convenient when playing DVDs in home theaters not equipped with multi-channel playback compatibility.

SD-3980 • SD-4980 • SD-5980 • SD-6980

Conveniences

- ◆ Digital Power Picture Zoom (up to 4x) allows you to select an area of the picture you want to zoom in on and magnify it. Enhanced digital processing during moving or freeze-frame playback produces superior color fidelity and resolution, even when you're zoomed in. Also can be used to expand letterbox-only films to increase the viewable area on-screen.
- ◆ Parental control allows you to restrict the playback of DVDs that have embedded control flags/markers. This ensures greater control over DVD content.
- ◆ They can be set to automatically go into a screen saver mode after five minutes of inactivity. While in this mode, the Toshiba DVD logo appears and "ping-pongs" across the screen. This is very important because many movies will display the main movie menu indefinitely after the movie has ended. If left onscreen for a prolonged period, this can result in burn-in on the TV screen.
- ◆ Supplied remote controls all DVD functions.

SD-4980 Step-up Features

- ◆ The SD-4980 steps-up from the SD-3980 with HDMI and video upconversion to 720p/1080i. HDMI supports uncompressed digital video up to HDTV resolution. The player makes the use of this medium by up-converting standard DVD resolution to near HDTV-quality with output resolutions of 720p or 1080i.
- ◆ HDMI (High-Definition Multimedia Interface) streams multi-channel digital audio and digital video information on one cable to compatible digital TVs and monitors. This makes the SD-4980 ideal for today's digital TVs. And because it performs 720p/1080i Upconversion in the player, the video signal remains free from excessive digital-to-analog conversion artifacts.
- ◆ Provides playback of DivX movies. DivX is compressed digital video that can be downloaded fast and easy over DSL or cable modems with no reduction in quality. Watch full-screen, full-motion videos from the internet that actually look and sound like what you get from your TV or DVD player, and are not the size of postage stamps.

SD-5980 Step-up Features (no DivX playback)

- ◆ HD JPEG provides the ability to view megapixel images in their enhanced resolution when using HDMI and an HDTV display device. Thanks to a specialize chipset (MPEG Decoder and Scaler) and the HDMI interface with an HDTV display, megapixel JPEG images are displayed in their enhanced resolution, versus the image compression that takes place with component interfaces.
- ◆ 9-in-2 Media Card Slot will accept SD, Mini SD, Memory Stick, Memory Stick Pro, Memory Stick Duo, Memory Stick Duo Pro, XD Picture Card, Compact Flash and Multimedia (MMC) cards. By taking advantage of these different media formats the DVD player will allow playback of JPEG, WMA and MP3 files.

SD-6980 Step-up Features

- ◆ The SD-6980 steps-up with multi-channel audio supporting both DVD Audio and SACD (Super Audio CD). DVD-Audio and Super Audio CD (SACD) bring the high resolution multi-channel audio experience to your living room. These enhanced optical discs offer higher sampling rates, greater frequency range, and enhanced dynamic range when compared to conventional CDs.
- ◆ Provides playback of DivX movies. DivX is compressed digital video that can be downloaded fast and easy over DSL or cable modems with no reduction in quality. Watch full-screen, full-motion videos from the Internet that actually look and sound like what you get from your TV or DVD player, and are not the size of postage stamps.
- ◆ 10-in-2 Media Card Slot (same as SD-5980 but adds Smart Media)



Models	SD-3980	SD-4980	SD-5980	SD-6980
Disc Quantity	1	1	1	1
Disc Play	DVD-Video, DVD-R, VCD, CD, CD-R, CD-RW	DVD-Video, DVD-R, DVD-RW, VCD, CD, CD-R, CD-RW	DVD-Video, DVD-R, DVD-RW, VCD, CD, CD-R, CD-RW	DVD, DVD-R, DVD-RW, VCD, CD, CD-R, CD-RW MP3, WMA
Video D/A	10-Bit/27MHz	10-Bit/27MHz	10-Bit/54MHz	10-Bit/27MHz
Component Video Output	ColorStream Pro	ColorStream Pro	ColorStream Pro	ColorStream Pro
Progressive Scan	3:2 Pulldown Digital Cinema Progressive			
Audio D/A	24-bit/192kHz	24-bit/192kHz	24-bit/192kHz	24-bit/192kHz
Dolby Digital/DTS DTS Compatible	X	X	X	X
WMA & MP3 Playback	X	X	X	X
Virtual Surround Sound	3-D	X	X	X
HDMI w/ Dolby Digital and DTS Bitstream Output		X	X	X
Y/Pr/Pb	1 set	1 set	1 set	1 set
S-Video	1	1	1	1
RCA-Video	1	1	1	1
L-R Audio	1 pair	1	1 pair	1
Coaxial Out	1	1	1	1
Optical Out		1	1	1
Dimensions	16.9 x 1.7 x 7.9"	17 x 1.6 x 8"	17 x 1.9 x 8.1"	16.9 x 1.9 x 9.8"
Weight	3.3 lbs.	3.2 lbs.	4.4 lbs.	5.1 lbs.

SD-V393 • SD-V593

DVD/VHC VCR Combos

Convenient and easy-to-use combination models, the SD-V393 features a 4-head HiFi VHS VCR and a full featured DVD player offering Digital Cinema Progressive Scan (3:2 Pulldown), ColorStream Pro component video outputs, MP3 and WMA playback, a JPEG viewer, 3D Virtual Surround Sound, and unified glow remote control. The SD-V593 steps-up with HDMI and video upconversion to 720p or 1080i, and HD JPEG viewer and a Memory Card slot supporting nine different formats. Both decks permit DVD playback while recording a TV broadcast on VHS, and both let you can record DVDs to VHS without color distortion.



SD-V393



SD-V593

FEATURES

DVD Video

- ◆ Play DVD, DVD-R/RW, VCD and CD-R/RW discs embedded with MP3/WMA and JPEG digital photo files
- ◆ ColorStream PRO component video outputs provides low-noise, highly detailed picture with unequaled color purity, while Digital Cinema Progressive (3/2 Pulldown) delivers the smoothest, most film-like images to any progressive scan television (HD-compatible) and ensures maximum resolution.

DVD Audio

- ◆ 24-bit/192 kHz PCM audio compatibility delivers warmer, more natural-sounding audio from many types of discs.
- ◆ MP3 & WMA compatible audio playback of custom music collections encoded via MP3 or Windows Media Audio (WMA) digital audio formats onto CD-R or CD-RW discs.
- ◆ Dolby Digital and DTS digital (coaxial) output for 5.1 surround sound when connected to an A/V receiver with built-in Dolby Digital and/or DTS decoder.
- ◆ 3D Virtual Surround Sound mode provides a simulated surround sound effect from stereo soundtrack.
- ◆ Coaxial digital audio output for even greater flexibility with hardware configurations.

DVD Conveniences

- ◆ Digital zoom lets you select an area of the picture and magnify it up to 4x) lets Also can be used to expand letterbox-only films to increase the viewable area on-screen.
- ◆ Parental control to restrict the playback of DVDs with embedded control flags/markers.
- ◆ They can be set to go into a screen saver mode after five minutes of inactivity. This is important because if a movie is left on-screen for a prolonged period, it can result in burn-in on the TV screen.
- ◆ JPEG Viewer lets you digital images. An intuitive on-screen display assists in the creation of customized slideshows with a few simple clicks of the remote control.
- ◆ Supplied with unified glow remote control

VHS 4-Head VCR

- ◆ 4-Head/19-micron head system offers superior slow motion effects, while also significantly enhancing tapes recorded in SLP mode.
- ◆ VHS Hi-Fi Stereo can be used to create Dolby Surround, Dolby ProLogic, or Dolby ProLogic II surround sound.
- ◆ S-VHS Quasi Playback allows playback of S-VHS tapes without a reduction in quality.
- ◆ Auto Clock Set to automatically set the clock display and keep it accurate.
- ◆ Commercial Skip lets you automatically advance the tape 30- or 60-seconds forward bypassing recorded commercials.
- ◆ 1-month/8-program timer, MTS/SAP tuner, high-speed FF and REW, automatic head cleaner, and tri-lingual on-screen display.

SD-V593 Step-up Features

- ◆ The SD-V593 can up-convert standard DVD 480p resolution to 720p/1080i HDTV resolutions and then sends the signal uncompressed via HDMI interface to HDTV televisions.
- ◆ HD JPEG provides the ability to view megapixel images in their enhanced resolution when using HDMI and an HDTV display device. Thanks to a specialize chipset (MPEG Decoder and Scaler) and the HDMI interface with an HDTV display, megapixel JPEG images are displayed in their enhanced resolution, versus the image compression that takes place with component interfaces.
- ◆ 9-in-2 Media Card Slot will accept SD, Mini SD, Memory Stick, Memory Stick Pro, Memory Stick Duo, Memory Stick Duo Pro, XD Picture Card, Compact Flash and Multimedia (MMC) cards.

DR-4

Multi-Drive DVD Recorder

Featuring multi-drive versatility, the fully equipped DR-4 can record and playback DVD-RAM, DVD-RW and DVD-R discs. With DVD-RW compatibility, the DR-4 offers more flexibility in home recording and viewing choices. It allows you to time shift frequently watched TV shows and

create recordings that are compatible with virtually every DVD player currently in the market.

Additional features include Digital Cinema Progressive Scan and Colorstream Pro component video outputs, and an optical digital output round out the package. For convenience, the DR-4 offers front panel A/V and S-Video inputs and comes with a universal remote control. A simplified EASY NAVI menu allows easy access to recordings and the ability to preview those titles, as well as a convenient and intuitive access to the unit's key features.



FEATURES

- ◆ ColorStream Pro component video output for the highest quality video signal and a low-noise, highly detailed picture with unequaled color purity.
- ◆ Digital Cinema Progressive (3/2 Pulldown) - delivers the smoothest, most film-like images to any progressive scan television.
- ◆ Time Slip lets you start watching a recording that is already in progress or 'pause' a live recording and then return to it later. During playback of both modes, a bar graph can be displayed on-screen depicting the 'progress' or location of the playback signal with regards to the real time recorded signal.
- ◆ Preset audio and video settings makes it easy to set the recording bit rate and allow you to maximize disc space based on the content to be recorded. (1-, 2-, 3-, 4- and 6-hours).
- ◆ Plays DVD-Video, DVD, CD, CD-R/RW, VCD, DVD-R/RW, DVD-RAM and WMA, MP3, JPEG embedded discs.
- ◆ Recorded content easy to find with the help of a menu that is automatically created when you record. It displays the date and channel you recorded, along with a thumbnail by capturing the first video frame of the recording.
- ◆ The date and channel can be change to any 64-character title and the thumbnails to any image within the recording. Chapters within the recording can also be created by selecting specific points within the recording or predetermined intervals. These chapters can also, be named and assigned a specific thumbnail from any video frame within the chapter.

Conveniences

- ◆ One-Touch Record simplifies setup of timer for recording within a 24-hour period. One button starts record and allows setting of a record length of up to 6 hours.
- ◆ EASY NAVI Menu provides quick and easy access to key features such as Timer Recording or DV Capture. Additionally the EASY navi displays a "live action window", providing feedback whether it is recording a program, in the Time Slip mode, or playing back content with DVD-RAM.
- ◆ There are composite audio and video inputs, as well as L/R inputs on the front panel for easy camcorder dubbing. As well, an S-Video input is available on the front panel as well.
- ◆ 3D Virtual Surround Sound mode provides a simulated surround sound effect from sources that contain only a stereo sound-track. Convenient when playing DVDs in home theaters not equipped with multi-channel playback compatibility.
- ◆ 181-channel cable compatible tuner and a 2-month, 36-event timer programming functionality. Also offers Auto channel setup, Auto Clock, Daylight Savings Time Adjust and Time Zone Adjust.
- ◆ On-screen keyboard and parental lock

Multi-Drive Recorder

The DR-4 provides the greatest flexibility in recording and playback by supporting DVD-RAM, DVD-R, and DVD-RW disc formats. You'll have the right format for every application:

- DVD-RAM is the most flexible of the recordable DVD formats when it comes to recording, editing and playback. Even more, re-record content approximately 100,000 times!
- DVD-R is a write-once format perfect for sharing treasured video moments with virtually anyone who has a DVD-Video player.
- DVD-RW (VR format only) can rewrite content up to 1000 times and playback in a wide variety of computer drives and DVD-Video players

RD-XS34 • RD-XS54

DVD/HDD Combo Multi-Drive Recorders

The Multi-Drive RD-XS34 and RD-XS54 offer the option of recording on either a DVD disc or storing up to 280 or 420 hours of video on their built-in massive 160GB and 250 GB hard disk drives (respectively). This allows you to record and playback your favorite TV broadcasts as well as compile personal movie libraries for archiving and preserving family videos. They offer high speed dubbing from the HDD to DVD-RAM at up to 24x normal speed and 32x to DVD-R.

They can record and playback DVD-RAM, DVD-RW and DVD-R discs and feature Time Slip function, Digital Cinema Progressive Scan and ColorStream Pro component outputs, an IR Blaster for cable and DBS box controls and multimedia playback for JPEGs, MP3 and WMA titles. The RD-XS54 steps up with an Ethernet port for system networking and greater integration with a PC as well as an HDMI (High-Definition Multimedia Interface) uncompressed, digital audio/video output and video upconversion to 720p/1080i.



SAME FEATURES AS THE DR-4 (PREVIOUS PAGE) PLUS—

- ◆ With a built-in 160GB or 250GB hard disk drive, they can store up to 280 or 420 hours of recorded content and can be used to perform the Time Slip (Chase Play and Pause Live TV) function just like DVD-RAM. They also allow high-speed dubbing from the hard drive to DVD-RAM (12x normal speed) or DVD-R (24x normal speed) without any deterioration to the signal.
- ◆ To help with digital recordings, they feature TV Guide On Screen. An interactive program guide, it provides an easy to read listing of the television programs available to view or record: an 8-day program listing, flexibility of recording directly to DVD or the HDD, the ability to perform keyword searches for locating favorite programs and includes the G-Link IR Blaster for controlling cable boxes. When recording television programs, the name of the show, along with the channel and date, are automatically captured.
- ◆ Preset bit rates and audio settings for 11 different recording options plus one user adjustable setting, including selections for LPCM audio recording.
- ◆ There are composite audio and video inputs, as well as audio L/R inputs on their front pane for easy camcorder dubbing. Additionally, an IEEE1394 input on the front panel allows direct dubbing from DV camcorders. The decks provide automatic recognition of the device and on-screen menu controls to easily direct the “downloading” process with the recorders remote control.

RD-XS52 Step-up Features

- ◆ Equipped with an HDMI interface for a single cable connection to compatible digital TVs and monitors. The RD-XS54 also uses the HDMI connection to support video upconversion from 480i to 720p and 1080i HDTV level resolution. This makes the RD-XS54 a perfect match for today's HDTVs. And because the conversion is performed in the player, the signal remains free from excessive digital-to-analog conversion artifacts.
- ◆ Includes Toshiba's Network NAVI system for connection and control within a home network for: advanced editing, streaming content to a PC, e-mail timer and recordings and more.
- ◆ Incorporates an Ethernet port for system networking giving users the ability to dub copy free content to another room if there are two units in the house—record content in one room and watch it in another. It also allows for greater integration with a PC including the ability to:
 - ◆ Dub copy free content from one RD-XS54 to another if they are connected to the same network.
 - ◆ Stream recorded content or even live programming to a PC.
 - ◆ Add and edit title information to personal home videos from a PC.
 - ◆ Upload custom menu backgrounds for creating DVD-R/RW discs.
 - ◆ Remotely schedule recordings via email.
 - ◆ Receive automatic software upgrades.
 - ◆ Use a PC scroll mouse to control the recorder for detailed editing of personal home movies.

RS-TX20 • RS-TX60

DVD/HDD Combo Recorders with TiVo Service

The RS-TX20 and RS-TX60 are digital media servers featuring TiVo technology with DVD recording. They include high capacity hard drive (RS-TX20 includes a 120GB, the RS-TX60 a 160GB) with the capability to record up to 140 or 200 hours (respectively) of your favorite TV programs. With the addition of a front panel DV input, they also offer the ability to transfer camcorder material to the hard drive and then to DVD quickly and easily.

With TiVo Basic Service included (no subscription fee), you can select programs to record from a 3-day program guide, save them to the hard drive and view them at your leisure, or record your shows to DVD quickly and easily. TiVo's easy to use interface can automatically create a DVD Menu based on your selections, or titles can be manually entered. In either case, simplicity is the key. The TiVo Basic service also includes "Trick Play" features including the ability to pause and rewind live TV, and manual recording capability with repeat function. Additionally, both come with a 45-day free trial of the TiVo Plus service. Other key features include Progressive Scan component video outputs (DVD and DVR signals), capability to record in DVD-R and DVD-RW formats, as well as an IR blaster for Cable Box and Satellite Receiver control.



FEATURES

- ◆ Record and playback on either a DVD-R or DVD-RW disc. Compatible with DVD-Video, DVD, CD, CD-R/RW, VCD, DVD-R/RW, DVD-RAM and WMA, MP3, JPEG embedded discs.
- ◆ Digitally record up to 120 or 200 hours onto their built-in hard drive
- ◆ Simultaneous Play & Record (HDD and DVD, DVA and HDD)
- ◆ TV Trick Play feature lets you begin watching a recording that is already in progress, or 'pause' a live recording and then return to it later using HDD or DVR-R/RW media
- ◆ Front A/V & IEEE1394 (DV) inputs as well as rear RF, A/V and S-Video inputs for dubbing content from multiple sources
- ◆ TiVo Basic Service lets you record from up to 3 day on-screen program guide and TiVo channel banner with program description.
- ◆ They also offer manual recording capability including scheduling, repeating, recording of specific time and channel slot via the on-screen user interface. Enjoy on-screen display of content with program name, rating, station identifier, and time and date.
- ◆ Upgradeable to the TiVo Plus service (subscription required) which lets you search for programs by title, set up Season Pass recordings and create WishLists for favorite shows.

D-VR4

DVD/VHS Combo Multi-Drive Recorder

The D-VR4 combines most of Toshiba's high quality DVD recorder technology with VHS capability.

This allows you to conveniently transfer content from a VHS tape to DVD or DVD content to VHS. Dubbing from VHS to DVD provides the capability of either transferring the entire tape, or transfer multiple individual segments by programming the time codes through the use of an on-screen menu.



Video

- Multi-Drive playback and recording
- DVD-RAM/DVD-R/DVD-RW compatibility
- 4-head Hi-Fi stereo VHS playback
- ColorStream Pro progressive scan component video outputs
- Bi-direction dubbing (DVD-VHS/VHS-DVD)
- Preset recording modes for DVD: XP (1hr), SP (2hr), LP (4hr), EP (6hr)
- JPEG viewer

Audio

- LPCM/Dolby Digital (2-Ch) audio recording
- MP3 file play
- 24-Bit/96kHz audio D/A converter
- 3-D Virtual Surround Sound
- TosLink optical and coaxial digital outputs

Conveniences

- Front and rear A/V inputs with S-Video and RF input for dubbing content from multiple sources

DV-S5860

DVD-Audio/SACD (Super Audio CD) Player

The DV-S5860 is a slim, progressive scan DVD player with outstanding picture and sound quality. It has a host of high-end

features including DVD-Audio and Super Audio CD playback, CD Upsampling and Audio Direct. It is compatible with VR format recorded DVD-RW and DVD+R double layer (DL) discs. It offers MP3, JPEG, DivX and WMA multisession playback. For convenience, it features a 'Night Mode' as well as a sleep function.



FEATURES

Audio and Video

- ◆ Offers terrific audio and video processing. 192 kHz/24-bit compatible audio D-A conversion assures that the player delivers superior sound performance. Yamaha's high quality, 12-bit, video DAC conversion assures the finest possible video performance.
- ◆ Video Picture Modes (Standard, Bright, Soft and Personal) are available for adjusting the picture to obtain maximum image quality with various sources and room lighting conditions.
- ◆ 2x and 4x CD Upsampling enables CD playback to approach the quality of DVD-Audio. Once CD Upsampling is selected, it is automatically engaged whenever a CD is played.
- ◆ Play PAL-format discs on NTSC televisions, and vice versa. The DV-S5860 will convert the formats with no loss of quality.
- ◆ Compatible with DVD-Video, DVD+R/RW, SVCD, Video CD, Audio CD, and MP3, WMA, DivX and JPEG embedded discs. JPEGs can be zoomed, rotated and scanned. Also compatible with the new generation of Double Layer DVD discs.
- ◆ Multiple Zoom function lets you vary the size of the image in six steps: 1/4, 1/3, 1/2, 2x, 3x and 4x.
- ◆ They are compatible with DVD-Audio and Super Audio CD (SACD). These high-end audio formats bring the high resolution multi-channel audio experience to your living room. These enhanced optical discs offer higher sampling rates, greater frequency range, and enhanced dynamic range when compared to conventional CDs.

Inputs/Outputs

- ◆ Incorporates component video outputs as well as composite and S-Video outputs. On the audio side of things, you get the use of optical and coaxial digital audio outputs for Dolby Digital, DTS, MPEG, and PMC sound. Also features a mixed 2-channel output.

Conveniences

- ◆ The unique screen saver feature dims the screen to 75% when in the pause mode.
- ◆ Resume play allows you to interrupt a movie to go to a feature and then pick up the movie where you left off. It has a 5-disc memory.
- ◆ Child Lock allows parents the option of denying play of any specific DVD or VCD.
- ◆ Control and operation of the DV-S5860 is easy with the well designed remote control keypad.
- ◆ Night Mode lets you reduce the volume and still enjoy proper tonal balance and dynamic range when watching movies late at night.

DV-C6770 • DV-C6771

5-disc Progressive Scan DVD-Audio/SACD Changers



The DV-C6770 (black) and DV-C6771 (silver) have all the features of the DV-S5860 plus a 5-disc carousel DVD changer. This gives you the benefits of extended playing time and direct selection from all discs. And with Yamaha's PlayXchange, you can change discs while the current one continues to play. You don't have to interrupt the movie or music to change a disc and you're not limited to changing only one disc at a time. What's more, when you press stop, the tray opens all the way, allowing you to change all five discs at once.

CD/DVD ACCESSORIES

Merit-Line



Black Slim Jewel Cases
50-pack for CDs and DVDs.
(MEBSJC50)**9.99**

Color Slim Jewel Cases 50-Pack for

CDs and DVDs (MECSJC50)**8.99**

Multi Color Cases 10-Pack for CDs and DVDs
(MEDVDC10)**4.95**

Slim Ejector Cases 10-Pack for CDs and DVDs:
Made from shatterproof polypropylene,
featuring a special 'hands free' mechanism
which gently holds the disc by its edge,
preventing the playing surface from becoming
damaged. (MEECDCL10)**4.99**

Black Dual Cases 10-Pack for CDs and DVDs
(MEDVDC10)**4.29**

Paper Sleeves with window for CDs and DVDs
(25-Pack) (MEPCSW25)**1.39**

Tyvek Paper Sleeve with window for CDs and
DVDs (25-Pack) (METCSW25)**3.99**

Inserts for DVD Cases

◆ High resolution photo gloss or matte DVD
case inserts

◆ Compatible with any inkjet or laser printer

◆ DVD insert cards are die-cut and perforated
to allow for easy of printing, separation and
insertion into DVD case

◆ Compatible with EZ label Pro, Click'n design
3D Neato & Sure Thing label software

Glossy Inserts 50 Sheets (MEDVDCIG50)**19.95**

Matte Inserts 50 Sheets (MEDVDCIM50)**9.99**

Inserts for Jewel Case

◆ Pair of J-card and tray card on one sheet

◆ Compatible with any inkjet or laser printer

◆ J-cards and tray cards are die-cut and perfo-
rated to allow for easy of printing, separation
and insertion into jewel case.

◆ Compatible with EZ label Pro, Click'n design
3D Neato & Sure Thing label software

Matte Insert for Jewel Case (50 Sheets)
(MEJCM50)**7.49**

Glossy Insert for Jewel Case (50 Sheets)
(MEJCM50)**12.95**

Merit-Line CD and DVD Labeling Kit



The Merit-line DVD Labeling Kit (DVD Media and DVD Case Label Kit) provides the perfect solution for the professional design and positioning of labels on discs.

- ◆ Includes EZ Label Design software, an intuitive program with numerous graphic and image templates and libraries, to easily design labels. Compatible with Photoshop, Illustrator, etc.
- ◆ The EZ Label allows you to burn data, MP3's, audio and mixed mode CD's. EZ label can burn audio tracks from MP3 files with it's on the fly decoding components. It can also be used to copy data or audio or user's CD. Rip CD tracks to MP3, MP3 to CD, DVD audio to MP3, burn, design and label it.

Merit-Line CD and DVD Labeling Kit (Item # MEDVDLK)**12.99**

GGI Laser Lens Cleaner
for CD-DVD-VCD-CD Rom

- ◆ Superfine micro fibre brushes
- ◆ Dry Cleaning System
- ◆ Voice Instructions and Music

GGCDVC1
\$9⁹⁵



Inserts for DVD Cases

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Inserts for Jewel Case

◆ Pair of J-card and tray card on one sheet

◆ Compatible with any inkjet or laser printer

◆ J-cards and tray cards are die-cut and perfo-
rated to allow for easy of printing, separation
and insertion into jewel case.

◆ Compatible with EZ label Pro, Click'n design
3D Neato & Sure Thing label software

Matte Insert for Jewel Case (50 Sheets)
(MEJCM50)**7.49**

Glossy Insert for Jewel Case (50 Sheets)
(MEJCM50)**12.95**

DiscGuard2 - Clear Disc Sealer

Seal your discs with an invisible hard glass-like coating. A proven, effective, easy to use coating that shields the data side of all disc formats, DiscGuard2 forms a protective glass-like sealant that will guard your disc collection against accidental scratching and fingerprints during disc handling. Ideal for use on DVDs, game discs, music discs, photo CDs, recordable discs, CD or DVD-ROMs and similar disc media.

2 oz. kit (treats over 200 discs) # DIDG220**14.95**

TDK CD/DVD LensCLEAR
Laser Lens Cleaner

CD/DVD LensCLEAR removes contaminants from a CD/DVD player's lens, helping prevent mistracking. Disc also includes voice tutorials about matching speaker levels, setting recording levels, car stereo testing and more. (TDCDCL)**7.95**



Vidpro

CD48 Leather Case

Leather Case holds 48 CD's and DVD's. Available in Blue or Red color.

Blue Leather Case (VICDLC48)**14.95**

Red Leather Case (VICDLC48R)**14.95**

CD Racks

First released in 1998, these racks became an overnight sensation. The best selling CD-600 has been on *Stereophile* magazine's recommended components list for 5 consecutive years. Since their inception Boltz has added new finishes to choose from but the quality and style have remained the same and are built to the highest quality standards



CD-110

CD-110

Holds 110 CDs Wall Mounted

110% steel, incredible baked on powder coat finish. Includes 2 wall hangers. Steel slider divider on each tier keeps CDs in place. Wall hangers may be hidden from view by hanging rack on second rod from top. Rack may also be placed on a table or other flat surface. Measures 24 x 12 x 5.5" (WxHxD) and weighs 32 lbs. loaded. Ships assembled, shipping weight is 9 lbs (BOCD110)**69.00**

CD-220

Holds 220 CDs Wall Mounted

100% steel, incredible baked on powder coat finish. Includes 2 wall mount hangers. Steel slider divider on each tier keeps CDs in place. Wall hangers may be hidden from view by hanging rack on second rod from top. Measures 24 x 26 x 5.5" (WxHxD) and weighs 64 lbs. loaded. Ships assembled, shipping weight is 21 lbs (BOCD220)**129.00**

CD-150

Holds 150 CDs Floor Standing

A 6 tier floor standing CD rack. Each tier has a slider divider for quick and easy organization of your CDs. The rack comes with stabilizer feet and can be infinitely expanded by adding expansion racks. Measures 12 x 37 x 6.5" (WxHxD) with feet. Ships assembled, shipping weight is 18 lbs (BOCD150)**119.00**

CD-275

Holds 275 CDs Floor Standing

At 12" wide, this rack is ideal for corners or where space is at a premium. With 11 tiers, each holding 25 CDs, you can get 275 CDs on this rack. Each tier has sliding dividers to organize your collection. Stabilizer feet are included. Measures 12 x 67 x 6.5" (WxHxD), 12" deep with feet. Ships assembled, shipping weight is 33 lbs (BOCD275)**199.00**

CD-330

Holds 330 CDs Floor Standing

High capacity 6 tier floor standing storage system. Each tier has an individual slider divider for better CD management. Ships with stabilizer feet. Easily expandable with expansion kits to grow with your collection. Measures 24 x 37 x 6.5" (WxHxD) with feet. Ships assembled, shipping weight is 24 lbs (BOCD330)**129.00**

CD-600

Holds 600 CDs Floor Standing

The best selling rack holds up to 600 CDs, and accepts as many expansion kits as you want to add. Each tier has a slider divider. Comes with optional feet and stabilizer wall brackets. 24 x 67 x 6.5", 12" deep with feet. Ships assembled, shipping weight is 42 lbs. Available in clear coat steel or black matte finish (BOCD600)**249.95**

CD-600x2: Holds 1200 CDs. Includes one unassembled CD-600 and one unassembled tall expansion kit. Available in clear coat steel or black matte finish. Shipping weight is 73 lbs. (BOCD600X2)**379.95**

CD-600x3: Holds 1800 CDs. Includes one unassembled CD-600 and two unassembled tall expansion kits. Available in clear coat steel or black matte finish. Shipping weight is 104 lbs. (BOCD600X3)**499.95**

CD-600x4: Holds 2400 CDs. Includes one unassembled CD-600 and three unassembled tall expansion kits. Available in clear coat steel or black matte finish. Shipping weight is 135 lbs. (BOCD600X4)**649.95**



CD-600

Short CD Expansion Kit

This expansion kit holds 330 CDs. It will double the capacity of a CD-330 to 660 CDs or triple the capacity of a CD-150 to 450 CDs. Can also be attached to a CD-600 or CD-275 for unique storage solutions. Takes approx. 30 minutes to attach to existing rack and includes all hardware needed and a Boltz wrench. (BOCDEXPS)**94.95**

Tall CD Expansion Kit

This expansion kit will increase your CD-600 or CD-275 capacity by 600 CDs. There is no limit to how many expansion kits you can add to your system. Each kit uses precision fasteners to connect and only takes about 40 minutes to add to your existing racks. (BOCDEXPT)**119.95**

Multimedia Racks

Are you still searching for storage to hold all your movies and music in all their formats? Look no further - Boltz's solid steel multimedia racks are designed to hold DVDs, VHS, CDs, SACD, and DVD-Audio all in the same unit. And, for those collectors that have large collections the unique Boltz design offers the option of infinite expandability by attaching as many expansion kits as you like. Floor standing units include optional stabilizer feet and wall brackets for maximum stability. Note: CD and Multimedia racks can not be joined together.

MM-72

Holds 72 DVDs Floor Standing

100% steel floor standing multimedia rack. Steel slider divider on each tier keeps CDs, DVDs or VHS in place. Measures 12 x 38 x 6.5" (WxHxD), 12" deep with feet. Holds 72 DVDs, 100 CDs or 36 VHS tapes. Ships assembled, shipping weight is 17 lbs. (BOMM72).....**99.95**

MM-76

Wall Mountable Multimedia Rack

100% steel, incredible baked on powder coat finish. Includes 2 wall hangers. Steel slider divider on each tier keeps CDs, DVDs or VHS in place. Wall hangers may be hidden from view by hanging rack on second rod from top. Rack may also be placed on a table or other flat surface. The rack measures 24 x 18 x 5" (WxHxD). It holds 76 DVDs, 110 CDs, 36 VHS tapes. Ships assembled, shipping weight is 9 lbs. (BOMM76)**89.00**

MM-126

Holds 126 DVDs Floor Standing

Ideal for corners or where space is at a premium. Only 12" wide and 7 tiers high. Holds 126 DVDs, 175 CDs or 63 VHS. 100% steel construction with a beautiful baked on powder coat finish. Will also hold SACD and DVD-Audio discs. Measures 12 x 68.5 x 6.5", 12" deep with feet. Ships assembled, shipping weight is 32 lbs. (BOMM126)**199.95**

MM-160

Holds 160 DVDs Floor Standing

100% steel, incredible baked on powder coat finish. Includes a steel slider divider on each of the 5 tiers. This rack holds 160 DVDs, 220 CDs or 84 VHS tapes. Comes with optional feet to add stability. Measures 24 x 38 x 6.5", 12" deep with feet. Holds 160 DVDs, 220 CDs or 84 VHS tapes. Ships assembled, shipping weight is 26 lbs. Available in clear coat steel and black matte finish (BOMM160).....**129.95**

MM-252

Holds 252 DVDs Floor Standing

The ultimate in multimedia storage the MM-252 holds CDs, DVDs, VHS, SACDs, and DVD-Audio. Individual slider divider on each of the 7 tiers allows you to organize or categorize your vast media library. The solid steel construction and baked on powder coat finish create a multimedia rack that is as strong as it is beautiful. Ships with optional feet and wall brackets for added stability. Holds 252 DVDs, 385 CDs or 147 VHS. Infinitely expandable by adding expansion kits. Measures 24x 68.5 x 6.5" (WxHxD), 12" deep with feet. Holds 252 DVDs, 385 CDs or 147 VHS tapes. Ships assembled, shipping weight is 37 lbs. (BOMM252)**219.95**

MM-252x2: Holds 504 CDs. Includes one unassembled MM-252 and one unassembled Tall MM Expansion Kit. Available in clear coat steel or black matte finish. Shipping weight is 62 lbs. (BOMM252X2)**349.95**

MM-252x3: Holds 756 CDs. Includes one unassembled MM-252 and two unassembled Tall MM Expansion Kit. Available in clear coat steel or black matte finish. Shipping weight is 112 lbs. (BOMM252X3)**469.95**

MM-252x4: Holds 1008 CDs. Includes one unassembled MM-252 and three unassembled Tall MM Expansion Kit. Available in clear coat steel or black matte finish. Shipping weight is 137 lbs. (BOMM252X4)**599.95**



MM-252

Short MM Expansion Kit

Doubles the capacity of an MM-160 to 320 DVDs, 440 CDs, 168 VHS or combo. Triples the capacity of the MM-72 to 232 DVDs, 500 CDs, 108 VHS or combo. Can also be attached to a MM-126 or MM-252. Approximate assembly time 20 minutes. (BOMMEXPS)**89.95**

Tall MM Expansion Kit

Expand your MM-252 series or MM-126 with an expansion kit. There is no limit to how wide you can build your system. Each section uses precision fasteners for simple, easy assembly. Each expansion kit increases your rack's width by 24". Approx. assembly time 40 minutes per kit. Please note that expansion kits will not support your collection without being attached to a compatible multimedia rack. (BOMMEXPT)**129.95**

CD Optical Media Recordable Discs

CD-R

CD-R is short for "CD-Recordable". Recordable CDs are WORM (Write Once, Read Multiple) media that work just like standard CDs. The advantage of CD-R over other types of optical media is that you can use the discs with a standard CD player. The disadvantage is that you can't reuse a disc.



50 Pack Spindle



Disc in Jewel Case

Sony

80-min/700MB 48x	50 Pack Storage Spindle	#SOCDR8050	\$19.95
80-min/700MB 48X	Single Pack with Jewel Case	#SOCDR80	\$7.99
80min/700MB - 48X	20 Color Pack Slim Jewel Case	#SOCDR8020	\$12.50
80min/700MB - 48X	30 Pack Color Storage Spindle	#SOCDR8030	\$14.50
80min/700MB - 48X	10 Pack Slim Jewel Case	#SOCDR8010	\$7.29
80min/700MB - 48X	100 Pack Storage Spindle	#SOCDR80100	\$28.99



Verbatim

700MB (74 Minute) 16X Digital Vinyl CD-R

5 Vibrant Colors -	10 Pack with Jewel Case	#VECDR80V10	\$5.99
5 Vibrant Colors -	25 Pack with Slim Jewel Case	#VECDR80V25S	\$13.99
Color Coded -	25 Spindle Pack	#VECDR80V25	\$9.99
Color Coded -	50 Spindle Pack	#VECDR80V50C	\$22.99
Ink Jet Printable -	50 Spindle Pack	#VECDR80V50	\$19.99

700MB (74 Minute) 52x CD-R Discs,

Blank White Surface	50 Spindle Pack	#VECDR8050BW	\$14.99
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700MB (80 Minute) Digital Vinyl Metal CD-R

(5 Gold/5 Platinum)	10 Pack with Jewel Cases	#VECDR80V10Q	\$7.99
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650MB 52X CD-R Discs White Thermal Printable -

	50 Spindle Pack	#VECDR8050W	\$15.99
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700MB (80 Minute) 52x CD-R Disc

CD-R Disc	with Slim Jewel Case	#VECDR80S	\$5.99
10 Pack	with Slim Jewel Case	#VECDR80S10	\$5.99
20 Pack	with Slim Jewel Case	#VECDR80S20Q	\$9.99
50 Spindle Pack		#VECDR8050C	\$11.99
100 Spindle Pack		#VECDR80100BS	\$21.99
30 Pack	Spindle w/ Lightscribe	#VECDR80SLS30	\$19.95
50 Spindle Pack	Silver Inkjet Printable	#VECDR8050SQ	\$17.95
100 Spindle Pack	Shiny Silver Surface	#VECDR80100SS	\$29.95

CD-RW

CD-RW provides you the flexibility to write and rewrite your CDs, as much as 1,000 times, while offering compatibility for playback on your CD-R/RW burner, DVD-ROM, or your Multi-Read CD-ROM drive. Rewritability is ideal for MP2 files and JPEG images.



Disc in Jewel Case

Fuji

700MB (80 Min.)	10-Pack w/Jewel Case	#FUCDRW8010	\$10.95
700MB (80 Min.)	20-Pack w/Jewel Case	#FUCDRW8010	\$18.95

Verbatim

2X-4X to 32x speed rewrite compatibility. Rewritable up to 1000 times. Read compatible with multi-read CD & DVD drives.



700MB (80 Minute) 32x CD-RW Discs - 10 Pack with Slim Jewel Cases	#VECDRW80USP1	\$14.50
700MB (80 Minutes) 2x-4x CD-RW Discs - Colored with Matching Color Slim Jewel Cases - 20 Pack	#VECDRW8020	\$12.09
700MB (80 Minute) 2x-4x CD-RW, Silver, Inkjet Printable - 50 Spindle Pack	#VECDRW8050S	\$29.95

CD-R Music

Designed expressly for music or audio recording, Sony CD-R music discs provide the excellent sound quality of pre-recorded compact discs, and the ability to hear them on conventional home, auto and portable CD players. Sony CD-R music discs record digital music and audio in the standard compact disc 16-bit, 44.1kHz format.



Verbatim 40x CD-R Music

80 Min. 40x CD-R Music - 50 Spindle Pack	#VECDR8050M	\$16.95
80 Min. 40x VIBE Music CD-R Disc with Slim Jewel Case - 20 Pack	#VECDR8020M	\$9.99

TDK 32x CD-R Music

80 min.	32x Single w/Jewel Case	#TDCDR80M	\$0.99
80 min.	32x 5-Pack w/Jewel Case	#TDCDR80M5ZZ	\$3.59
80 min.	32x 10-Pack w/Jewel Case	#TDCDR80M10	\$7.19
80 min.	32x 30-Pack on Spindle	#TDCDR80M30	\$12.99

Fuji 40x CD-R Music

80 min.	10-Pack Color w/Jewel Case	#FUCDR80C10	\$5.95
80 min.	30-Pack Spindle	#FUCDR8030Q	\$12.95
80 min.	50-Pack Spindle	#FUCDR8050	\$19.95

DVD Optical Media Recordable Discs

DVD-R

DVD-R is a write once media that is readable in most DVD drives. It has a 4.7GB capacity and allows excellent compatibility with both stand-alone DVD players and DVD-ROM drives.

Fujifilm

4.7GB (120 Min.) DVD-R with Jewel Case
#FUDVDMR47 **\$1.49**



Sony

4.7GB (120 Min.) DVD-R 3-Pack with Jewel Case #SODMR47L33 **\$3.95**

Verbatim

4.7GB (120 Minutes)

4x DVD-R Disc - with Jewel Case #VEDVDMR47 **\$1.19**

4.7GB 2x DVD-R Disc -

10 Pack with Video Box #VEDVDMRW471Q **\$16.50**



Digital Movie DVD-R 4.7GB 4x

- Unique "movie reel" disc surface
- 4X speed DVD+R discs
- High-performance Metal Azo recording dye
- Superior archival stability
- Premium clear Super Jewel Box cases fit most DVD video storage racks-



3 Pack with Super Jewel Box #VEDVDMR473 **\$5.49**

25 Spindle Pack #VEDVDMR4710Q **\$19.99**

10 Pack with Jewel Cases #VEDVDMR4710 **\$14.95**

4.7GB (120 Minutes) 8x DVD-R,

50 Spindle Pack White Thermal Printable #VEDVDMR8X50Q **\$39.95**

4.7GB (120 Minutes) 8x DVD-R,

10 Pack with Jewel Case #VEDVDMR8X10 **\$14.95**

50 Spindle Pack #VEDVDMR47850 **\$32.95**

50 Spindle Pack Shiny Silver Surface #VEDVDMR4785S **\$29.95**

50 Spindle Pack White Inkjet Printable #VEDVDMR8X50 **\$39.95**

9.4GB (240 Minutes) 3x DVD-R, Double Sided

50 Spindle Pack #VEDVDMR944C5 **\$354.95**

DVD-RAM

Panasonic

4.7GB (120 Minutes) DVD-RAM Disc - with Jewel Case #PALMAF120LU **\$2.99**

4.7GB (120 Minutes) DVD-RAM Disc -

3-Pack with Jewel Case #PALMAF120LU3 **\$7.49**

4.7GB (120 Minutes) DVD-RAM Disc -

10-Pack with Jewel Case #PALMAF120LU1 **\$7.49**

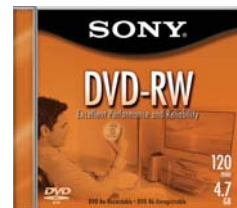


9.6GB (240 Minutes) Double Sided DVD-RAM Disc - in Type 4 Cartridge

240 minutes recording time in SP mode, 720 minutes in EP mode with Jewel Case #PALMAD240 **\$9.95**

DVD-RW

Based on DVD-R, using similar track pitch, mark length, and rotation control, DVD-RW is playable in many DVD drives and players. Capacity is 4.7 GB. DVD-RW discs can be rewritten about 1,000 times. This format is probably most useful for the storage of a complete video film that is to be played on a domestic DVD player.



Fujifilm

4.7GB (120 Min.) DVD-RW Disc - with Jewel Case #FUDVDMRW47 **\$2.25**

Sony

4.7GB (120 Min.) DVD-RW Disc - with Jewel Case #SODMW47 **\$2.49**

Verbatim

4.7GB (120 Min.) 2x DVD-RW Disc - w/Jewel Case #VEDVDMRW247 **\$1.99**

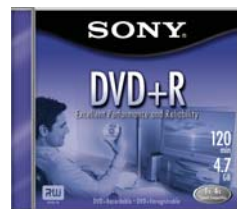
10 Pack with Video Trim Boxes #VEDVDMRW471Q **\$16.50**

30 Spindle Pack #VEDVDMRW4730 **\$29.95**

4.7GB (120 Minutes) 4x DVD-RW Disc - w/Jewel Case #VEDVDMRW447 **\$2.09**

DVD+R

DVD+R was designed with both data and video recording uses in mind. Compatible with existing DVD players and DVD-ROM drives is a major strength of the DVD+R format. Each disc can hold 4.7GB of information, with up to two hours of high quality MPEG2 DVD video with outstanding picture quality.



Fujifilm

4.7GB (120 Minutes) DVD+R Disc - with Jewel Case #FUDVDPR47 **\$1.49**

Sony

4.7GB (120 Minutes) 4x DVD+R Disc - with Jewel Case #SODPR47 **\$1.49**

Verbatim

4.7GB (120 Minutes) 4x DVD+R Disc - w/Jewel Case #94472 **\$1.29**

4.7GB (120 Minutes) 8x DVD+R Disc w/Lightscribe-

20 Spindle w/Jewel Case #VEDVDPR47LS2 **\$37.50**

30 Spindle Pack #VEDVDPR47LS3 **\$42.95**

4.7GB (120 Minutes) 16x DVD+R Disc -

50 Spindle Pack (16x) #VEDVDPR4750Y **\$39.95**

50 Spindle Pack (16x) White Inkjet Printable #VEDVDPR47516 **\$39.95**

DVD+RW

Sony

4.7GB (120 Minutes) 4x DVD+RW Disc - with Jewel Case #SODPW47 **\$2.49**

25 Spindle Pack #SODPW4725 **\$34.95**

Verbatim

4.7GB (120 Minutes) 4x DVD+RW Disc - w/Jewel Case #VEDVDPRW474 **\$1.99**