

# Pioneer

## A/V Components 2009-2010

Indulge All Your Senses with the Ultimate Home Entertainment Experience



**PIONEER CORPORATION**  
4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan  
<http://www.pioneer.jp>

**PIONEER ELECTRONICS AUSTRALIA PTY. LTD.**  
ACN 005 017 087 (Incorporated in Victoria),  
PO Box 295, Mordialloc, Victoria 3195, Australia  
Free Call: 1800-988-268  
<http://www.pioneer.com.au>

**MONACO CORPORATION**  
10 Rothwell Avenue, Albany, Auckland, New Zealand  
<http://www.pioneernz.co.nz>

# Feature Highlights of the New A/V Receivers

Our latest A/V receivers bring studio master quality to your home, by joining Pioneer-original surround sound technologies — Phase Control and MCACC — with DTS-HD Master Audio and Dolby TrueHD new generation audio formats. Also featuring HDMI Repeater connectivity, superior sound from your iPod/iPhone, multi zone audio connectivity, and a gloss black finish.

## HDMI Connection

### HDMI Terminals

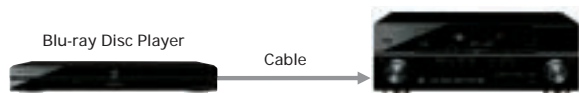
HDMI allows lossless transmission for high-quality pictures and sound, as signals remain in a pure digital state. The Pioneer A/V receivers also support Deep Colour and x.v.Colour.

HDMI Terminals	VSX-1019AH	VSX-919AH	VSX-819H	VSX-519V
HDMI Input/Output	4/1 (Repeater)	3/1 (Repeater)	3/1 (Repeater)	2/1 (Repeater)
Deep Colour	•	•	•	•
x.v.Colour	•	•	•	•
KURO LINK	•	•	•	•

### HDMI Repeater

All Pioneer A/V receivers feature a HDMI repeater function. Unlike HDMI switching which only transfers high-definition video signals, the HDMI repeater allows full-digital transfer of high-definition audio as well as video signals up to 1080p. Although the VSX-519V does not have Dolby TrueHD or DTS-HD Master Audio decoders, it does allow you to enjoy HD audio via LPCM output through HDMI.

### HDMI Repeater vs. HDMI Switching

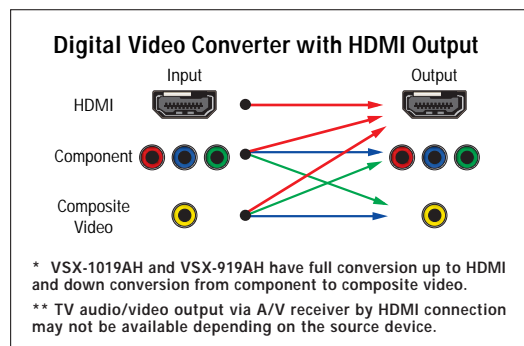


	HDMI Repeater	HDMI Switching	Legacy Cable
Connection Type	Video Audio	Video Audio	Video Audio
HD Audio	Yes DOLBY TRUEHD dts HD Master Audio	— DOLBY DIGITAL dts Digital	— Dolby Surround (Analogue)
Auto Lip-Sync	Yes	—	—

### Digital Video Converter with PureCinema™ and HDMI Upscaler\* (VSX-1019AH/VSX-919AH)

The VSX-1019AH and VSX-919AH allow HDMI output of all analogue video signals, whilst the VSX-1019AH features a video upscaler by Anchor Bay Technology for upscaling 480i/p video signals up to 1080p.

\* VSX-1019AH only



### Precision Quartz Lock System (PQLS) — Jitter-Free Audio Transmission via HDMI (VSX-1019AH/VSX-919AH)

Through a HDMI connection with a compatible Pioneer Blu-ray Disc player, the VSX-1019AH and VSX-919AH perfect CD playback with the proprietary Precision Quartz Lock System (PQLS). This technology eliminates distortion from timing errors, giving the best possible digital-to-analogue conversion from audio CD sources for jitter-free playback and dynamic sound quality.

## Multi Zone Audio and Video

### Multi Zone / Multi Source Audio playback (VSX-1019AH/VSX-919AH/VSX-819H/VSX-519V) Multi Zone / Multi Source Video playback (VSX-1019AH/VSX-919AH)

Pioneer's latest A/V receivers have been designed with more than one room in mind. All A/V receivers feature a Zone 2 audio pre-out, which allows different audio sources to be enjoyed in two separate areas. The VSX-1019AH and VSX-919AH also feature a Zone 2 Video pre-out, which will allow video from different video sources to be enjoyed in two separate areas.

## iPod/iPhone Connection

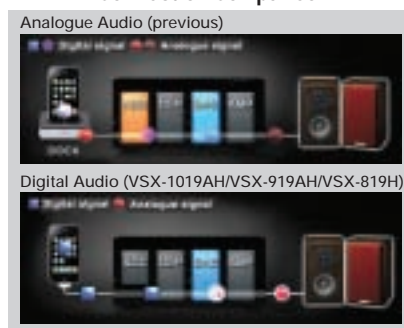
### iPod®/iPhone Digital Connection via USB (VSX-1019AH/VSX-919AH/VSX-819H)

Enjoy iPod videos, pictures and music via a digital connection. The VSX-1019AH, VSX-919AH, and VSX-819H

each come with an iPod/iPhone connection cable allowing direct USB connection to the front panel without having to buy a docking station. The audio signals are directly transferred to the A/V receiver's high-performance DAC, offering superior sound. What's more, you can operate your iPod with the A/V receiver's remote control, while the A/V receiver charges your iPod/iPhone. With an iPhone/iPod Touch, you can even watch YouTube video enlarged on your TV screen, and the VSX-1019AH and VSX-919AH can display iPod/iPhone album artwork in colour on a HDTV.



### Connection Comparison



With conventional iPod connection, D/A conversion is done within iPod, and the extra process deteriorates sound quality. With iPod digital, D/A conversion is done immediately before output stage, providing clean sound.

## High-Performance Technologies for Superior Sound Quality

### Advanced Sound Retriever

Pioneer's latest A/V receivers feature the Advanced Sound Retriever, which significantly improves the sound quality of compressed audio, by creating new signals to restore the minor details left out during the compression process. The VSX-1019AH and VSX-919AH feature an Advanced Sound Retriever for multi-surround sound, which is compatible with DVD and TV soundtracks.

### Auto Level Control

Auto Level Control equalises volume level differences between tracks when playing music from iPod or other sources. The Auto Level Control on the VSX-1019AH and VSX-919AH supports multi-channel playback, maintaining a consistent level even at low volumes.



### New GUI (VSX-1019AH/VSX-919AH)

The GUI on the latest A/V receivers has been refined, resulting in enhanced ease-of-use. Each function has a dedicated GUI screen, displaying, for instance, iPod/iPhone data, speaker settings, or EQ adjustments.



Home Menu

Speaker Setting

iPod/iPhone



	DTS-HD/Dolby TrueHD	MCACC	iPod Digital	Advanced Sound Retriever	Auto Level Control
VSX-1019AH	•	• (Advanced)	•	• (Multi-ch)	• (Multi-ch)
VSX-919AH	•	• (Advanced)	•	• (Multi-ch)	• (Multi-ch)
VSX-819H	•	•	•	• (2ch)	• (2ch)
VSX-519V	•	•	•	• (2ch)	• (2ch)

# VSX-1019AH-K VSX-919AH-K

### New Generation Audio Formats

- DTS-HD/Dolby TrueHD decoders

### Pioneer-Exclusive Innovations

- Phase Control (Bass management system ensures precision low frequency output)
- Advanced MCACC setup with 9-band EQ
- Standing Wave Control
- Advanced Sound Retriever (for enhanced PC and portable audio)
- Front Stage Surround Advance
- Auto Level Control (Multi)
- Advanced Direct Energy Power Amplifier

### Features for Superior Sound Quality

- Maximum power (6 ohms): 170 W x 7ch
- PQLS 2ch Audio
- Digital Core Engine with Freescale 400MIPS Processing DSP
- 192 kHz/24-bit DAC

### Surround Sound Technologies

- DTS-ES/DTS 96/24/Dolby Digital EX/ Dolby Digital Plus decoders
- Neural-THX Surround
- Sound Delay for adjusting Lip Sync (0.0-10.0 frames)
- Dialogue Enhancement

### Enhanced Convenience

- iPod player digital direct via USB
- USB memory audio ready (USB Host function)
- HDMI Upscaler (VSX-1019AH)
- Digital video converter (up to HDMI)
- Multi-Zone Audio/Video (Zone 2)
- iPod/iPhone On Screen Display in Zone 2 (VSX-1019AH)

# VSX-819H-K VSX-519V-K

### New Generation Audio Formats

- DTS-HD/Dolby TrueHD decoders (VSX-819H)

### Pioneer-Exclusive Innovations

- Phase Control (Bass management system ensures precision low frequency output)
- Auto MCACC setup (VSX-819H)
- Advanced Sound Retriever (for enhanced PC and portable audio)
- Front Stage Surround Advance
- Auto Level Control (2ch)

### Features for Superior Sound Quality

- Maximum power (6 ohms): 150 W x 5ch
- Digital Core Engine with Texas Instruments Aureus™ DSP
- 192 kHz/24-bit DAC

### Surround Sound Technologies

- DTS Neo:6/Dolby Pro Logic IIx decoders (VSX-819H)
- DTS 96/24/Dolby Digital/Dolby Pro Logic II decoders
- Sound Delay for adjusting Lip Sync (0.0-9.0 frames)
- Stream Direct (for pure and unprocessed digital sound)

### Enhanced Convenience

- HDMI repeater (VSX-819H: 3 in/1 out, VSX-519V: 2 in/1 out), x.v.Colour, Deep Colour compatible
- iPod player digital direct via USB (VSX-819H)
- USB memory audio ready (USB Host function) (VSX-819H)
- Multi-Zone Audio (Zone 2)
- Surround Back Pre-Out (SBL/SBR) (VSX-819H)

# Feature Highlights of the New Blu-ray Disc Player

Since introducing the world's first Laser Disc player, followed by our expertise in DVD technology, Pioneer has remained at the forefront of optical disc innovations. The latest Blu-ray Disc player brings forth our continuous pursuit for high-resolution, natural colours, and quality sound, giving you the thrilling experience of high-definition sound and images like never before.

## Innovative Video Technologies

Since introducing the innovative LaserDisc, then throughout the DVD to Blu-ray Disc era, Pioneer has remained committed to offering the best stay-at-home movie experience. Our passionate devotion to movies realised the world's first 1080/24p real film quality output. Pioneer Blu-ray Disc player can even upscale the resolution of your standard DVD collection, so that all your movies look better than ever. The Blu-ray Disc player is capable of 1080/24p output. Through a connection with a compatible display, you can enjoy images in 24 frames per second (fps) — the real-cinema quality intended by the creators.

## Deep Colour

The Pioneer Blu-ray Disc player supports high-bit Deep Colour, offering images with superbly detailed, natural colour expression. The BDP-120 features 36-bit colour depth, providing natural and smooth colour gradations.

## x.v.Colour

The unit supports "x.v.Colour", an advanced feature which greatly broadens the colour space input to include 1.8 times as many natural colours than the standard RGB signals when connected to a compatible display.

\* "x.v.Colour" and "x.v.Colour" logo are trademarks of Sony Corporation.  
\*\* "x.v.Colour" only available for playback of discs recorded with AVCHD devices.



## Enhanced Convenience

### BD-LIVE™

With BD-LIVE™ compatible discs, you can download special contents via the internet such as bonus features or languages not supported on the original disc. The BDP-120 can store data externally on a USB memory stick.  
\* BD-LIVE™ only available on compatible discs and playable features depend on the disc contents. "BD-LIVE" is trademark of Blu-ray Disc Association.

### Slim Design

The 58 mm-high slim design allows you to easily place the unit in a small space on your TV stand or A/V rack.

### Quick Start

No need to wait — the unit starts up in 0.8 seconds from stand-by, ready for instant viewing.

### New Generation Audio Formats

The BDP-120 is compatible with bit-stream output/decoding of Dolby TrueHD and DTS-HD Master Audio. The decoding feature allows you to enjoy high-quality surround sound when you connect to a HDMI repeater A/V receiver.

\* Dolby and the double-D symbol are registered trademarks of Dolby Laboratories.  
\* DTS is a registered trademark & the DTS logos and Symbol are trademarks of DTS, Inc.



## BDP-120

- Quick Start 0.8 sec.
- BD-LIVE™ compliant (profile 2.0)
- KURO LINK
- 1080/24p
- Deep Colour (36-bit) compatible
- x.v.Colour compatible
- USB Input for BD-LIVE contents storage
- DTS-HD Master Audio/Dolby TrueHD/DTS-High Resolution Audio/Dolby Digital Plus decoders
- Skip Search (30 sec.)/Replay (10 sec.)

## DV-420V-K

A multi-format DVD player featuring HDMI 1080p upscaling, USB, and DivX®/WMV playback

- 1080p upscaling with HDMI output
- Official DivX® Certified product
- USB Movie Playback
- HD JPEG PhotoViewer
- KURO LINK
- HDMI terminal
- USB terminal
- CD -> USB Recording
- Sound Retriever
- WMV playback

## DV-220KV-K

A 360 mm-wide compact multi-format DVD player featuring HDMI 1080p upscaling, USB, karaoke, and DivX® playback

- 1080p upscaling with HDMI output
- Official DivX® Certified product
- USB Movie Playback
- HD JPEG PhotoViewer
- KURO LINK
- HDMI terminal
- USB terminal
- CD -> USB Recording
- Sound Retriever

# Feature Highlights of the New DVD Players

## Innovations for Stunning Pictures

### HDMI Upscaler and PureCinema Progressive Scan

The DV-420V and DV-220KV can upscale video signals from 480i/p to a maximum of 1080p HDMI output, allowing you to enjoy standard-definition video sources in HD resolution. All models feature Pioneer's 2-3 Pull-down PureCinema Progressive Scan Technology, which accurately inserts additional frames to the DVD data for natural, film-like images.

### HD JPEG

With Pioneer's new DVD players, you can view HD JPEG, the latest format for viewing high resolution still images over HDMI.

## Versatile Playback Functions

### DivX® Video Playback

The DV-420V and DV-220KV feature the latest DivX® certification. The units support playback from USB as well as DVD-R/RW/ROM and CD-R/RW/ROM discs, offering flexible media options.

\* Plays DivX® video. DivX® is a registered trademark of DivX, Inc., and is used under license.



## Inputs and Outputs

### HDMI Interface

The DV-420V and DV-220KV feature HDMI, an uncompressed, all-digital audio/video giving you superior pictures and sound — with no loss.



### USB Terminal

You can connect USB mass storage class devices to the DVD players for easy playback of music, JPEG photo files, and video files. Please refer to the feature comparison page for compatible formats.



### CD -> USB Recording

You can directly record songs from CDs on to USB devices. The data is stored in MP3 format, letting you choose the bit rate from 128/192/320 kbps. You can copy the whole album, or select tracks.



### Sound Retriever

The Sound Retriever significantly improves compressed audio quality to the level of CD sound in three steps (high/low/off), by creating new signals to restore minor details left out during the compression process. The feature is effective for both analogue and digital output, and upgrades MP3/WMA sound closer to the original master.

### Other Features:

- x1.4 playback with sound
- 3-step scan during DivX® playback
- Auto power on/off
- OSD on/off
- Shuffle play

## Hi-Fi Components

### PD-F507

25 Disc CD Player



### PD-M427

6 Disc Cartridge CD Player



### JD-M300

Multi-Disc Magazine (Option) for PD-M427



### CT-W208R

Twin Cassette Deck



### F-208

Quartz-PLL Synthesizer Tuner



## FEATURE COMPARISON

	HDMI 1080p	DivX	WMV	WMA/MP3/MPEG-4 AAC	Sound Retriever	USB Movie Playback	CD ->USB Recording	KURO LINK	Karaoke
DV-420V	•	•	•	•	•	•	•	•	•
DV-220KV	•	•	•	• (except MPEG4-AAC)	•	•	•	•	•

**FEATURE COMPARISON & SPECIFICATIONS: A/V RECEIVERS**

	VSX-1019AH-K	VSX-919AH-K	VSX-819H-K	VSX-519V-K
<b>Power Output</b>				
Rated Power Output Stereo (20 Hz - 20 kHz, 0.2 % THD)	90 W + 90 W (8 ohms)	90 W + 90 W (8 ohms)	65 W + 65 W (8 ohms)	65 W + 65 W (8 ohms)
Rated Power Output Multi-ch (1 kHz, 1 % THD)				
Front	140 W/ch (6 ohms)	140 W/ch (6 ohms)	125 W /ch (6 ohms)	125 W /ch (6 ohms)
Centre	140 W (6 ohms)	140 W (6 ohms)	125 W (6 ohms)	125 W (6 ohms)
Surround	140 W/ch (6 ohms)	140 W/ch (6 ohms)	125 W /ch (6 ohms)	125 W /ch (6 ohms)
Surround Back	140 W/ch (6 ohms)	140 W/ch (6 ohms)		
Maximum Power (RMS, 1 kHz, 10 % THD)	170 W x 7ch (6 ohms)	170 W x 7ch (6 ohms)	150 W x 5ch (6 ohms)	150 W x 5ch (6 ohms)
<b>Amplifier Design</b>				
Channels	7	7	5	5
Amplification Type	Hybrid	Hybrid	Discrete	Discrete
Impedance Guarantee	6 ohms	6 ohms	6 ohms	6 ohms
<b>MCACC Features</b>				
Auto MCACC	Advanced (9 Band EQ)	Advanced (9 Band EQ)		
<b>DSP Design</b>				
Digital Core Engine	Freescale 400 MIPS Processing DSP	Freescale 400 MIPS Processing DSP	Texas Instruments Aureus™ DSP	Texas Instruments Aureus™ DSP
DAC	192 kHz/24-bit	192 kHz/24-bit	192 kHz/24-bit	192 kHz/24-bit
<b>DSP Features (License or Format)</b>				
DTS-HD Master Audio	•	•	•	•
Dolby TrueHD	•	•	•	•
Dolby Digital EX	•	•	•	•
Dolby Digital	•	•	•	•
Dolby Pro Logic II/Dolby Pro Logic IIx	•/•	•/•	•/•	•/•
DTS-HD High Resolution Audio	•	•	•	•
DTS Express	•	•	•	•
DTS Neo:6	•	•	•	•
DTS-ES	•	•	•	•
DTS 96/24	•	•	•	•
DTS	•	•	•	•
WMA9 Pro	•	•	•	•
Neural THX Surround	•	•	•	•
<b>DSP Features (Original)</b>				
Phase Control	•	•	•	•
Advanced Surround Modes	13 Modes*1	13 Modes*1	9 Modes*2	9 Modes*2
Front Stage Surround Advance	• (Focus, Wide)	• (Focus, Wide)	•	•
Virtual Surround Back	•	•	•	•
Advanced Sound Retriever	• (Multi)	• (Multi)	• (2ch)	• (2ch)
Dialogue Enhancement	•	•	•	•
Midnight Listening Mode	•	•	•	•
Tone Control	•	•	•	•
<b>Audio Features</b>				
Auto Level Control	• (Multi)	• (Multi)	• (2ch)	• (2ch)
Sound Delay (Lip-Sync)	• (10 frame)	• (10 frame)	• (9 frame)	• (9 frame)
Stream Direct	•	•	•	•
<b>HDMI</b>				
1080p Transferring	•	•	•	•
PQLS	•	•	•	•
x.v.Colour	•	•	•	•
Deep Colour	•	•	•	•
Repeater	•	•	•	•
HDMI Scaling	•	•	•	•
Video Converter	Up to HDMI (Full Convert)	Up to HDMI (Full Convert)		
<b>iPod**3</b>				
iPod* Digital Audio	•	•	•	•
<b>USB</b>				
Terminal Type	A-Type	A-Type	A-Type	
USB Host Function (for Audio Playback)	•	•	•	•
<b>Tuner</b>				
FM/AM Tuner	•	•	•	•
Radio Random Preset Select	63	63	30	30
FM/AM 3-Speed Accelerated Tuning	•	•	•	•
<b>Remote Control</b>				
Type	Preset	Preset	Preset	SR
<b>Terminals</b>				
HDMI Input/Output	4/1 (Repeater)	3/1 (Repeater)	3/1 (Repeater)	2/1 (Repeater)
USB Input (for Memory Audio)	1	1	1	1
Digital Coaxial Input/Output	2/0	1/0	1/0	1/0
Digital Optical Input/Output	2/0	2/0	2/0	2/0
Analogue Multi-ch Input	• (5.1ch)	• (5.1ch)	• (5.1ch)	• (5.1ch)
Preamp Output	• (SW)	• (SW)	• (SW, SBL, SBR)	• (SW)
Audio Input/Rec. Output	4**/1	4**/1	4**/1	4**/1
A/V (Composite) Input/Rec. Output	4/1	4/1	4/1	3/1
Component Video Input	2 (assignable)	2 (assignable)	2 (assignable)	2 (assignable)
Monitor Video Output (to TV): Component/Composite	1/1	1/1	1/1	1/1
Multi Zone Pre-Out	Video/Audio (Powered)	Video/Audio (Powered)	Audio	Audio
6/7 ch Surround Back Pre-Out			• (SBL/SBR)	
<b>Miscellaneous</b>				
Dimensions (W x H x D)	420 x 158 x 349 mm	420 x 158 x 349 mm	420 x 158 x 347.7 mm	420 x 158 x 347.7 mm
Weight	8.7 kg	8.7 kg	9.0 kg	8.8 kg
Power Requirements	110/120-127/220/230-240 V 50/60 Hz	110/120-127/220/230-240 V 50/60 Hz	110-127/220-240 V 50/60 Hz	110-127/220-240 V 50/60 Hz
Power Consumption	330 W	330 W	285 W	280 W
Power Consumption during Standby	0.7 W (Stby - KURO LINK off) 0.8 W (Stby - KURO LINK on)	0.7 W (Stby - KURO LINK off) 0.8 W (Stby - KURO LINK on)	0.8 W	0.7 W

\*1 Action, Drama, Sci-Fi, Mono Film, Entertainment Show, Expanded Theater, TV Surround, Advanced Game, Sports, Classical, Rock/Pop, Unplugged, Extended Stereo + Phones Surround  
 \*2 Action, Drama, Entertainment Show, Advanced Game, Sports, Classical, Rock/Pop, Unplugged, Extended Stereo  
 \*3 The units are compatible with 5th generation and newer iPod, iPod nano, iPod touch, and iPhone, but compatibility may vary depending on the software incorporated in your iPod. The Pioneer A/V receivers do not support software versions prior to iPod update 2004-10-20. Consult your nearest Pioneer dealer for supported versions.  
 While connected to the A/V receiver, iPod cannot be controlled directly and only the word "Pioneer" is displayed on the iPod display. Functions such as equalizer cannot be controlled using the receiver, so we recommend you to turn off the equalizer before connecting. iPod is for legal or rightholder-authorized copying only. Don't steal music. iPod is a trademark of Apple Computer, Inc., registered in the U.S. and other countries.  
 \*\*4 Tuner included.

	iPhone		iPod		iPod Photo	iPod Video	iPod Classic	iPod touch		iPod mini	iPod nano			
	iPhone	iPhone 3G	with dock connector	with colour display	4th gen.	5th gen.		1st gen.	2nd gen.		1st gen.	2nd gen.	3rd gen.	4th gen.
VSX-1019AH	AV	AV						A	AV	AV		A	AV	AV
VSX-919AH	AV	AV						A	AV	AV		A	AV	AV
VSX-819H	AV	AV						A	AV	AV		A	AV	AV

AV = Audio file playback compatible with OSD and remote control. Video file playback requires iPod operation.  
 A = Audio file playback compatible with OSD and remote control.

**FEATURE COMPARISON & SPECIFICATIONS: BLU-RAY DISC PLAYER**

	BDP-120
<b>Technical Features</b>	
Playback Discs	Blu-ray Discs (BD-ROM, BD-R/RE) DVD Video (DVD-R, R DL, RW) DVD VR (DVD-R, R DL, RW) AVCHD (DVD-R, R DL, RW) CD (CD-DA, JPEG File)
BD-ROM Profile	2.0 (BD-Live compliant)
Dual System (PAL/NTSC)	•
<b>Compressed Video and Music Playback</b>	
DivX	•
JPEG PhotoViewer	•
MP3	•
WMA	•
<b>Audio Features</b>	
192 kHz/24-bit D/A Converter	•
DTS-HD High Resolution Audio Decoder	•
DTS-HD Master Audio Decoder	•
Dolby Digital Plus Decoder	•
Dolby TrueHD Decoder	•
<b>Video Features</b>	
148.5 MHz/12-bit D/A Converter	•
Deep Colour	• (36-bit)
x.v.Colour	•
<b>Conveniences</b>	
Resume Function (Stop Key)	•
Quick Start	•
KURO LINK	•
Software Update via USB	•
Playlist Playback	•
Repeat Mode	•
Slideshow	•
Screensaver	•
Auto Power Off (10 min.)	•
Skip Search (30 sec./Replay (10 sec.))	•
<b>Terminals</b>	
HDMI Terminal	•
USB Input	•
Component Video Output	•
Composite Video Output	•
2ch Audio Out	•
Optical Digital Output	•
LAN	•
<b>Specifications</b>	
Power Requirements	AC 110-230 V 50 Hz
Power Consumption	20 W
Power Consumption during Standby Mode	0.6 W
Dimensions (W x H x D)	420 x 58 x 268 mm
Weight	2.7 kg

**REAR PANELS**



VSX-1019AH-K



VSX-919AH-K



VSX-819H-K



VSX-519V-K



BDP-120



DV-420V-K



DV-220KV-K

**FEATURE COMPARISON & SPECIFICATIONS: DVD PLAYERS**

	DV-420V-K	DV-220KV-K
<b>Technical Features</b>		
Playback Discs	DVD/SVCD/VCD/CD/CD-R/RW/ DVD-R/R DL/RW/ (Video Mode, VR Mode W/CPRM/ DVD+R/R DL/RW (Video Mode))	DVD/SVCD/VCD/CD/CD-R/RW/ DVD-R/R DL/RW/ (Video Mode, VR Mode W/CPRM/ DVD+R/R DL/RW (Video Mode))
Twin-Wave Laser Pickup	•	•
Dual System (PAL/NTSC)	•	•
<b>Compressed Video and Music Playback</b>		
WMV	•	•
DivX	•*1	•*1
JPEG PhotoViewer	•	•
HD JPEG	•	•
MPEG-4 AAC	•	•
MP3/WMA	•	•
PHOTO + MUSIC MIX (JPEG Slideshow with Music)	•	•
<b>Audio Features</b>		
96 kHz/24-bit D/A Converter	•	•
Sound Retriever	•	•
Virtual Surround	•	•
Digital Output (Dolby Digital, DTS (DVD), MPEG Audio, Linear PCM)	•	•
Sound EQ	•	•
Dialogue	•	•
Karaoke Mic Echo/Digital Key Control	•	•
<b>Video Features</b>		
Dual PureCinema Progressive Scan (PAL/NTSC)	•	•
108 MHz/12-bit D/A Converter	•	•
I/P Simultaneous Output	•	•
<b>Conveniences</b>		
Last Memory (DVD)	DVD: 5, VCD: 1	DVD: 5, VCD: 1
Resume Function (Stop Key)	•*2	•*3
10-Key Direct Search and Play (Chapter/Track)	•	•
KURO LINK	•	•
CD->USB Recording	•	•
<b>Terminals</b>		
USB	1	1
Mic Jack	1	1
HDMI Terminal	1 (to 1080p/60 Hz)	1 (to 1080p/60 Hz)
Component Video Output	1	1
S-Video Output	1	1
Video Output	1	1
Audio Output	1	1
Coaxial Digital Output	1	1
Optical Digital Output	1	1
<b>Specifications</b>		
Power Requirements	110-240 V 50/60 Hz	110-240 V 50/60 Hz
Power Consumption	11 W	11 W
Power Consumption during Standby Mode	0.7 W	0.6 W
Dimensions (W x H x D)	420 x 49.5 x 215.5 mm	360 x 42 x 208 mm
Weight	1.7 kg	1.3 kg

\*1 Plays DivX® video, including premium content. \*2 Not available with MPEG-4 AAC/WMA/MP3 playback. \*3 Not available with WMA/MP3 playback.