

Home Entertainment Blu-ray and DVD Players

## Ultra HD Blu-ray Player DP-UB320

PLAYABLE DISCS	BD-ROM	Ultra HD Blu-ray/ FULL HD 3D/ BD-Video	yes
	BD-RE/BD- RE DL (Ver.3)	BDAV/ AVCHD/ AVCHD 3D/JPEG/ MPO	yes
	BD-R (Ver.1.3) / BD-R DL (Ver.2)	BDAV/ AVCHD/ AVCHD 3D/ MKV/ JPEG/ MPO	yes
	DVD	DVD-Video	yes
	DVD-R*1/ DVD-R DL*1/ DVD- RW*1	DVD-Video/ DVD Video Recording	yes
		AVCHD/ MKV	yes/ yes* (*DVD-R/ DVD-R DL)
		FLAC/ WAV/ ALAC/ DSD/ WMA/ AAC/ MP3/ AIFF	yes (DVD-R/ DVD-R DL)
		JPEG/ MPO	yes (DVD-R/ DVD-R DL)
	+R*1/+R DL*1/ +RW*1	Video/ AVCHD	yes
	CD, CD-R/ -RW	CD-DA/ DTS-CD	yes
		MKV	yes (CD-R/-RW)
		FLAC/ WAV/ ALAC/ WMA/ AAC/ MP3/ AIFF	yes (CD-R/-RW)
		JPEG/ MPO	yes (CD-R/ -RW)
AUDIO SYSTI	EM	Dolby Digital/ TrueHD	yes (Decode and Bitstream Output*2)
		Dolby Digital Plus	yes (Decode and Bitstream Output*2)
		DTS-HD Master Audio/ DTS-HD High Resolution Audio	yes (Decode and Bitstream Output*2)

		Dolby Atoms/ DTS:X	yes (Bitstream Output*2)
		FLAC	yes (Max. 192 kHz/ 24 bit)
		WAV	yes (Max. 192 kHz/ 32 bit)
		ALAC	yes (Max. 96 kHz/ 32 bit (7.1ch), 176.4/192 kHz/ 32 bit (5.1ch))
		DSD (DFF, DSF)	yes (2.8 MHz (2ch/ 5.1ch), 5.6 MHz (2ch))
		AIFF	yes (Max. 192 kHz/ 32 bit (2ch))
USB	Slot		yes (1)
	Front		1 (USB 2.0 High Speed)
	Playback	FLAC/ WAV/ ALAC/ AIFF/ DSD (DFF, DSF)/ WMA/ AAC/ MP3	yes
		MKV/ MP4 (H.264/HEVC), TS (MPEG-2/H.264/HEVC)	yes
		MPEG-2/ AVCHD/ AVCHD 3D	yes
		JPEG/ MPO	yes
HIGH QUALITY	HCX Processor for Ultra HD Blu-ray		yes
PICTURE	HDR	Hybrid Log Gamma(HLG)	yes
	4K Up-scaling	60p/50p/ 4:4:4 (HDMI2.0)	yes*4*5
		24p/ 25p	yes*4*5
	4K Direct Chroma Up-scaling		yes*4
	4K Networking (4K Video*6 Playback/ 4K JPEG Playback*4)		yes
	4K VOD		yes*7
	Picture Type Presets		(Normal/ Cinema/ Fine Cinema/ Retro Cinema/ Animation/ Live)*8
	Block/ Randam/ Mosquito Noise Reduction		yes
	Video on Demand in HD Quality		yes

	Ultra HD Premium		yes
	Deep Colour		yes
	x.v.Colour		yes*9
HIGH QUALITY SOUND		Pure Audio on HDMI (HDMI Low Clock Jitter Process)	yes
		High Quality Network Audio Playback (DLNA)	yes*10 (FLAC/ WAV/ ALAC/ AIFF/ DSD/ WMA/ AAC/ MP3)
SMART FEATURE		Remote Control	yes (Simple)
		Subtitle Position/Brightness Adjustment	yes
		HDAVI Control 5 (VIERA Link)	yes
		Internet Apps	yes*13
		Web Browser	yes
		Network Contents Playback (Client & Renderer)	yes*10
		External HDD Playback	yes*14
		Network Drive Access	yes
		BD-Live <sup>TM</sup>	yes*15
TERMINAL		HDMI Output	yes (1)
		LAN (Ethernet) Terminal	yes (for Ultra HD Blu-ray, DLNA*10, BD- LiveTM*15, Internet Apps*13 and Firmware Update)
OTHERS	Video System		PAL/ NTSC
	Power Supply		AC 220-240 V, 50 Hz
	Power Consumption	Normal Use	21 W
		Network Standby Off (Quick Start Off)	0.3 W
DIMENSIONS, WEIGHT		Dimensions (W x H x D)	320 x 45 x 191 mm *17

	Weight	1.3 kg
NOTE		*1 Discs recorded and finalized on recording devices.
NOTE		*2 HDMI connections and compatible equipment (e.g. AV Receiver) required.
NOTE		*3 Enabled by software update
NOTE		*4 For 4K Up-scaling playback a TV with same resolution is required.
NOTE		*5 For 4K/60p video, a high speed HDMI cable supporting 18 Gbps bandwidth is required.
NOTE		*6 MP4(4K/25p,30p) bit rate up to 100 Mbps/resolution up to 3840x2160.
NOTE		*7 Some network content services may not be available in your country.
NOTE		*8 Ultra HD Blu-ray and Photo (JPG/ MPO) are not supported.
NOTE		*9 This function is effective only when reproducing AVCHD data recorded with x.v.Color technology. The function cannot be used with BD-ROM or DVD-ROM discs. HDMI connection is required.
NOTE		*10 File formats that are not supported by your Network Contents server (DLNA compatible server, etc.) cannot be played.
NOTE		*11 CD sampling is done at 176.4/88.2 kHz.
NOTE		*12 A device that supports the Mirroring function and AndroidTM ver. 4.2 or higher is required.
NOTE		*13 Requires broadband Internet service.
NOTE		*14 The external HDD with capacities of 4TB or less in processing NTFS/ FAT32 data is supported. Playback is not possible with some external hard disk drives.
NOTE		*15 To enjoy content, you will need to insert a USB (1GB or more of free space/ sold separately). Requires broadband Internet service.
NOTE		*16 The analog 2-channel output terminal can also be used as an analog 7.1-channel output terminal.
NOTE		*17 Excluding the projecting parts.

NOTE	Specifications are subject to change without notice. All numbers given here are approximate.
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