

## Ultra HD Blu-ray Player DP-UB820

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
	+R*1/+R DL*1/ +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 SYST	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 Atmos/ DTS:X	Yes (Bitstream Output* <sup>2</sup> )
		FLAC	Yes (Max. 192 kHz / 24 bit)
		WAV	Yes (Max. 384 kHz / 32 bit)

ALAC DSD (DFF, DSF) AIFF		ALAC	Yes (Max. 96 kHz / 32 bit (7.1 ch), 176.4 /192 kHz / 32 bit (5.1 ch))
		DSD (DFF, DSF)	Yes (2.8 MHz (2ch / 5.1 ch), 5.6 MHz (2 ch / 5.1 ch), 11.2 MHz (2 ch))
		AIFF	Yes (Max. 384 kHz / 32 bit (2 ch))
USB	Slot		Yes (2)
	Front		1 (USB 2.0 High Speed)
	Rear		1 (USB 3.0 Super Speed)
	Playback	FLAC/ WAV/ ALAC/ AIFF/ DSD (DFF, DSF)/ WMA/ AAC/ MP3	Yes (Gapless Playback: FLAC / WAV / AIFF/ DSD (DFF,DSF))
		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	HDR10+	Yes*3
		Dolby Vision	Yes*3
		Hybrid Log Gamma (HLG)	Yes
	HDR Optimiser		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/ Random/ Mosquito Noise Reduction		Yes
	Video on Demand in HD Quality		Yes
	Ultra HD Premium		Yes
	Deep Colour		Yes
	x.v.Colour		

		Yes <sup>*9</sup>
HIGH QUALITY SOUND	TWIN HDMI	Yes
	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)
	High Clarity Sound Premium	Yes
	Digital Tube Sound	Yes (Up to 192 kHz / 32 bit)
	Surround Re- Master	Yes*11 (Up to 192 kHz / 32 bit)
	Audio D/A Converter	Yes
SMART FEATURES	Viewing Experience Controlled via Voice(Google Assitant/ Amazon Alexa)(Available for English)	Yes
	Unit Display	Yes (Dot Matrix)
	Remote Control	Yes (Simple)
	Subtitle Position/Brightness Adjustment	Yes
	HDAVI Control 5 (VIERA Link)	Yes
	Mirroring with Smartphone/Tablet	Yes*12
	Internet Apps	Yes*13
	Web Browser	Yes
	Wireless LAN System	Yes (Built-in) IEEE802.11 a/b/g/n/ac
	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 (2)
		Optical Output	Yes
Analogue Audio LR Output  Analogue Audio 7.1ch Output  LAN (Ethernet) Terminal		_	Yes*16
		_	Yes
			Yes (for Ultra HD Blu-ray, Network Contents Playback*10, BD-Live <sup>TM*15</sup> , Internet Apps*13 and Firmware Update)
OTHERS	Video System		NTSC
	Power Supply		AC 120 V, 60 Hz
	Power Consumption	Normal Use	31 W
		Standby(Quick Start Off)	8 W
		Standby (Quick Start Off)-Network Standby Off	0.2 W
DIMENSIONS & WEIGHT		Dimensions (W x H x D)	Approx. 430 x 62 x 204 mm*17
		Weight	2.4 kg
NOTE			*1 Discs recorded and finalized on recording devices.  *2 HDMI connections and compatible equipment (e.g. AV Receiver) required.  *3 Enabled by software update  *4 For 4K Up-scaling playback a TV with same resolution is required.  *5 For 4K/60p video, a high speed HDMI cable supporting 18 Gbps bandwidth is required.  *6 MP4/ MKV/ TS (H.264/ HEVC) Up to 3840x2160 25p/ 30p, 4096x2160 24p.  *7 Some network content services may not be available in your country.  *8 Ultra HD Blu-ray and Photo (JPG/ MPO) are not supported.  *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.  *10 File formats that are not supported by your Network Contents server (DLNA compatible server, etc.) cannot be played.  *11 CD sampling is done at 176.4/88.2 kHz.  *12 A device that supports the Mirroring function and Android TM ver. 4.2 or higher is required.  *13 Requires broadband Internet service.  *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.  *15 To enjoy content, you will need to insert a USB (1GB or more of free space/ sold separately). Requires broadband Internet service.  *16 The analog 2-channel output terminal can also be used as an analog 7.1-channel output terminal.  *17 Excluding the projecting parts.  Specifications are subject to change without notice. All numbers given here are approximate.
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