

# 4K Ultra HD with HDR10+TM and Dolby Vision Playback - Hi-Res Sound - 4K VOD Streaming - Voice Assist Blu-ray Player - Black DP-UB820-K

# • PLAYABLE DISCS

- ∘ BD-ROM
- o Ultra HD Blu-ray/ FULL HD 3D/ BD-Video yes
- BD-RE BD-RE DL (Ver3)
- $\circ\,$  BDAV/ BDMV/ JPEG/ MPO yes
- BD-R (Ver13) BD-R DL (Ver2)
- o BDAV/ BDMV/ MKV/ JPEG/ MPO yes
- ∘ **DVD**
- o DVD-Video yes
- DVD-R1 DVD-R DL1 DVD-RW1
- o DVD-Video/ DVD Video Recording yes
- AVCHD/ MKV yes/ yes\* (\*DVD-R/ DVD-R DL)
- o FLAC/ WAV/ ALAC/ AIFF/ DSD/ WMA/ AAC/ MP3 yes (DVD-R/ DVD-R DL)
- JPEG/ MPO yes (DVD-R/ DVD-R DL)
- +R1 +R DL1 +RW1
- o Video/ AVCHD yes
- CD, CD-R -RW
- ∘ CD-DA/ DTS-CD yes
- ∘ MKV yes (CD-R/-RW)
- $\circ\,$  FLAC/ WAV/ ALAC/ AIFF/ WMA/ AAC/ MP3 yes (CD-R/ -RW)
- JPEG/ MPO yes (CD-R/-RW)

# • AUDIO SYSTEM

- o Dolby Audio (Dolby Digital/ Dolby Digital Plus/ Dolby TrueHD) yes (Decode and Bitstream Output\*2)
- o DTS-HD Master Audio/ DTS-HD High Resolution Audio yes (Decode and Bitstream Output\*2)
- Dolby Atoms/ DTS:X yes (Bitstream Output\*2)
- o FLAC yes (Max. 192 kHz/ 24 bit)
- o WAV yes (Max. 384 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/ 5.1ch), 11.2 MHz (2ch))
- AIFF yes (Max. 384 kHz/ 32 bit (2ch))

#### • USB

- o Slot
- Front 1 (USB 2.0 High Speed)
- Rear 1 (USB 3.0 Super Speed)
- o Playback
- FLAC/ WAV/ ALAC/ AIFF/ DSD (DFF, DSF)/ WMA/ AAC/ MP3 yes (Gapless Playback : FLAC/WAV/AIFF/DSD(DFF,DSF))
- $\circ$  MKV/ MP4 (H.264/ HEVC), TS (MPEG-2/ H.264/ HEVC) yes
- ∘ MPEG-2/ AVCHD/ AVCHD 3D yes
- o JPEG/MPO yes

# HIGH QUALITY PICTURE

- ∘ HCX Processor for Ultra HD Blu-ray yes
- o System Gamma Adjustment yes
- o HDR10 Metadata Display yes
- 4K Direct Chroma Up-scaling\*4 yes
- $\circ\,$  4K Networking (4K Video\*6 Playback/ 4K JPEG Playback\*4) yes
- o 4K VOD yes\*7
- o Picture Type Presets\*8 Normal/ Cinema/ Fine Cinema/ Retro Cinema/ Animation/ Live
- o Block/ Randam/ Mosquito Noise Reduction yes
- $\circ\,$  Video on Demand in HD Quality yes
- o Ultra HD Premium yes
- o Deep Colour yes
- o x.v.Colour\*9 yes
- $\circ$  HDR
- o HDR\_yes
- HDR10+ yes\*3
- Dolby Vision yes\*3
- Hybrid Log Gamma (HLG) yes

- o HDR Optimizer
- o HDR\_Optimizer yes
- o 4K Up-scaling45
- 60p/ 50p/ 4:4:4 (HDMI2.0) yes
- o 24p/ 25p yes

# HIGH QUALITY SOUND

- o TWIN HDMI yes
- o Pure Audio on HDMI (HDMI Low Clock Jitter Process) yes
- o High Quality Network Audio Playback\*10 yes (FLAC/ WAV/ ALAC/ AIFF/ DSD/ WMA/ AAC/ MP3)
- o High Clarity Sound Premium yes
- o Digital Tube Sound yes (Up to 192 kHz/ 32 bit)
- o Surround Re-Master\*11 yes (Up to 192 kHz/ 32 bit)
- o Audio D/A Converter yes

#### • SMART FEATURES

- o Viewing Experience Controlled via Voice (Google Assitant/ Amazon Alexa) (Available for English) yes
- Unit Display yes (Dot Matrix)
- Remote Control yes (Simple)
- o Subtitle Position/Brightness Adjustment yes
- HDAVI Control 5 (VIERA Link) yes
- o Mirroring with Smartphone/Tablet\*12 yes
- o Internet Apps\*13 yes
- o Web Browser yes
- Wireless LAN System yes (Built-in) IEEE802.11 a/b/g/n/ac
- o Network Contents Playback\*10 (Client & Renderer) yes
- o External HDD Playback\*14 yes
- o Network Drive Access yes
- BD-Live<sup>TM</sup>\*15 yes

#### • TERMINAL

- HDMI Output yes (2)
- o Optical Output yes
- Analogue Audio LR Output yes\*16
- Analogue Audio 7.1ch Output yes
- LAN (Ethernet) Terminal yes (for Ultra HD Blu-ray, Network Contents Playback\*10, BD-Live<sup>TM\*</sup>15, Internet Apps\*13 and Firmware Update)

#### OTHERS

- o Video System NTSC
- o Power Supply AC 120 V, 60 Hz
- o Power Consumption
- o Normal Use 31 W
- o Standby (Quick Start Off): Network Standby On 8 W
- o Standby (Quick Start Off): Network Standby Off 0.2 W

### DIMENSIONS, WEIGHT

- o Dimensions (W x H x D)\*17 Approx. 16-15/16 x 2-1/2 x 8-1/16 inch
- o Weight 5.3 lbs.

#### NOTIFICATION

- NOTE \*1 Discs recorded and finalized on recording devices.
- o \*2 HDMI connections and compatible equipment (e.g. AV Receiver) required.
- o \*3 Enabled by software update. It already has been released (as of April, 2019).
- o \*4 For 4K Up-scaling playback a TV with same resolution is required.
- o \*5 For 4K/60p video, a high speed HDMI cable supporting 18 Gbps bandwidth is required.
- o \*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.
- o \*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. T 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.
- o \*12 A device that supports the Mirroring function and Android™ ver. 4.2 or higher is required.
- o \*13 Requires broadband Internet service.
- \*14 The external HDD with capacities of 4TB or less in processing NTFS/ FAT32 data is supported. Play
  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). Requir broadband Internet service.
- o \*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.
- WARNING: The recording and playback of content on this or any other device may require permission the owner of the copyright or other such rights in that content. Panasonic has no authority to and does grant you that permission and explicitly disclaims any right, ability or intention to obtain such permissi your behalf. It is your responsibility to ensure that your use of this or any other device complies with applicable copyright legislation in your country. Please refer to that legislation for more information on relevant laws and regulations involved or contact the owner of the rights in the content you wish to reco playback.
- Playability may vary depending on the contents, discs and quality of the recording. For content recorde
  your personal use.

- Specifications are subject to change without notice.
- TRADEMARK NOTICE: Blu-ray Disc<sup>TM</sup>, Blu-ray<sup>TM</sup>, Ultra HD Blu-ray<sup>TM</sup> and the logos are trademark Blu-ray Disc Association.
- o "AVCHD" and the "AVCHD" logo are trademarks of Panasonic Corporation and Sony Corporation.
- HDR10+TM logo is a trademark of HDR10+ Technologies, LLC.
- MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.
- o Dolby, Dolby Vision, Dolby Audio, and the double-D symbol are trademarks of Dolby Laboratories.
- For DTS patents, see http://patents.dts.com.Manufactured under license from DTS, Inc. DTS, the Symb DTS and the Symbol together, DTS-HD, and the DTS-HD logo are registered trademarks or trademark DTS, Inc. in the United States and/or other countries.©DTS, Inc. All Rights Reserved.
- The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademark registered trademarks of HDMI Licensing, LLC in the United States and other countries.
- DLNA, the DLNA Logo and DLNA CERTIFIED are trademarks, service marks, or certification marks the Digital Living Network Alliance.
- o Android is a trademark of Google Inc.
- o THX and the THX logo are trademarks of THX Ltd., registered in the United States and other countrie
- ULTRA HD PREMIUM<sup>TM</sup> logo indicates that this product complies with [DISTRIBUTION SPECIFICATION] but only when this product plays back an Ultra HD Blu-ray disc that also bears the ULTRA HD PREMIUM<sup>TM</sup> logo. ULTRA HD PREMIUM<sup>TM</sup> logo is a trademark or registered trademark the UHD Alliance,Inc. in the United States and other countries.
- The product with Hi-Res Audio logo is conformed to High-Resolution Audio standard defined by Japan Audio Society. This logo is used under license from Japan Audio Society.

UPC885170334618