Pioneer

WHERE STYLE MEETS FUN

HI-END BLU-RAY DISC PLAYERS 2014-2015

THE ULTIMATE EXPERIENCE

True Reproduction

Just immerse in the scene. Every detail of sound and vision that was previously unperceivable can be reproduced in ultra-high resolution. Hence, the ambience which could only be felt on the spot, now closes in with unprecedented fidelity.

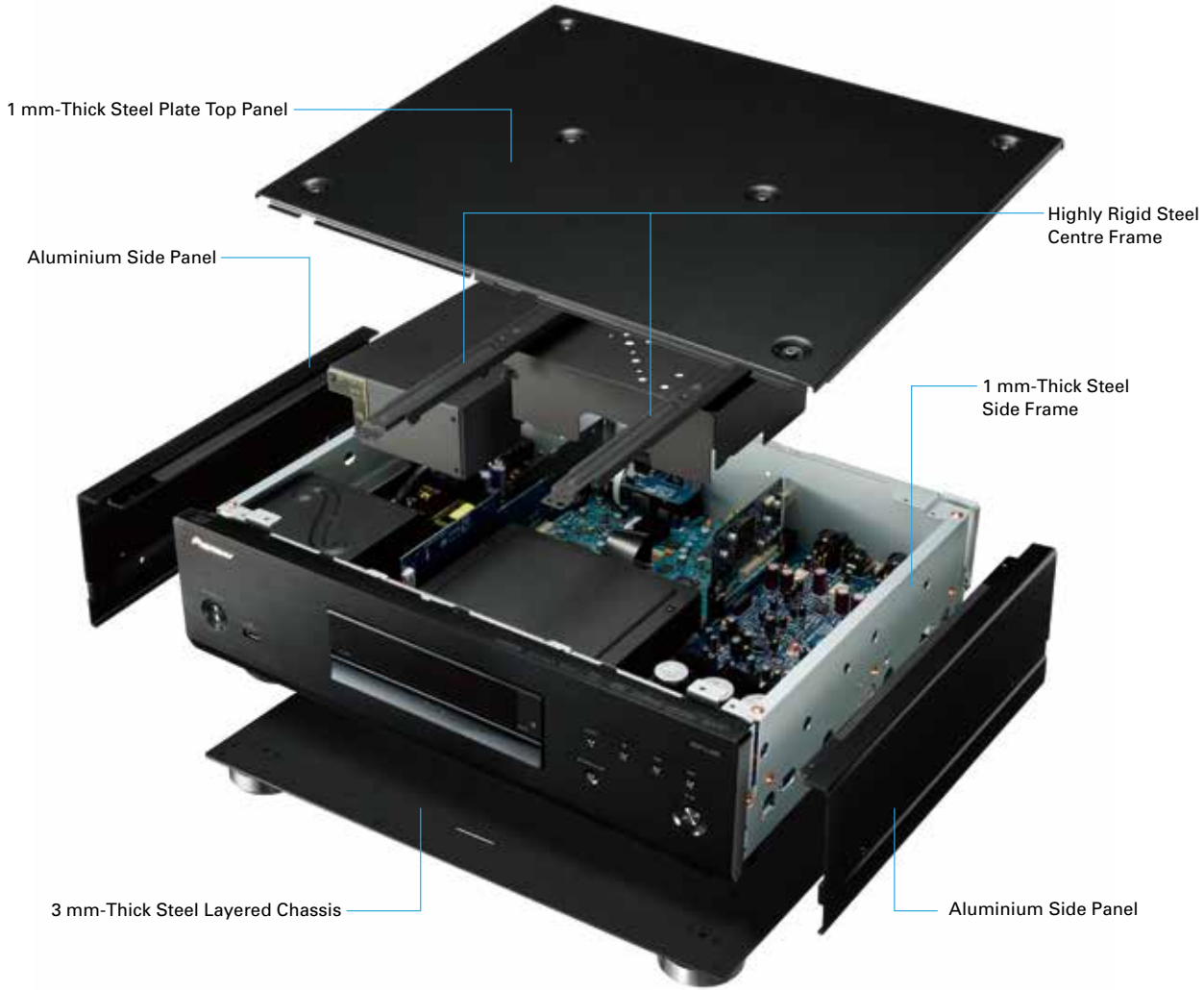
Launching the BDP-LX88 Blu-ray Disc player—the flagship model that leads the 4K era.

The five elements for realising outstanding sound and vision:	Video Tuning	Large Capacity and Fast Response Power Supply
Highly Rigid Chassis	High-Precision Drive Mechanism	Sound Tuning

Elaborately Created Chassis— the Cornerstone of Supreme Sound

Three-Chamber Structure with Independent Power Supply, Digital Processing, and Audio Circuit Blocks

The power supply, digital processing, and audio circuit blocks are separated by the three-chamber structure to eliminate mutual electrical and magnetic interference between the blocks. Additionally, highly rigid centre frames placed between the blocks and side frames realise a further reinforced construction, while within the chassis, an optimal layout design minimises vibration as well as loss of signal.



Highly Rigid Chassis with Low Centre of Gravity for Quality Sound

The 1.6 mm-thick chassis base is reinforced with a 3 mm-thick plate. This newly developed Double-Layered Chassis structure provides unprecedented rigidity and low centre of gravity. Anti-vibration paint is applied to the chassis surface to further improve sound quality. This robust chassis supports quality sound performance.

Robust Construction Ultimately Eliminates Unwanted Vibration

A 1 mm-thick steel plate is used for the top panel, with even the air vents for heat dissipation removed to create a flat surface to ensure rigidity. In an utmost effort to cut out vibration within the chassis, aluminium with high damping effect is used for the side panels.

Vibration-Proof High Performance Rigid & Quiet BD Drive

The BD drive is housed in a shield case with anti-vibration paint. In a floating structure, the drive is attached to the steel plate drive base with vibration-dampening rubber material, while the drive base is firmly fixed to the chassis. This minimises vibration generated inside and outside the drive. Additionally, the tray features anti-vibration paint and reinforcement shafts for a more stable drive movement.

Acoustic Damper Tray Ultimately Cuts Out Operational Sound Within

The Acoustic Damper Tray features separate disc tray cover and tray base which are connected by damper springs. The design provides enhanced damping effect by preventing the transmission of the vibration generated inside the drive to the chassis via the tray.

Acoustic Damper Tray Movement Image (Sectional View)

Tray Open

The tray panel moves in close contact with the tray

Tray Closed

The tray panel fits tightly against the front panel but is separated from the tray base, with the damper springs in-between

Unparalleled Expertise for Quality Pictures, Taking Ultra-High-Resolution to the Limit

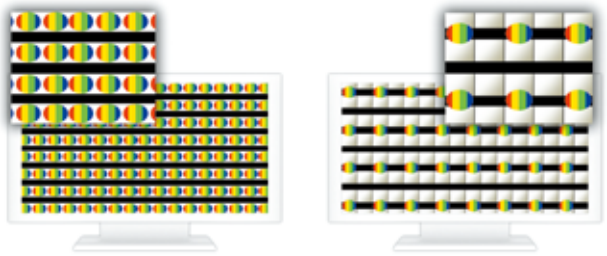
Main Circuit Design to Achieve High S/N Ratio

To ultimately reduce digital noise, a 6-layer IVH (Interstitial Via Hole) is used for the main circuit board. This optimises the digital signal pathway and minimises the GND impedance, and significantly improves the S/N ratio for audio and visual signal processing. The circuit design allows more precise 18 Gbps large-capacity transmission for the latest HDMI 2.0 specification.

Supports All Specifications of 4K Video of the Latest HDMI 2.0

The BDP-LX88 is based on HDMI 2.0 specification, supporting 18 Gbps bandwidth transfer. You can enjoy 4K/60p/4:4:4, as well as 4K/60p/4:2:2/36-bit and 4K/24p/4:4:4:/36-bit video output, with more vivid colour tones and rich gradation.

4K/60p Video Colour Signal Specification Comparison

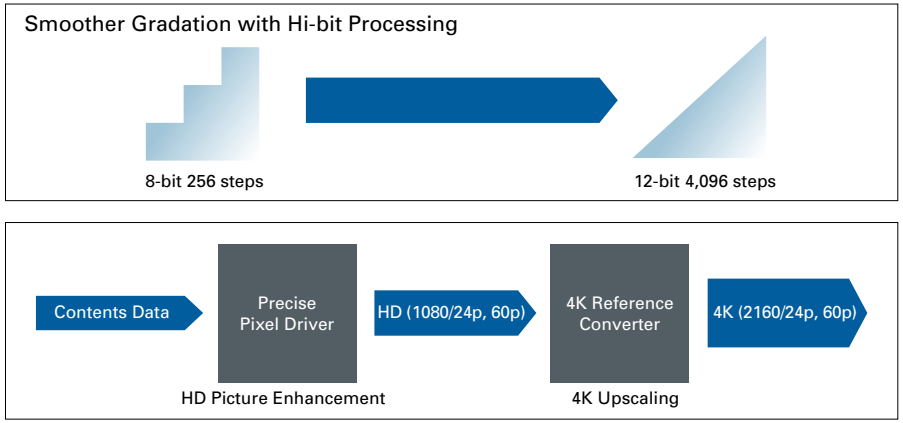


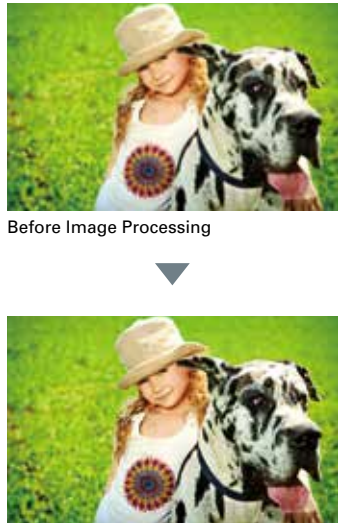
4K/60p/18 Gbps
(4:4:4 Video Signal)

4K/60p/9 Gbps
(4:2:0 Video Signal)

Newly Developed Video Processing Engines Create Ultra High Resolution and True-to-Life Images

The HD Detail Enhancer by the **Precise Pixel Driver** has integrated with the ultra-high-resolution 4K upscaler by the newly developed **4K Reference Converter**. This allows extremely natural picture expression rich with emotion, letting you appreciate the greatest extent of full HD content reproduction, which has evolved to an even higher stage.





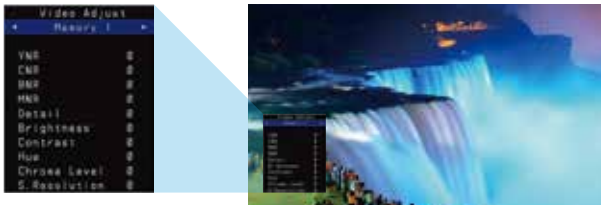
Before Image Processing

After Image Processing

For illustrative purpose only

13 Items for Various Video Adjustment

You can fine-tune the picture by changing the settings of 13 video adjustment items including video noise reduction and detail adjustments. Up to three video settings can be saved to the memory.



Beautiful and Detailed Image with Delicate Texture Expressed by the **Precise Pixel Driver**

The **Precise Pixel Driver** detects fine texture from the image and applies the appropriate compensation to increase the texture of the details, thoroughly bringing out HD video signals in full HD content. The picture enhancement processing of full HD content provides more detailed and beautiful image.

4K Reference Converter Brings Out the Full Allure of 4K Visuals

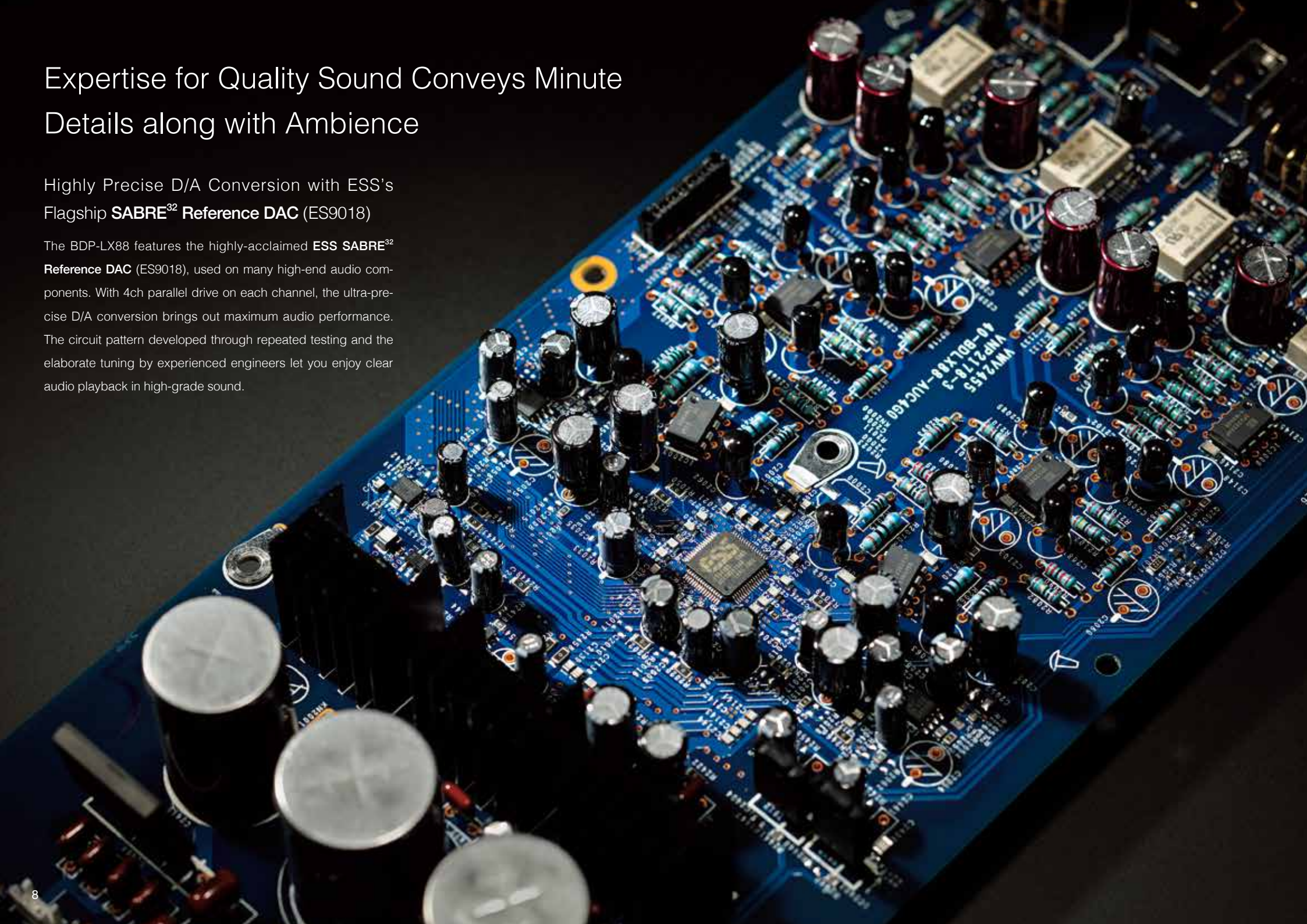
The BDP-LX88 features the newly developed **4K Reference Converter** to achieve full-resolution 4K output with the latest HDMI 2.0 specifications. The high-grade HD video generated by the **Precise Pixel Driver** is further elevated to an even more detailed, natural and realistic picture with the 4K Upscaling featuring super-resolution.

- **Preset Video Adjust Modes** offer optimal settings for the playback content and the connected display with Pioneer-original tuning.
- **Triple HD Noise Reduction** reduces noise in various types of content, from digital films to network video.

Expertise for Quality Sound Conveys Minute Details along with Ambience

Highly Precise D/A Conversion with ESS's Flagship **SABRE^{32} Reference DAC** (ES9018)

The BDP-LX88 features the highly-acclaimed **ESS SABRE^{32} Reference DAC** (ES9018), used on many high-end audio components. With 4ch parallel drive on each channel, the ultra-precise D/A conversion brings out maximum audio performance. The circuit pattern developed through repeated testing and the elaborate tuning by experienced engineers let you enjoy clear audio playback in high-grade sound.



Large-Capacity Power Supply Transformer with Excellent Instantaneous Current Performance

The BDP-LX88 comes with a large capacity transformer dedicated for analogue audio with high response. This transformer, combined with Pioneer-original select capacitors, constitute a power supply circuit capable of high instantaneous current supply. The shield case with copper plate and anti-vibration paint cuts out the unwanted electromagnetic wave generated from the high power transformer, to insulate from noise and vibration. The f-hole-shaped embossing also helps to suppress standing waves within the case, thereby achieving sound quality with both dynamic and silent features.

Double Layer Image: Copper Plating + Anti-Vibration Paint

Precision Audio Reduces Jitter in Analogue Audio Output

Precision Audio drastically eliminates jitter in the analogue audio output. At the DAC's input stage, by referring to the highly-precise clock for digital audio processing, the input signal's phase is matched, generating signals with ultra-low jitter. Then, with the high-precision master clock for DAC, the DAC performs an extremely precise D/A conversion. You can enjoy a wide-range sound with superior S/N, expressing the expanse of space and dense details.

Select Parts for Quality Audio

High-grade parts such as exclusive capacitors co-developed with an experienced parts manufacturer are used for superior audio performance. Each part has been sound tested and given elaborate sound tuning to bring out maximum performance, realising Pioneer's signature high-quality sound.

Direct Function for Pure Analogue Audio Output

By a push of a key on the remote control or the front panel, you can turn the **DIRECT function** on. The function blocks the audio/video digital signal processing which can affect analogue audio, letting you enjoy pure, high-quality sound from Hi-Res 2ch audio files or CDs.

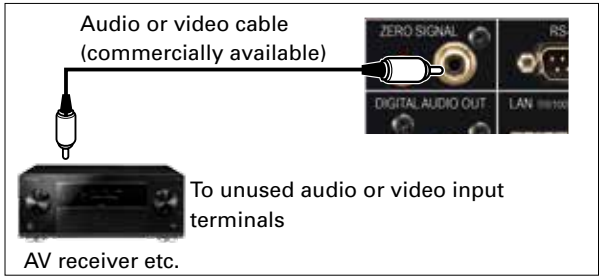
Dual HDMI for Separate Audio and Video Output

With dual HDMI output terminals, the audio and video signals can be separately assigned to the main and sub terminals for a finer signal transfer. Besides this Separate Mode, Dual Mode allows simultaneous output of audio and video signals from two HDMI terminals for enjoying on two displays, while Pure Audio Mode provides quality audio output, even when two devices are connected to the main and sub HDMI terminals.

Various Features for the Ultimate Experience

Zero Signal Terminal–Pioneer's Original Picture/Sound Tuning Feature

The **Zero Signal Terminal** only connects to the BDP-LX88's GND, and transmits neither audio nor video signals. By connecting the Zero Signal Terminal with an unused audio/video input terminal of an input device such as an AV receiver, the reference level (GND) of the audio/video signals can be matched between the two devices with restrained electric potential difference, allowing an even more precise signal transmission. You can further improve the quality of both sound and vision.



User-Friendly Self-Illuminating Remote Control

The self-illuminating remote control allows easy operation even in a darkly-lit home theatre. The keys are clearly laid out in four groups according to their functions for smooth control. You can directly operate the frequently used features such as picture/sound adjustment.

- With **Auto Power Off**, the BDP-LX88 switches to standby mode after being left uncontrolled with no signals for a certain time.
- The **Dimmer** function lets you turn off or adjust the brightness of the front panel display.

Flagship Model for Bringing Out True Splendour from Blu-ray Discs

Blu-ray 3D™ Disc Player

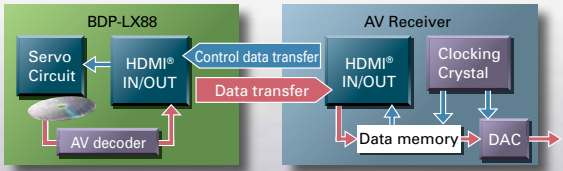
BDP-LX88

Integrate with the SC-LX88 AV Receiver for an Even More Advanced Home Theatre Environment

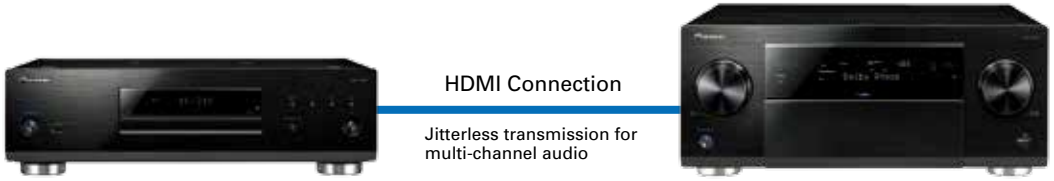
Pure Jitterless Transmission by HDMI Connection with AV Receiver

By combining the SC-LX88 AV receiver which is compatible with **PQLS** (Precision Quartz Lock System), an extremely pure jitterless signal transmission is possible via HDMI. You can enjoy quality sound from a Blu-ray Disc, as well as DVD, DVD-Audio, SACD, CD, and other audio files.

■ Jitterless Transmission by PQLS Bit-stream via HDMI



* Effective for BD, DVD, audio CD, and audio files



The Extraordinary Performance of the Direct Energy HD Amplifier Reveals the True Intent of the Creator

AV Receiver

SC-LX88

For details on the SC-LX88, please refer to Pioneer's AV receiver website.

The True Inheritor of the Flagship Model

With finely-honed qualities, the BDP-LX58 inherits the core technologies used on the flagship BDP-LX88. The 4K videos and high-resolution sound of the latest content can be reproduced in pure precision. The high-quality, heart-touching performance makes it the leading model in the class.

Highly Rigid Chassis with Low Centre of Gravity for Quality Sound

The 1.6 mm-thick chassis base is reinforced with a 3 mm-thick plate. This newly developed Double-Layered Chassis structure provides unprecedented rigidity and low centre of gravity. A 1 mm-thick steel plate is used for the bonnet, with even the air vents for heat dissipation removed to create a flat surface to ensure rigidity. Elaborately developed to cut out vibration within the chassis, the robust construction supports quality sound performance.

Vibration-Proof High Performance **Rigid & Quiet BD Drive**

The BD drive is attached to the steel plate drive base in a floating structure with vibration-dampening rubber material, while the drive base is firmly fixed to the chassis. This minimises vibration generated inside and outside the drive. Additionally, the tray features anti-vibration paint and reinforcement shafts for a more stable drive movement.

Acoustic Damper Tray Ultimately Cuts Out Operational Sound Within

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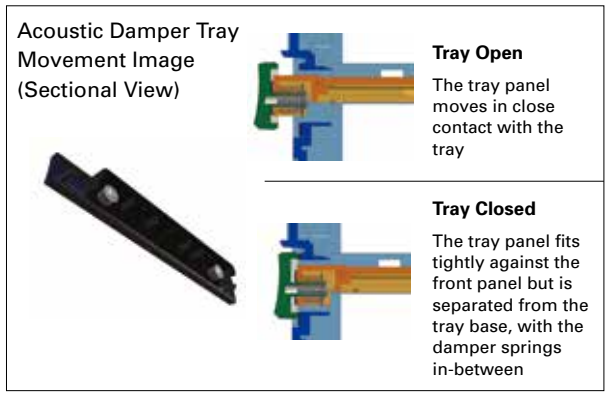

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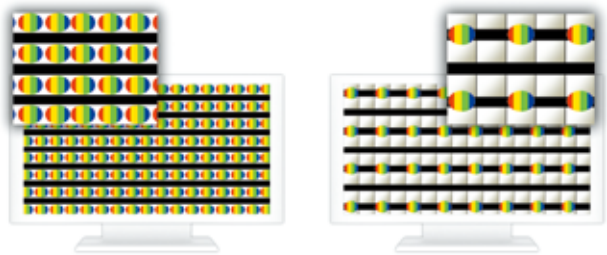

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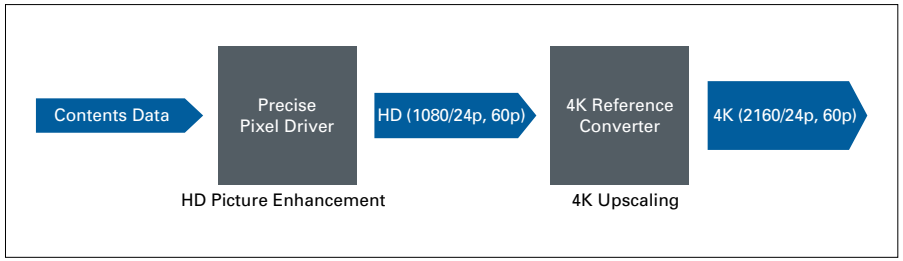

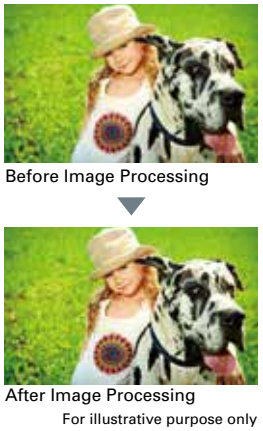

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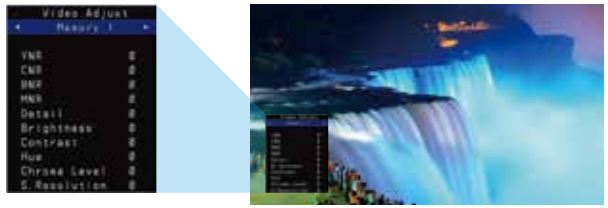

- **Preset Video Adjust Modes** offer optimal settings for the playback content and the connected display with Pioneer-original tuning.
- **Triple HD Noise Reduction** reduces noise in various types of content, from digital films to network video.

Highly-Precise D/A Conversion with ESS **SABRE[32] Ultra DAC**

The highly acclaimed ESS **SABRE[32] Ultra DAC** (ES9011) is adopted to realise extremely precise D/A conversion. You can enjoy high-grade sound with practically no jitter.

Direct Function for Pure Analogue Audio Output

By a push of a key on the remote control or the front panel, you can turn the **DIRECT function** on. The function blocks the audio/video digital signal processing which can affect analogue audio, letting you enjoy pure, high-quality sound from Hi-Res 2ch audio files or CDs.

Pure Jitterless Transmission by HDMI Connection with AV Receiver

By combining with a **PQLS** (Precision Quartz Lock System) compatible AV receiver, an extremely pure jitterless signal transmission is possible via HDMI. You can enjoy quality sound from a Blu-ray Disc, as well as DVD, DVD-Audio, SACD, CD, and other audio files.

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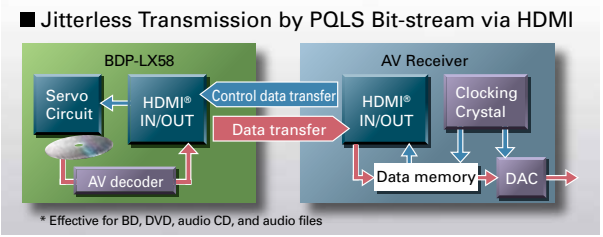

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- User-Friendly Self-Illuminating Remote Control
- With **Auto Power Off**, the BDP-LX58 switches to standby mode after being left uncontrolled with no signals for a certain time.
- The **Dimmer** function lets you turn off or adjust the brightness of the front panel display.

High-Grade Model for Quality AV Reproduction, Inheriting the Core Technologies of the BDP-LX88

Blu-ray 3D™ Disc Player

BDP-LX58

FEATURE COMPARISON & SPECIFICATIONS: BLU-RAY DISC PLAYERS

	BDP-LX88	BDP-LX58
Construction		
Three-Chamber Structure	•	
Double-Layered Chassis	•	•
Highly Rigid Centre Frames	•	
Steel Plate Top Panel and Aluminium Side Panels	•	
Steel Plate Bonnet		•
Rigid & Quiet BD Drive	•	•
Steel Shield Drive Case with Anti-Vibration Paint	•	• (Without Anti-Vibration Paint)
Steel Drive Base	•	•
Tray Shaft	•	•
Tray with Anti-Vibration Paint	•	•
Acoustic Damper Tray	•	•
Video Features		
Precise Pixel Driver	•	•
4K Reference Converter	•	•
Stream Smoother	•	•
36-bit Deep Colour	•	•
"x.v.Colour"	•	•
HDMI 1080p/24 Hz & 2160p/24 Hz Output	•	•
Video Adjust	•	•
Audio Features		
ESS SABRE^{32} DAC	SABRE^{32} Reference DAC (ES9018)	SABRE^{32} Ultra DAC (ES9011)
Large-Capacity Power Supply Transformer	•	
Acoustic Custom Capacitors and Other High-Grade Parts	•	•
Zero Signal Terminal	•	•
Precision Audio	•	
PQLS Bit-stream	•	•
Dual HDMI Output	•	•
Audio Scaler	•	
Hi-bit32	•	
Up Sampling	•	
Digital Filter	•	
Balanced Analogue Audio Output	•	
Direct Function	•	•
SACD Compatible	•	•
Sound Retriever Link	•	•
Network Features		
DLNA Certified™ (1.5)	•	•
iControlAV5 Remote App Ready	•	•
YouTube/Picasa Viewing	•	•
Various Playable Formats	• (see right table)	• (see right table)
Convenience		
Continue Mode	•	•
30 sec Skip Forward/10 sec Skip Back	•	•
Quick View (x1.5) with Audio	•	•
Auto Power Off	•	•
Firmware Update (USB/Network)	•	•
User-Friendly Remote Control	•	•
Specifications		
Power Requirements	AC 220-240 V 50/60 Hz	AC 220-240 V 50/60 Hz
Power Consumption	40 W	27 W
Power Consumption during Standby Mode (Network On)	0.5 W (6 W or less)	0.5 W (6 W or less)
Dimensions (W x H x D)	435 x 130 x 339 mm	435 x 118 x 338 mm
Weight	13.4 kg	9.9 kg

Various Playable Formats

Playable Files (Extensions)	Playable Media			File Specifications
	BD-R/RE/-R DL/-RE DL/-R LTH, DVD-R/RW/-R DL/+R/+RW/+R DL, CD-R/RW	USB Device*	Network	
MP3 (.mp3)	•	•	•	Sampling frequencies: Up to 48 kHz, Bit rate: Up to 320 kbps, Audio type: MPEG-1 Audio Layer 3
WMA** (.wma)	•	•	•	Sampling frequencies: Up to 48 kHz, Bit rate: Up to 192 kbps, Audio type: WMA version 9
AAC (.m4a)	•	•	•	Sampling frequencies: Up to 96 kHz, Bit rate: Up to 320 kbps, Audio type: MPEG4-AAC
MPEG2 AAC (.aac)	•	•	•	Sampling frequencies: Up to 48 kHz, Bit rate: Up to 320 kbps, Audio type: MPEG2-AAC
WAV (.wav)	•	•	•	Sampling frequencies: Up to 192 kHz, Quantization bitrate: 16 bit, 24 bit, Channel: 2ch/Multi (7.1 ch) (PCM codec)
FLAC (.flac)	•	•	•	Sampling frequencies: Up to 192 kHz, Quantization bitrate: 16 bit, 24 bit, Channel: 2ch/Multi (5.1 ch)
Monkey's Audio (.ape)	•	•	•	Sampling frequencies: Extra-high support up to 48 kHz, High support up to 96 kHz, Quantization bitrate: 16 bit, 24 bit, Channel: 2ch
DSD (.dff/.dsf)	•	•	•	2.8 MHz, Channel: 2ch/Multi (5.1 ch)
AIFF (.aif/.aiff)	•	•	•	Sampling frequencies: Up to 192 kHz, Quantization bitrate: 16 bit, 24 bit, Channel: 2ch (PCM codec)
ALAC (.m4a)	•	•	•	Sampling frequencies: Up to 192 kHz, Quantization bitrate: 16 bit, 24 bit, Channel: 2ch (PCM codec)
JPEG (.jpg/.jpeg)	•	•	•	Maximum resolution: 4000 x 3000 pixels
MPO (.mpo)	•	•	•	3D photo image
PNG (.png)	•	•	•	Maximum resolution: 2048 x 1024 pixel, Animated PNG files are not supported.
GIF (.gif)	•	•	•	Maximum resolution: 2048 x 1024 pixel, Animated GIF files are not supported. Rotate is not supported.
DivX (.avi/.divx/.mkv)	•	•	•	Supported versions: Through DivX® PLUS HD, Maximum resolution:Up to 1920 x 1080 (DivX® PLUS HD), Up to 1280 x 720 (MKV)
MP4 (.mp4)	•	•	•	Maximum resolution: Up to 1920 x 1080, Video: MPEG4, MPEG-4 AVC (level 4.1), Audio: AAC, MP3
WMV (.wmv)	•	•	•	Maximum resolution: Up to 1920 x 1080, Video: WMV9, WMV9AP (VC-1), Audio: WMA
AVI (.avi)	•	•	•	Maximum resolution: Up to 1920 x 1080, Video: MPEG4, Audio: MP3, AAC
3GP (.3gp)	•	•	•	Video: H.263, MPEG4, H.264, Audio: MPEG-4 AAC
FLV (.flv)	•	•	•	Video: Sorenson H.263 (FLV1), VP6 (FLV4), H.264, Audio: MP3, AAC
RMVB (.rm/.rmvb)	•	•	•	Maximum resolution: Up to 1 280 x 720, Video: RealVideo®, Audio: RealAudio®, AAC

* Supports FAT16, FAT32 and NTFS file systems.

** WMA Pro, Lossless and Voice are not supported.

• Depending on the file structure, the server capacity and the network environment, some files may not play back even if listed above.

• Files protected by DRM (Digital Rights Management) cannot be played (except DivX VOD files).

• AVCHD contents cannot be played via LAN.