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SACD PLAYER & D/A CONVERTER "PD-70AE"				
REFERENCE GUIDE				

## **Audio Features**

- Works as a Premium D/A Converter with Digital Audio Inputs
- Analogue Balanced Output (XLR) and Machined RCA Terminal
- Full Balanced Circuitry
- Analogue/Digital Discrete Power Supply Circuitry
- Custom Electrolytic Capacitors for High-Quality Audio
- Lock Range Adjust Function for Reducing Jitter by Adjusting Lock Range Accuracy
- Digital Filter with 3 Modes (SHARP/SLOW/SHORT)

## Construction

- Aluminium Die-Cast Tray
- Shielded CD Drive Case with Honeycomb Mechanism Cover and Anti-Vibration Paint

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- Aluminium Side Panels
- Rigid Under Base
- Anti-Standing Wave Insulators
- AC Inlet Type Thick Cables

## **Playable Discs & Formats**

## Convenience

- Operation with Smartphones via Connected Components
- Album & Song Title Display

## **Specifications**

### Works as a Premium D/A Converter with Digital Audio Inputs

The PD-70AE is equipped with optical and coaxial digital input terminals, letting you connect other digital players for quality audio playback using the SACD player's high-grade D/A converter. The carefully designed buildquality brings out the full potential of the high-performance ESS DAC, letting you enjoy solid sound full of rich details from the connected component.



## Analogue Balanced Output (XLR) and Machined RCA Terminal

Selected gold-plated terminals are used for analogue balanced output (XLR3), achieving high-resolution sound by quality signal transmission. Machined and gold-plated RCA terminals are used for the analogue unbalanced output. The analogue unbalanced output can be turned on/off. By turning it off, noise from the unbalanced output can be reduced.



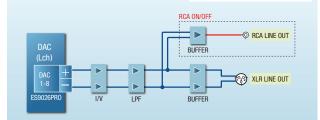
## **Full Balanced Circuitry**

From D/A conversion to signal output, the whole analogue process is constructed with a full-balanced circuitry featuring independent left and right channels. This allows high-grade audio transmission by cutting out the interference from disturbance noise. When connected to an amplifier with balanced output, the common impedance in transmission can be minimised, resulting in enhanced channel separation.



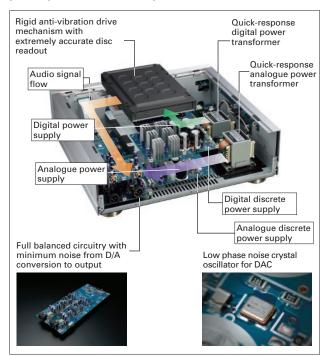
Balanced transmission

**Balanced Circuitry Image (Lch)** 



### Analogue/Digital Discrete Power Supply Circuitry

The digital and analogue circuitries each have discrete power supply. The PD-70AE is designed with the shortest and the most optimal power supply stage as well as audio signal path, to provide pure and rich sound reproduction.



### **Custom Electrolytic Capacitors for High-Quality Audio**

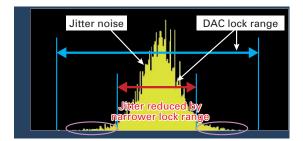
A custom electrolytic capacitor for high-grade audio has been selected through repeated trials in listening to SACD and CD sound. The capacitor brings out the best from audio discs, letting you enjoy stable performance of powerful and dynamic sound.



## Lock Range Adjust Function for Reducing Jitter by Adjusting Lock Range Accuracy

The function allows you to make fine adjustments in the DAC's lock range to reduce jitter in the input signal. Adjustments can be made in six steps, with the default set at Range 6. Ranges 1 to 3 are intended for fine-tuning by expert users.

\* Narrowing the range may release the lock, and cause audio cuts and noise.



## Digital Filter with 3 Modes (SHARP/SLOW/SHORT)

The digital filter lets you enjoy three types of sound characteristics by switching the DAC—"Slow" for soft and warm, "Sharp" for solid and tight, and "Short" for quick and forward sound.

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## **Aluminium Die-Cast Tray**

The disc tray is made of die-cast aluminium, which enhances the tray's rigidity and helps to further stabilize the drive operation.



## Shielded CD Drive Case with Honeycomb Mechanism Cover and Anti-Vibration Paint

The CD drive is housed in a shielded case coated with antivibration paint. The honeycomb mechanism cover reinforces the structure and suppresses disc rotation noise. The drive base is securely fixed by an aluminium frame, and placed through a floating structure using damping pulp material. This helps to minimise vibration within and outside the drive.



## **Aluminium Side Panels**

The brushed hairline aluminium side panels give a touch of

elegance that goes with any room décor, while also providing rigidity for a clear and stable audio performance.



## **Rigid Under Base**

The PD-70AE adopts the Rigid Under Base, Pioneer's high-quality sound technology for 2-channel components, which works to eliminate external vibrations, providing steady bass reproduction.



### **Anti-Standing Wave Insulators**

The Anti-Standing Wave Insulator has been developed through repeated listening tests, featuring a special form with no parallel sides inside to prevent cavity resonance. This makes the sound localisation, tone, and scale clearer, while also enhancing the response to quick sound.



## **AC Inlet Type Thick Cable**

A thick AC inlet type power cable is included to provide superior sound.



## **Playable Discs & Formats**

The PD-70AE is compatible with WAV, FLAC, AIFF, ALAC, MP3, WMA, AAC, and DSD audio files, providing audio playback from disc media such as SACD, CD, CD-R, CD-RW, DVD-R, DVD-RW, DVD+R, and DVD+RW.

### Playable Formats (CD-R/RW, DVD-R/RW, DVD+R/RW)

Format			
WAV	Sampling Frequency	32/44.1/48/88.2/96/176.4/192 kHz	
	Quantization Bit Rate	8 bit/16 bit/24 bit	
FLAC -	Sampling Frequency	32/44.1/48/88.2/96/176.4/192 kHz	
	Quantization Bit Rate	8 bit/16 bit/24 bit	
AIFF -	Sampling Frequency	32/44.1/48/88.2/96/176.4/192 kHz	
	Quantization Bit Rate	8 bit/16 bit/24 bit	
Apple Lossless –	Sampling Frequency	32/44.1/48/88.2/96/176.4/192 kHz	
	Quantization Bit Rate	8 bit/16 bit/24 bit	
MP3	Sampling Frequency	32/44.1/48 kHz	
	Quantization Bit Rate	8 - 320 kbps	
WMA	Sampling Frequency	32/44.1/48 kHz	
AAC	Sampling Frequency	32/44.1/48/88.2/96 kHz	
DSD -	Sampling Frequency	2.8224/5.6448 MHz	
	Quantization Bit Rate	1 bit	

## **Operation with Smartphones via Connected Components**

By connecting the PD-70AE with Pioneer's network audio player via the control terminals, you can operate the SACD player's basic functions using the Pioneer Remote App on your smartphone. You can also connect the PD-70AE to a Pioneer amplifier or receiver via the control terminals to



operate both components using just one remote control.

## **Album & Song Title Display**

The front panel display is compatible with text information contained in the playing disc, letting you check the album and song titles while listening to Hi-Res Audio files.



## **SACD Player Specifications**

	PD-70AE	
Frequency Response		
CD	2 Hz-20 kHz	
SACD	2 Hz-50 kHz (-3 dB)	
S/N Ratio		
CD/SACD	116 dB or more	
THD		
CD/SACD	0.002 % or less	
Power Requirement	46 W	
Power Consumption during Standby	0.3 W	
Dimensions (W x H x D)	435 x 142 x 413 mm	
Weight	18.5 kg	

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# **Product Sheet**

PD-70AE(S)MGP



## SACD Player & D/A Converter



Introducing the flagship PD-70AE SACD player, a compilation of Pioneer's know-how and expertise on disc playback, represented by the original technologies on pickup control and quiet drive. Featuring dual ESS DACs, XLR terminals with full-balanced circuitry, and discreet analogue/digital power supply stage, the PD-70AE brings out the best from your favourite SACD or CD album, letting you experience heart-touching sound with the high-fidelity reproduction.

## AUDIO FEATURES

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- > Works as a Premium D/A Converter with Digital Audio Inputs
  > Selected XLR Analogue Terminals (Gold Plated) with Full-
- Balanced Circuitry
- > On/Off Switching Function for RCA Output
- > Analogue/Digital Discrete Power Supply Circuitry
- > Custom Electrolytic Capacitors for High-Quality Audio
- > Lock Range Adjust Function for Reducing Jitter by Adjusting
- Lock Range AccuracyDigital Filter with 3 Modes (SHARP/SLOW/SHORT)

## CONSTRUCTION

- > Aluminium Die-Cast Tray
- > Shielded CD Drive Case with Anti-Vibration Paint
- > Honeycomb Mechanism Cover
- > Aluminium Side Panels
- > Rigid Under Base
- > Anti-Standing Wave Insulators
- > AC Inlet Type Thick Cables

## PLAYBACK MEDIA & FORMATS

- > SACD, CD, CD-R/RW, DVD-R/RW, DVD+R/RW
- > WAV/FLAC/AIFF/ALAC/MP3/WMA/AAC/DSD

## TERMINALS

- > Analogue Output (1 Pair Gold-Plated RCA, 1 Pair Gold-Plated XLR)
- > Digital Coaxial Output (Gold-Plated)

- > Digital Optical Output
- > Digital Coaxial Input (Gold-Plated)
- > Digital Optical Input
- > Control In/Out
- > AC Inlet (Large type)

## SPECIFICATIONS

- > S/N Ratio: 116 dB or more
- > THD: 0.0020 % or less
- > Frequency Response: SACD 2 Hz-50 kHz (-3 dB), CD 2 Hz-20 kHz
- > Power Requirements: AC 220-230 V, 50/60 Hz
- > Power Consumption/Standby: 46 W/0.3 W
- > Dimensions (W x H x D): 435 x 142 x 413 mm
- > Weight: 18.5 kg



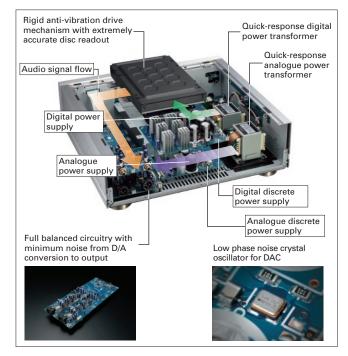
### Works as a Premium D/A Converter with Digital Audio Inputs

In addition to being a SACD/CD player, the PD-70AE also functions as a D/A converter for delivering superb sound. The carefully designed build-quality brings out the full potential of the high-performance ESS DAC, letting you enjoy solid sound full of rich details from the connected component.



### Analogue/Digital Discrete Power Supply Circuitry

The digital and analogue circuitries each have discrete power supply. The PD-70AE is designed with the shortest and the most optimal power supply stage as well as audio signal path, to provide pure and rich sound reproduction.



### Analogue Balanced Output (XLR) and Machined RCA Terminal

Selected terminals are used for analogue balanced output (XLR3), achieving high-resolution sound by quality signal transmission. Machined and goldplated RCA terminals are used for the analogue unbalanced output. The analogue unbalanced output can be turned on/off. By turning it off, noise from the unbalanced output can be reduced.



Hi-Res

## SABRE DAC





structure using damping pulp material. This helps to minimise vibration within and outside the drive.

Shielded CD Drive Case with Anti-Vibration Paint

### Aluminium Disc Tray

The disc tray is made of die-cast aluminium, which enhances the tray's rigidity and helps to further stabilize the drive operation.

The CD drive is housed in a shielded case with

paint. The drive base is securely fixed by an aluminium frame, and placed through a floating

honeycomb mechanism cover and anti-vibration

### **Full Balanced Circuitry**

From D/A conversion to signal output, the whole analogue process is constructed with a full-balanced circuitry featuring independent left and right channels. This allows highgrade audio transmission by cutting out the interference from disturbance noise. When connected to an amplifier with balanced output. the common impedance in transmission can







be minimised, resulting in enhanced channel separation. The on/off switching function for RCA output is also available, offering high signal to noise ratio and high separation for XLR output.

### **Custom Electrolytic Capacitors for High-Quality Audio**

A custom electrolytic capacitor for high-grade audio has been selected through repeated trials in listening to SACD and CD sound. The capacitor brings out the best from audio discs, letting you enjoy stable performance of powerful and dynamic sound.

## Lock Range Adjust Function

The function allows you to make fine adjustments in the DAC's lock range to reduce jitter in the input signal. Adjustments can be made in six steps, with the default set at Range 6. Ranges 1 to 3 are intended for fine-tuning by expert users, with increased frequency of audio cuts.

### **Digital Filter**

The digital filter lets you enjoy three types of sound characteristics by switching the DAC—"Slow" for soft and warm, "Sharp" for solid and tight, and "Short" for quick and forward sound.

### **Rigid Under Base Construction**

The PD-70AE adopts the Rigid Under Base, Pioneer's high-quality sound technology for 2-channel components, which works to eliminate external vibrations, providing steady bass reproduction.

### Anti-Standing Wave Insulator

The Anti-Standing Wave Insulator has been developed through repeated listening tests, featuring a special form with no parallel sides inside to prevent cavity resonance. This makes the sound localization, tone, and scale clearer. while also enhancing the response to quick sound.





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