

LUXMAN

USB D/A CONVERTER
DA-07X



Giving new life to digital sources

A new command center, opening up your listening experience to the future

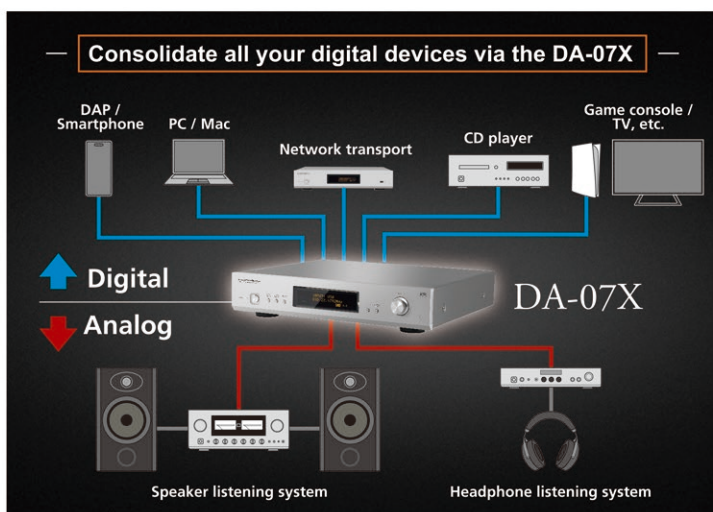
As high-resolution music distribution and high-quality audio streaming services become more commonplace, LUXMAN unveils our new USB equipped D/A converter, the DA-07X, fully compatible with today's diversifying digital music ecosystem.

In order to competently handle current digital sources, LUXMAN has combined cutting-edge digital circuitry with our advanced analog audio technology know how.

The DA-07X is a core component that breathes musicality and new life into digital audio reproduction and serves as a command center for modern audio systems as we move further into a new era.

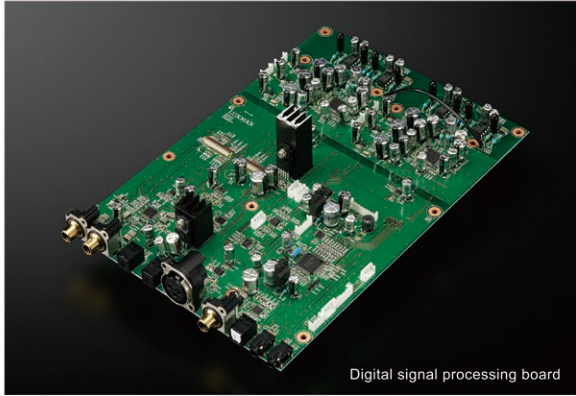


Core components that match your modern audio environment



More than 40 years have passed since the CD (compact disc) was introduced in 1982, and yet the format still remains a standard music distribution medium. Nowadays there are many high-quality streaming services that are attracting attention as next generation virtual sources that surpass the audio quality and convenience of CDs. As these modern digital sources become more diverse, D/A converters are expected to become fundamental universal audio components, as important as amplifiers and speakers for audio systems that connect the past, present and future. The DA-07X is a new D/A converter from LUXMAN, realized by removing the disc playback functions from our highly acclaimed D-07X high-performance SACD/CD player and thoroughly brushing up functionality, connectivity and sound quality performance as a standalone DAC device. This model accepts the digital outputs of all current audio devices, from network transports such as our NT-07, PCs and Macs, smartphones, TVs, game consoles, and even existing CD players, and maximizes the sound quality of audio signals with advanced digital signal processing systems and LUXMAN's highly respected analog audio circuit technology. The DA-07X is a core component for a new era that perfectly matches modern audio environments centered on digital sound sources, allowing users to enjoy versatile music playback that suits their listening style.

The latest digital technology and carefully designed analog circuitry combine to realize the ideal

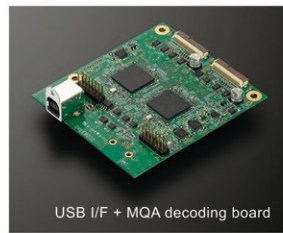


Digital signal processing board

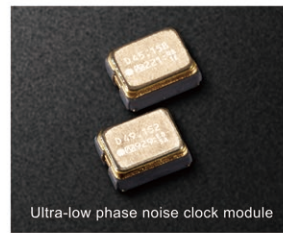
The DA-07X brings together excellent high-end digital circuitry, inherited from our high-performance D-07X SACD/CD player, and an advanced analog output system. LUXMAN's long-standing knowledge gained in amplifier development meets our newest digital technologies in order to realize expressive musicality that makes use of the abundant information contained in digital audio data, supporting the highest specifications of PCM and DSD formats. The DAC block, which is the heart of the digital circuitry, relies on top-of-the-range BD34301EKV DAC chips from ROHM's "MUS-IC" series in a dual mono configuration. The USB input supports rates of up to 192kHz/24bit for PCM data and 2.8MHz for DSD (DoP). All inputs support full decoding of the MQA high-quality audio format. A new bypass function has also been included, making use of built-in digital filtering. The reference clocking system has two ultra-low phase noise clock modules with high precision and low jitter, reducing noise near the oscillation frequency to a minimum. To achieve even lower jitter, asynchronous communication by a dedicated DSP is used for the USB input and a built-in, high precision DAIR clock is used for S/PDIF signals. By adopting low jitter functions optimized for each input, we have surpassed our expectations of high-quality digital signal transmission. In addition, as a function that allows the listener to select a preferred sound reproduction standard, two digital filter modes are built in for PCM data (MQA bypass) and two analog filter modes for DSD data. The analog output stage, which determines the final grade of the component, has outstanding current/voltage conversion specifications, receiving the differential output of each BD34301EKV DAC chip operating in mono mode, just like LUXMAN's high-end digital players, and high-quality buffer circuitry and fully balanced output architecture, further improving output audio signal impedance. Hence, the unit powerfully drives next-stage components, such as an integrated amplifier or control amplifier. In addition, we have adhered to a design philosophy that is thoroughly focused on every detail, such as a non-angled PCB tracing pattern that ensures smooth signal transmission, internal wiring with OFC cable, a shielded chassis structure that blocks digital noise and newly adopted silent relays.



Analog amplifier board



USB I/F + MQA decoding board



Ultra-low phase noise clock module



DAC IC BD34301EKV



Large capacity power supplies placed close to each circuit

The DA-07X features LUXMAN's traditional, highly regulated power supplies to provide stable energy, with three separate OI core type transformers, regulation systems and bespoke filter capacitors for individual block. Such a high-quality power supply delivers powerful musical expression and a tranquil playback space.



Highly rigid chassis and robust insulator feet

The slim chassis matches well with our network transport NT-07, featuring an extremely thick bottom chassis made of two steel plates (2mm+1.6mm thick), achieving high rigidity and a low center gravity. The cast iron insulator feet have density gradient built in, isolating the electronics and delicate music signal transmission from unnecessary vibrations.

High-definition OLED display

The DA-07X's front panel is centered on a large, high-definition OLED display with a four-stage dimmer (with automatic shut-off function) that is easy to see from the listening position, displaying various information about signals and devices, such as input switching position, sampling frequency and bit depth. The bottom row also clearly displays filter and MQA status.



Abundant input/output terminals to suit a variety of systems

The DA-07X is equipped with a variety of digital inputs including USB, two coaxial systems, two optical systems and AES/E-BU (XLR) and also has wide-pitch RCA and XLR analog output terminals. A digital output off function that shuts down unnecessary signal paths to conserve processing bandwidth and a DD converter function that allows digital signals to be bussed through the unit unprocessed. There is also an output phase switching function (switchable on the front panel) for connections to particular next stage components.



Stable AC inlet

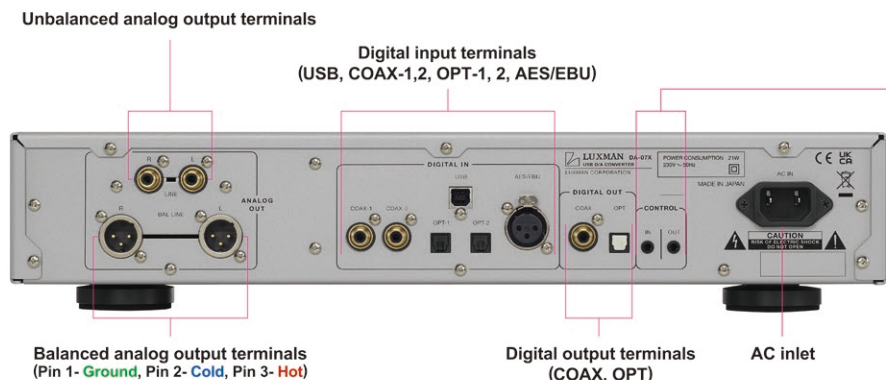
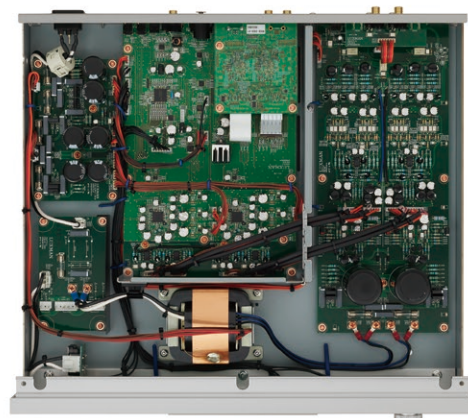
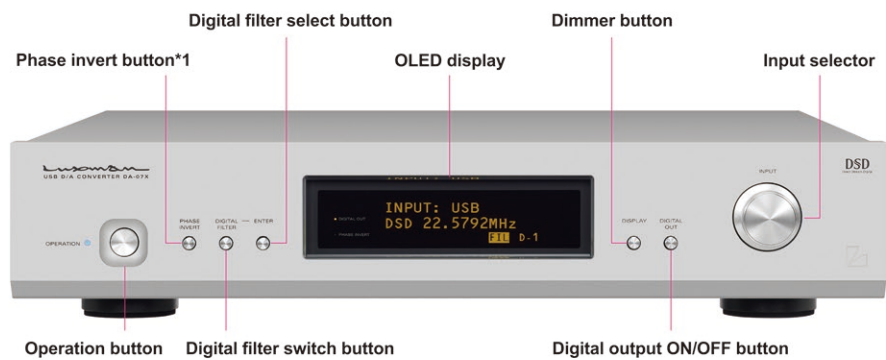
The AC inlet's structure has been improved to support the weight of heavy power cables by reversing the mounting, suppressing any movement of the power cable while maintaining a stable grip.



LUXMAN's original playback software

LUXMAN has also developed our own high-quality "LUXMAN Audio Player" music playback software for Windows/Mac, which supports four modes of Bulk Pet transfer that optimize the processor load between the source and the D-07X for improved transparency.

DA-07X USB D/A CONVERTER



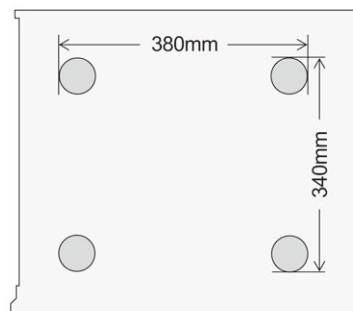
Internal configuration

Control input / output terminal
Remote control operations can be sent to a compatible LUXMAN product connected via commercially available 3.5mm monoaural mini jack cable.

SPECIFICATIONS

Type	2 channel USB D/A converter
Supported sampling frequencies	USB input (PCM) : 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz, 352.8 kHz, 384 kHz, 705.6 kHz, 768 kHz (16, 24, 32-bit) USB input (DSD) : 2.8 MHz, 5.6 MHz, 11.2 MHz, 22.5 MHz (1-bit) Coaxial / Optical / AES/EBU input : 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz (16, 20, 24-bit)
Analog output voltage / impedance	Unbalanced : 2.4 V / 300 Ω, Balanced : 2.4 V / 600 Ω DSD format : 2.3 V
Frequency response	5 Hz to 20 kHz (+0, -0.4 dB), 5 Hz to 47 kHz (+0, -3.0 dB)

Total harmonic distortion	Unbalanced : 0.001 %, Balanced : 0.001 %
S/N ratio (IHF-A)	124 dB
D/A converter	ROHM BD34301EKV (monaural mode) x 2
Power supply	230 V~(50 Hz) / 115 V~ (60 Hz)
Power consumption	21 W
External dimensions	440(W) x 92(H) x 402(D) mm front side knob of 14 mm and rear side terminal of 8 mm included in depth
Net weight	12.8 kg (main unit)
Accessories	Power cable



Insulator position / dimensions

*1 Press the phase inverter button to make the balanced input terminals pin No. 2 to change to HOT, and No.3 to COLD.

* LUXMAN Audio Player (Windows 10 and macOS 10.15 and driver software for Windows can be downloaded from the LUXMAN website.

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* Bulk Pet is a registered trademark of Interface Co., Ltd.

Create an advanced network audio environment in combination with your D/A converter

SPECIFICATIONS

Digital input	Network : 1000 Base-T (gigabit · ethernet) HDMI : PCM 2 channel, 4K pass-through ARC (Audio Return Channel) supported
Digital output	USB (USB2.0), OPT, COAX HDMI : PCM 2 channel, 4K pass-through ARC (Audio Return Channel) supported
Storage connection	USB x 2 terminals (USB2.0, single partition, FAT32, exFAT, NTFS)
Supported sampling frequencies	USB : PCM 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz, 352.8 kHz, 384 kHz, 705.6 kHz, 768 kHz (16, 24, 32-bit) DSD : 2.8 MHz, 5.6 MHz, 11.2 MHz, 22.5 MHz (1-bit) COAX / OPT / HDMI (ARC) : 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz (16, 24-bit)
Corresponding format formats	WAV, AIFF, FLAC, ALAC, MQA, MP3, AAC, DSD (DSF, DFF)
Streaming protocols	UPnP (OpenHome), TIDAL Connect, Spotify Connect, Roon Ready (soon to be available)
Power supply	230 V~(50 Hz) / 115 V~ (60 Hz)
Power consumption	27 W (HDMI in/output when connected to USB storage) 5.9 W (HDMI in/output when USB storage is disconnected)
Dimensions	440(W) x 92(H) x 398(D) mm front side display of 3 mm and rear side terminal of 13 mm included in depth
Net weight	10.3 kg (main unit)
Accessories	Remote control (RC-30), Power cable



NETWORK TRANSPORT
NT-07

LUXMAN

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Safety Cautions

To ensure correct use of this product, read the "Owner's Manual" prior to use. Failure to follow all safeguards can result in fire, electric shock, or other accidents.