

# LUXMAN

USB D/A CONVERTER  
**DA-150**



Luxman  
USB D/A CONVERTER DA-150

OPERATION



USB OPT COAX



SAMPLING RATE / KHz

INPUT



FILTER/DIMMER



VOLUME



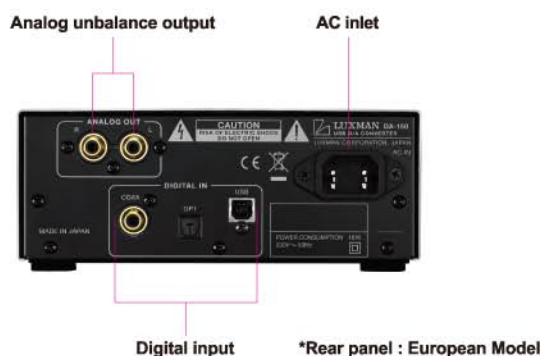
LECUA

DSD  
Direct Stream Digital

PHONES



## Desktop revolution – a new definition of D/A converter



The DA-150 is a state of the art, compact, USB D/A converter built upon the same principle as its predecessor, the DA-100, that is to construct a simple PC audio environment to offer high quality sound in a small footprint. Desktop usability and high sound quality co-exist perfectly within the design of the DA-150 with features such as compatibility with USBs inputting PCM 192 kHz/32 bits and DSD 5.64 MHz (like the upper model DA-250), a headphone amplifier circuit with remarkably improved drive force and the addition of the LECUA\* computerized attenuator as standard. As a digital interface to connect with various devices to reproduce high-resolution sound sources, the DA-150 raises the benchmark for compact D/A converters.

\*LECUA is an abbreviation of Luxman Electric Controlled Ultimate Attenuator.

### Digital Circuit

For the DAC chip, a Texas Instruments Incorporated 32-bit compatible PCM1795 is used. The USB input is capable of supporting up to 192kHz/32-bit PCM data as well as DSD data (2.82 M, 5.64MHz). The S/PDIF input supports up to 192kHz/24-bit PCM signals. The digital inputs consist of a coaxial line and an optical line plus a USB input to connect to digital outputs such as a CD player or high resolution portable audio player. A selectable 32-bit digital filter offers 2 options for PCM whilst an analog selectable FIR filter offers 2 types of DSD. Low phase noise clock modules with high precision and low jitter are fitted independently for the 44.1k and 48kHz channels respectively. This feature remarkably reduces the jitter for the USB input through asynchronous communication for the S/PDIF by embedding a DAIR high-precision clock.



DAC chip PCM1795

### Analog circuit

The sound quality and performance of the DAC+headphone amplifier composition of the DA-150 has been substantially improved by condensing all the functions into a B5 size footprint. The LECUA computerized attenuator – which has never been used before in this class – enables the sound volume to be adjusted with negligible sound deterioration as well as minimizing the level deviation at low sound volumes. LECUA allows the user to easily achieve high precision, smooth sound volume adjustment. A discrete buffer circuit is added to the headphone output in order to achieve the optimal drive force for high-end headphones. Sound quality is also the priority of the power supply unit design, where a high inertia power supply environment has been created using a power transformer with original specifications and regulators with independent large capacity block capacitors for each circuit.



Power transformer

### Additional features

A highly visible 3-digit, 7 segment LED with a dimmer function to display the status is mounted on the stylish blaster white finish front panel. Placing the input selector, filter/dimmer selection switch and the power switch on the front panel improves further the convenience of the DA-150. The USB input terminal, coaxial terminal and optical terminal are positioned on the rear panel of the DA-150 for stability and safety. The outputs are 18mm pitch RCA gold plated terminals to support high quality line cable with large plugs so that various audio devices can be connected securely. LUXMAN's original high sound quality playback software, 'LUXMAN Audio Player' can also be used with the DA-150 supporting many types of file formats such as FLAC, ALAC, WAV and AIFF to enable simple, intuitive operation.



7-segment LED

## SPECIFICATIONS

Format	2-channel D/A converter
Supported sampling frequencies	USB input (PCM) : 32k, 44.1k, 48k, 88.2k, 96k, 176.4k, 192kHz(16, 24, 32bits) USB input (DSD) : 2.82M, 5.64MHz (1bit) COAX/OPT input : 32k, 44.1k, 48k, 88.2k, 96k, 176.4k, 192kHz (16, 20, 24bits)
Digital input	USB x 1, COAX x 1, OPT x 1
Analog output	Unbalance x 1 (Output level FIX), Headphone x 1
Line output voltage/impedance	unbalance : 2.5V/300Ω
Headphone output	130mW + 130mW(600Ω) 400mW + 400mW(32Ω), 200mW + 200mW(16Ω)
Frequency response	2Hz to 50kHz (+0, -3.0dB)
Total harmonic distortion	0.0012%
S/N ratio (IHF-A)	120dB
Power supply	230V~(50Hz) / 115V~(60Hz)
Power consumption	16W
Dimensions	182(W) x 73(H) x 277(D) mm front side knob of 12mm and rear side terminal of 8mm included in depth
Net weight	3.3kg(main unit)
Accessories	Power cable



Internal configuration

\* LUXMAN Audio player (corresponding to Windows 10 / Mac OSX v10/11) and driver software for Windows can be downloaded from LUXMAN homepage.

\* Windows is a registered trademark or a trademark of Microsoft Corporation in the United States and/or other countries.

\* Mac and Mac OS are trademarks of Apple Inc., registered in the U.S. and other countries. \* DSD is a registered trademark.

\* The described company names and product names are trademarks or registered trademarks of each company.

\* Specifications and appearance are subject to change without notice. \* The product listed in this catalog does not include line cables. Please purchase cables separately.

# 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.

