

FRONT & BACK PANEL

FRONT PANEL

1. Input - You can choose input source by pushing this button (USB, D1, D2, Bluetooth)
2. Output - You can choose output device by pushing this button (Headphone, Line Out, Variable Line Out and Balanced Out)
3. Volume - To control the volume.
4. Phones - To connect headphone jack.

BACK PANEL

1. Var Out - Line out to connect with other power amplifier. Output volume can be controlled by DAC.
2. Out - Line out to connect with other power amplifier. Output volume can't be controlled by DAC.
3. Balanced Output - You can get balanced output with XLR connector.
4. D1 - Connect with the equipment which has coaxial digital audio output. Can be connected with digital RCA cable. Audio RCA cable shouldn't be used.
5. D2 - This Input is for connection with equipment which has optical digital audio output.
6. USB - This USB Input can be connected to PC directly. Please do not use external USB hub but connect product to USB port of PC directly.
7. DC 12V - Please use the adapter enclosed in the packing box only.

TECHNICAL SPECIFICATION

DA Converter:

ESS TECHNOLOGY, ES9018K2M,
32Bit/384KHz PCM, DSD64, DSD128

Digital Input Sampling Frequency:

USB: 44.1KHz/ 48KHz/ 88.2KHz/
96KHz/ 176.4KHz/ 192KHz/
352.8KHz/ 384KHz/ DSD64/
DSD128

Digital Input: 20KHz to 216KHz
Frequency Response: DC to 20KHz

THD at 1KHz:

0.001% by Design

S/N Ratio:

>120dB by Design (A Weighting)

Jitter:

Patented Time Domain Jitter-
Eliminator

Line Out Level:

2.7V RMS max (1KHz 0dB)

Bluetooth:

4.0 CSR APT-X

Headphone Output Level:

Max 3.0V rms in 600 Ohm or
0.5V rms in 32 Ohm (Z out=25 Ohm)

Power Consumption:

< 10 Watts

* Technical specification could be
changed without prior notice.

WARRANTY CARD

Product Name: DA Converter
Model Name: Lead Audio NF DAC 384
Purchase Date:
Dealer:

- Warranty period of this product is two years.
- This product was manufactured under severe quality control and inspection process.
- This product passed EMC test and certification for home use device.
- The warranty is only valid if, when warranty service is required, the warranty card is fully and properly completed with the original invoice or receipt or confirmation, and the serial number on the product has not been defaced.
- Lead Audio's obligations are limited to the repair or, at its discretion, replacement of the product or the defective part.
- The products should be delivered to authorized Lead Audio dealers or authorized service centers by purchaser when repair or replacement is required.
- Warranty repairs must be carried out by authorized Lead Audio dealers or authorized service centers.
- No re-imbursement will be made for repairs carried out by non Lead Audio dealers and, any such repair work and damage to the products caused by such repair work will not be covered by this warranty.
- This product is not considered to be defective in materials nor workmanship by reason that it requires adaptation in order to conform to national or local technical or safety standards in force in any Country other than the one for which the product was originally designed and manufactured.
- The Warranty period starts from the invoice date or 2 months after production date which is recorded in central system of Lead Audio if purchaser can't provide a valid invoice.

LEAD AUDIO

www.lead-audio.com



NORTHERN FIDELITY

Digital to Analog Converter
Model : Lead Audio NF DAC 384

ENGLISH MANUAL
www.lead-audio.com

MESSAGE FROM THE MANUFACTURER

Thank you for purchasing NF DAC-384 of Lead Audio. NF DAC-384 is the fourth generation of DAC(Digital to Analog Converter) plus Headphone Amp introduced by Lead Audio with 32 Bit and 384 KHz of Sample Rate. NF DAC-384 succeeded the design fundamentals of LA-100, LA-120 and NF DAC-192 but upgraded its features and quality for the Lead Audio customers who have always encouraged, urged and waited for the next generation of DAC. However, it is not only for the users who already know the beauty of Lead Audio's sound but also for the new users who are ready to explore the new tone and timbre. Please take a look at the main features as follows and then enjoy original sound with help of NF DAC-384.

MAIN FEATURES

- High performance of Audio components used for expensive Hifi instruments. ES9018K2M DA Converter from ESS Technology and Wima Condenser
- 1 ppm of TCXO used for high precision of broadcasting equipment. NF DAC realizes Low Noise Master Clock with top-class of 1 ppm TCXO adaptation which has been used only for broadcasting equipments and uses double multiplication of frequency to secure 50% of Duty of Master clock. It fundamentally removes Jitter and Noise from the Clock so that the reproduction of the original sound becomes more substantial.
- Adaptation of special noise reduction technology know-how with 2 steps buffering clock.
- Adaptation of Sample rate converting technology used for top-class of Hifi Audio to remove Jitter noise which is fatal to sound quality.
- Adaptation of DC Coupled circuit for the high quality of sound which fundamentally eliminates the degradation of the sound quality from the usage of capacitor.

CONNECTION AND OPERATION

First, please connect the provided adapter with DC input jack on the back panel.

□ CONNECT WITH PC

Switch ON the power on the front panel after connecting PC and NF DAC-384 with USB cable enclosed in the packing box. Please don't use USB Hub but connect PC and NF directly to get the best sound quality. Operate Input key on the front panel and confirm USB LED is ON. To make operation by PC exactly, X-MOS driver should be installed. Please install the driver following the guidance appeared on the PC screen.

□ CONNECT WITH CD PLAYER

Connect Output socket (Coax Out / Optical Out) of a CD player with the matched socket (D1 or D2) on the back panel of NF DAC-384 with the appropriate cable. Operate Input key on the front panel and confirm D1 or D2 LED is ON. (Cable is not enclosed. Please contact a dealer to purchase appropriate cable suit to your favorite)

□ CONNECT WITH DVD PLAYER

Connect Output socket (Coax Out / Optical Out) of a DVD player with the matched socket (D1 or D2) on the back panel of NF DAC-384 with the appropriate cable. Operate Input key on the front panel and confirm D1 or D2 LED is ON. (Cable is not enclosed. Please contact a dealer to purchase appropriate cable suit to your favorite)

Please set the Output of DVD Player with 2 Channel PCM. NF DAC-384 doesn't support Dolby Digital 5.1 or DTS.

□ CONNECT WITH AMPLIFIER

Connect Var-out or Out on the back panel of NF DAC with RCA Input (Line-in) of Amplifier with the appropriate cable. Operate Output key on the front panel and confirm Var-out or Out LED is ON. (Cable is not enclosed. Please contact a dealer to purchase appropriate cable suit

to your favorite).

Var-out is a variable output and the Volume control is available by the Volume knob of the front panel and by the Remote controller. Out is a fixed output and the Volume control is available by Remote controller.

□ CONNECT WITH HEADPHONE

Connect the Headphone terminal to the phone jack of front panel. Operate Output key on the front panel and confirm Phone LED is ON.

□ CONNECT WITH BLUETOOTH

Search for DAC-384 and execute pairing. Due to bandwidth limitation of Bluetooth 4.0, supported sampling frequency is up to 16bit/44KHz.



SAFETY AND CAUTION FOR OPERATION

Do not expose the product in water or in to dense humidity, there is a risk of getting an electric shock or a start of fire.

Do not remove the cover, it may cause wrong operation and break.

User repair parts are **not enclosed**.

Please ask for service to experts.

Do not use the product near water

Do not cover the air circulation holes.

Do not install the product near heating sources such as heaters, stoves and fireplaces.

Do not use non-approved parts.

Pull out the power plug when the product is unused for a long time.

Contact the A/S if the power plug is damaged, any liquid entered the product, exposed to rain or humidity, does not work properly, or if damaged in any other way.

Please only use power adapter enclosed in packing box.

Please take all the safety tips cautiously.

Please use the adapter enclosed in the packing box only.