

# NuForce

# Icon DAC

## FCC Compliance Statement



Hereby, NuForce Inc. declares that this device is in compliance with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment uses and can radiate radio frequency energy. If not installed and operated in accordance with the instructions, it may interfere with radio communications.

There is no guarantee that interference will not occur in a particular installation. If this equipment does interfere with radio or television reception, the user may be able to correct the problem by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase separation between equipment and receiver.
- Use equipment on a circuit to which the receiver is not connected.
- Consult your dealer or an experienced radio/TV technician for help.

**WARNING:** Only peripherals complying with the FCC class B limits may be attached to this equipment.

Changes or modifications made to this equipment, not expressly approved by us or parties authorized by us could void the user's authority to operate the equipment. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Notice for customers: The following information is only applicable to equipment sold in countries applying EU Directives.**

## EU Declaration of Conformity



Hereby, NuForce Inc. declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2004/108/EC.

The manufacturer of this product is NuForce, 382 South Abbott Ave, Milpitas, CA 95035, USA.

The Authorized Representative for EMC and product safety is NuForce, 382 South Abbott Ave, Milpitas, CA 95035, USA.

For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.

### For customers in Europe



#### Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

## SAFETY INSTRUCTIONS

There are two categories of Safety Instructions included in this manual:

- Product Warnings, (i.e., what must never be done to assure avoiding those hazards that could cause bodily injury or property damage); and
- User Directions (i.e., what must always be done to assure the safe use of your device).

The Safety Instructions contained in this manual have been categorized in accordance with the seriousness of the potential hazards through the use of Signal Words. Those Signal Words, and their intended meanings, are as follows:

**DANGER:** Indicates that a failure to observe the Safety Instructions could result in death or catastrophic bodily injury.

**WARNING:** Indicates that a failure to observe the Safety Instructions could result in serious bodily injury.

**CAUTION:** Indicates that a failure to observe the Safety Instructions could result in minor bodily injury or property damage.

**NOTE:** Designates important information that relates to activities and/or conditions that might result in loss of data and/or damage to your device.

## Safe Use and Operation of Your Device

This equipment emits stray RF energy and will interfere with the reception of signals by airborne electronic navigational devices or medical devices. Do not operate this equipment near any sensitive medical devices.

**WARNING:** Use only grounded AC power cords.

Always immediately disconnect the power to the equipment in the event the device emits an unusual odor or sound or generates smoke.

**WARNING:** Never attempt to disassemble, repair or make any modification to your device. Disassembly, modification or any attempt at repair could cause bodily injury or property damage, as well as damage to the device itself.

**WARNING:** Your device is not a toy. Never allow children to play with your device. Misuse, rough or improper handling of your device by children could result in serious bodily injury for any of the enumerated safety warnings in this manual. In addition, always keep all accessories and components out of the reach of small children as small parts might present a choking hazard. Seek immediate medical attention if choking occurs or if any small part has been swallowed.

**CAUTION:** Never raise the sound volume level too high when using your device with earphones. An excessive sound volume level could cause damage to your hearing.

**WARNING:** To reduce the risk of fire or electric shock, do not expose the unit to moisture or water.

Do not allow foreign objects to get into the enclosure. If the unit is exposed to moisture, or a foreign object gets into the enclosure, immediately disconnect the power cord from the wall. Take the unit to a qualified service person for inspection and necessary repairs.

Read all the instructions before connecting or operating the component.

Keep this manual so you can refer to these safety instructions.

Heed all warnings and safety information in these instructions and on the product itself. Follow all operating instructions.

Do not use this unit near water.

Allow for a minimum 10 cm or 4 inches of unobstructed clearance around the unit. Do not place the unit on a bed, sofa, rug, or similar surface capable of blocking ventilation openings. If the unit is placed in a bookcase or cabinet, allow for proper ventilation. Keep the component away from radiators, heat registers, stoves, or any other appliance that produces heat.

If the unit requires a power supply:

- It must be connected to a power supply only of the type and voltage specified on the rear panel.
- Connect the component to the power outlet only with the supplied power supply cable or an exact equivalent. Do not modify the supplied cable.
- Do not route the power cord where it will be crushed, pinched, bent, exposed to heat, or damaged in any way. Pay particular attention to the power cord at the plug and where the cord exits the back of the unit.
- The power cord should be unplugged from the wall outlet during a lightning storm or if the unit is to be left unused for a long period of time.

Immediately stop using the component and have it inspected and/or serviced by a qualified service agency if:

- The power supply cord or plug has been damaged.
- Objects have fallen or liquid has been spilled into the unit.
- The unit has been exposed to rain.
- The unit shows signs of improper operation.
- The unit has been dropped or damaged in any way.

## NuForce Icon DAC

The innovative NuForce Icon DAC delivers the latest mobile device connectivity by supporting USB Audio for Android (4.1 and beyond with OTG), Mac and PC (with advanced PCM and DSD), a high-power headphone amplifier, a linear volume control and genuine audiophile construction throughout.

With the advent of Smartphones and their enormous storage capabilities, a great many audio enthusiasts have been longing for a quality DAC/headphone amp they can simply plug into in order to experience their favorite music delivered with vivid clarity.

The Icon DAC stands as the ideal solution for mobile music listeners seeking audiophile-grade performance. This versatile device features a USB input compatible with typical Windows or Mac computer-based setups, as well as Android 4.1.1\* (with optional OTG cable). In addition, employed simply as a headphone amp or preamp the Icon DAC provides a secondary analog input for stereo signals from most home-audio and mobile sources.

Furthermore, the Icon DAC is endowed with latest technology. Accepting PCM sample rates up to 96kHz, it's 32-bit DAC supports 24-bit asynchronous operation while also providing Direct-Stream Digital (DSD) decoding capability.

The discriminating headphone listener is also bound to be satisfied as the Icon DAC includes a proprietary headphone amp stage that drives the most demanding 600-Ohm headphones with ease. Comprising a linear up-conversion topology, it delivers an incredible 24V rail-to-rail supply voltage to the amplifier circuits resulting in ultra-fast transient reproduction and uncompromised peak dynamic performance.

As a control center/preamplifier for use with external amplifier and speaker arrangements, audiophile-grade circuit design and parts ensure that the Icon DAC always delivers the ultimate in clarity to its stereo RCA outputs. A coaxial S/PDIF output is included for added system flexibility.

The innovative design goes several steps further to include a linear power supply that provides only pure DC power to all circuits, a TOCOS high-resolution linear volume control for accurate rendering of critical low-level information, and quality construction throughout.

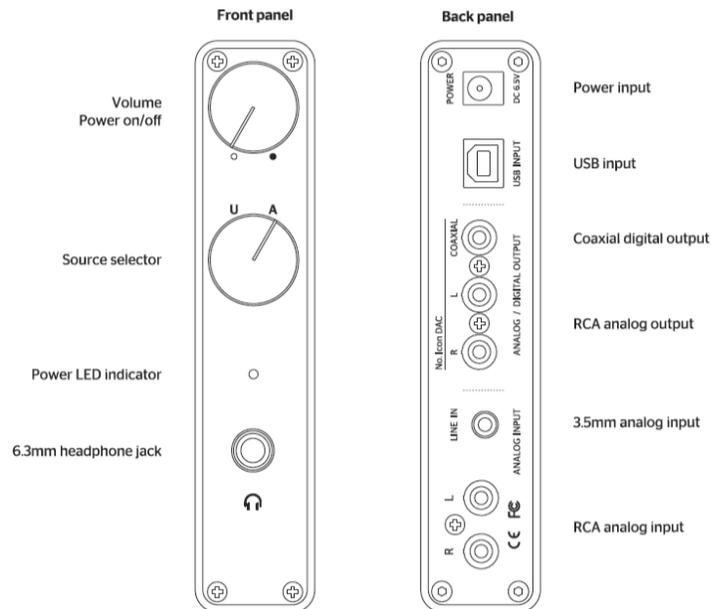
In total, every aspect of the Icon DAC design is optimized to yield truly remarkable performance. More remarkable still, the Icon DAC's rock-solid features are offered at an equally remarkable price. Indeed, the user is bound to agree that the Icon DAC is in a class of its own.

## FEATURES

- Asynchronous low-jitter USB interface
- Supports Windows 7, 8, Mac OSX, Android 4.1.1\*
- Supported Android devices:
  - HTC ONE X and newer version
  - Samsung S3 and newer version
  - SONY Xperia Z and newer version, and other mobile devices
- Supports PCM and DSD over USB playback (DSD support on PC only)
- High-precision 32-bit DAC
- Powerful 8V output headphone amplifier
- 6.3mm headphone output jack
- 3.5mm analog input and RCA analog output
- Audiophile TOCOS volume pot
- Multiple stage filtering and regulated up-converted 24V rail power supply
- High-quality aluminum chassis

*\*Android compatibility is limited to smart phones running Android 4.1.1 that enables support for USB OTG Audio features.*

## Quick Start Guide



### Top Knob:

Users can adjust the volume and switch the unit on/off by using the top knob

### Bottom Knob:

To switch Icon DAC input between USB and analog

U: USB input

A: Analog input

### Input:

1 x USB input

1 x RCA analog input

1 x 3.5mm analog input

### Output:

1 x 6.3mm headphone output\*

1 x RCA analog output\*\*

1 x Coaxial digital output

*\*Due to each headphone/earphone has different impedance and efficiency. Please make sure that the volume knob is set to low volume before plugging your headphone/earphone into the 6.3mm headphone output then adjust the volume accordingly to avoid any damages.*

*\*\*In order to ensure the best sound quality, Icon DAC is designed to mute the output signal when both USB and analog input are plugged into the same source i.e. PC, MAC. Icon DAC output signal resumes automatically when either USB or analog output is unplugged.*

## **Icon DAC Specification**

Maximum Sampling Rate: 96 kHz

Bit Resolution: 32 bits

Frequency Response: 10 - 100 kHz

THD+N: 0.0013%

SNR: > 115 dB

RCA Output Impedance: 10 ohm

Headphone Output Impedance: 2.4 ohm

RCA Input Impedance: 22K ohm

Headphone Power Output:

1.2W @ 16 ohm

1.825W @ 32 ohm

718 mW @ 100 ohm

249 mW @ 300 ohm

126 mW @ 600 ohm

Dimensions:

Height: 6" (15.24 cm)

Width: 1" (2.54 cm)

Depth: 4.5" (11.43 cm)

Weight: 1lb (453g)

## NuForce One (1) Year Limited Warranty

### NuForce's Limited Warranty and Limitation of Liabilities

#### ADDITIONAL RIGHTS

FOR CONSUMERS, WHO ARE COVERED BY CONSUMER PROTECTION LAWS OR REGULATIONS IN THEIR COUNTRY OF PURCHASE OR, IF DIFFERENT, THEIR COUNTRY OF RESIDENCE, THE BENEFITS CONFERRED BY THIS WARRANTY ARE IN ADDITION TO ALL RIGHTS AND REMEDIES CONVEYED BY SUCH CONSUMER PROTECTION LAWS AND REGULATIONS. THIS WARRANTY DOES NOT EXCLUDE, LIMIT OR SUSPEND ANY RIGHTS OF CONSUMERS ARISING OUT OF NONCONFORMITY WITH A SALES CONTRACT. SOME COUNTRIES, STATES AND PROVINCES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY OR CONDITION MAY LAST, SO THE LIMITATIONS OR EXCLUSIONS DESCRIBED BELOW MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY BY COUNTRY, STATE OR PROVINCE. THIS LIMITED WARRANTY IS GOVERNED BY AND CONSTRUED UNDER THE LAWS OF THE COUNTRY IN WHICH THE PRODUCT PURCHASE TOOK PLACE.

#### LIMITED WARRANTY

For a period of ONE(1) YEAR from the date of retail purchase by the original end-user purchaser ("Warranty Period"), NuForce warrants (i) this product against defects in materials and workmanship, and (ii) that each Product, unmodified and under normal use and conditions, will substantially comply with NuForce' applicable written technical documentation for the Product. NuForce reserves the right to make substitutions and modifications from time to time in the specifications of Products sold by NuForce, provided that such substitutions or modifications do not materially affect overall Product performance.

If a hardware defect exists and a valid claim is received within the Warranty Period, at its option and to the extent permitted by law, NuForce will (1) repair the hardware defect at no charge, using new or refurbished replacement parts, (2) exchange the product with a product that is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original product, or (3) refund the purchase price of the product. NuForce may request that you replace defective parts with user-installable new or refurbished parts that NuForce provides in fulfillment of its warranty obligation. A replacement product/part assumes the remaining warranty of the original product or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you. When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes NuForce's property. When a refund is given, your product becomes NuForce's property.

#### OBTAINING WARRANTY SERVICE

If you purchased the product in the U.S., deliver the product, at your expense, to any NuForce Service Center located in the U.S. If you purchased the product outside of the U.S., deliver the product to any NuForce Authorized Importer in the country where you purchased the product. Be aware, however, that not all countries have NuForce Authorized Service Providers ('NASP') and not all Authorized Service Providers outside the country of purchase have all parts or replacement units for the product. If the product cannot be repaired or replaced in the country it is in, it may need to be sent to a different country or returned to the country of purchase at your expense for repair or replacement. If you seek service in a country that is not the country of original purchase, you will comply with all applicable import and export laws and regulations and be responsible for all custom duties, V.A.T. and other associated taxes and charges. Where international service is available, NuForce may repair or exchange defective products and parts with comparable products and parts that comply with local standards.

You can always deliver the product to NuForce's U.S. main service center for obtaining warranty service, however, you may have to pay for return shipping cost.

NuForce may send you user-installable new or refurbished replacement product or parts to enable you to service or exchange your own product ("DIY Service"). Upon receipt of the replacement product or part, the original product or part becomes the property of NuForce and you agree to follow instructions, including, if required, arranging the return of original product or part to NuForce in a timely manner.

When providing DIY Service requiring the return of the original product or part, NuForce may require a credit card authorization as security for the retail price of the replacement product or part and applicable shipping costs. If you follow instructions, NuForce will cancel the credit card authorization, so you will not be charged for the product or part and shipping costs. If you fail to return the replaced product or part as instructed or the replaced product or part is not eligible for warranty service, NuForce will charge the credit card for the authorized amount.

## EXCLUSIONS AND LIMITATIONS

This Limited Warranty applies only to hardware products manufactured by or for NuForce that can be identified by the "NuForce" trademark, trade name, or logo affixed to them. The Limited Warranty does not apply to any non-NuForce hardware products or any accessories, even if packaged or sold with NuForce hardware. Non-NuForce manufacturers, suppliers, may provide their own warranties. Other accessories distributed by NuForce under the NuForce brand name are not covered under this Limited Warranty. This warranty does not apply: (a) to damage caused by accident, abuse, misuse, misapplication, liquid contact, fire, earthquake, non-NuForce products, or other external causes; (b) to damage caused by service performed by anyone who is not a NASP; (c) to a product or a part that has been modified without the written permission of NuForce; (d) to consumable parts, such as batteries, or protective coatings designed to diminish over time unless failure has occurred due to a defect in materials or workmanship; (e) to cosmetic damage, including but not limited to scratches, dents, and broken plastic on ports; (f) to defects caused by normal wear and tear or otherwise due to the normal aging of the product; or (g) if any NuForce serial number has been removed or defaced.

**Important:** Do not open the hardware product. Opening the hardware product may cause damage that is not covered by this warranty. Only NuForce or a NASP should perform service on this hardware product.

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Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the unit is within the Warranty period must be presented to obtain warranty service.

REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER.

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