

FCC Notice - Declaration of Conformity Information

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 and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the 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.

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.

You must allow 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 that could block the ventilation openings. If the unit is placed in a bookcase or cabinet, there must be ventilation of the cabinet to allow proper cooling. Keep the component away from radiators, heat registers, stoves, or any other appliance that produces heat.

The unit 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.

The NuForce DAC-9 Digital Analog Converter

Engineered to meet the needs of the most demanding audio purists while also providing the greatest degree of flexibility, the NuForce DAC-9 is a true reference-class digital-to-analog stereo converter, pre-amplifier and headphone amplifier in one supremely sophisticated package. As to versatility, with its six digital inputs, the DAC-9 offers compatibility with all existing digital formats.

And, in keeping with NuForce's commitment to its customers, plug-in USB module/interfaces will always provide for upgradeability to higher bit rates, thereby securing the end-user's investment as digital technology continues to advance.

The DAC-9 addresses the need for complexity on a foundation of remarkable simplicity. Minimal processing and the shortest possible signal paths set the DAC-9 apart. For example, when an input source is selected, a pair of high-performance, non-over-sampling DACs offer up to 24-bit/192kHz (24bit/96kHz for USB) conversion of digital audio data. Extensive testing and listening tell us that up-sampling and sample-rate conversion do more harm than good, as does negative feedback. Consequently, no form of sample-rate conversion is ever employed.

Summing the output of two DACs increases the signal-to-noise ratio to near-theoretical limits wherein every musical nuance stands out in brilliant contrast to a background of utter silence. As a further enhancement, an innovative Passive IV Digital Output Filter assures lifelike musical reproduction. The DAC-9's passive circuit employs no negative feedback of any kind, thus providing a ripple-free response wherein high-frequency phase coherence is always maintained.

Beyond the DACs and digital filter, the converted signal passes on to the analog preamplifier stage, which also adheres minimalist design principles. Again, NuForce applies no negative feedback in order, among other good reasons, to avoid higher-order distortion artifacts that typically plague unnecessarily complicated designs. The quietest circuitry components and layouts, along with the shortest possible signal paths, likewise contribute to the DAC-9's exemplary performance characteristics. As another means to a "straight-wire-with-gain" end, when the user selects Fixed-Mode Output, the digitally controlled, precision volume attenuator is bypassed by means of a precision mechanical relay.

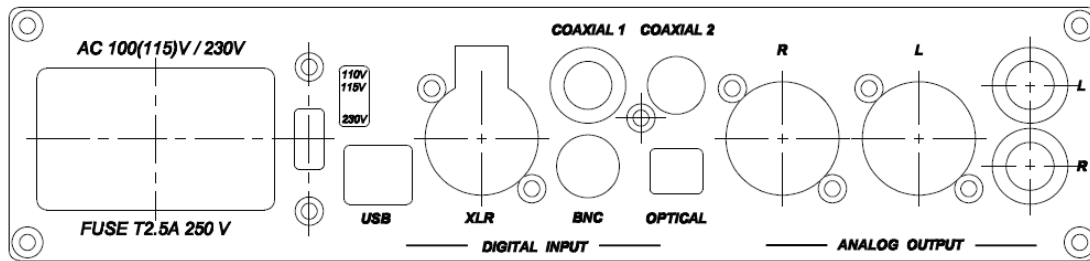
As impressive as these refinements are, the DAC-9 would not be nearly so successful without the clean, stable energy a shunt-regulated linear power supply provides. With its multiple regulation stages, the power supply allows the DAC-9's digital and analog circuits to operate to their fullest potential, with the lowest noise and distortion possible.

Nor has NuForce overlooked the needs of the dedicated headphone listener. The DAC-9 includes a fully independent, high-performance headphone stage with a dedicated volume control. The DAC-9's 6.3mm and 3.5mm headphone jacks sidestep the inconvenience and potential distortion of external plug adaptors. The DAC-9's exceptional value and versatility is exemplified by the unit's remote control, which

beyond its array of usual conveniences, operates other NuForce devices such as our P-9 Preamp and CDP-8 CD Player. Moreover, the DAC-9's sleek touch panel and low-profile chassis make a visually attractive addition to the finest playback systems.

NuForce strives, as always, to achieve superior performance by means of the purest and therefore simplest of design concepts. We're confident that you will find the NuForce DAC-9 Digital-to-Analog Converter, Preamp and Headphone Amp to be the ideal answer to your listening requirements. Price notwithstanding, few competing products can compare to the DAC-9's sonic excellence, simple elegance, and of course convenience. When one then takes into account the exceptional value the DAC-9 represents, we're sure you'll agree it's in a class of its own.

Back-Panel Connections



The DAC-9 employs a linear power supply. To avoid accidental damage, make sure the DAC-9's voltage switch is set to your area's AC voltage.

Digital Inputs 1 to 6:

1. USB, including a small plugged-in module that allows for future upgradeability to a higher-bit-rate USB interface card.
2. XLR, AES/EBU digital connection.
3. Coaxial or BNC S/PDIF input. Only one of these inputs can be used when Input 3 is selected. To achieve optimum performance, we recommend a 75-ohm BNC cable (available from NuForce) with a BNC connector.
4. RCA, another S/PDIF input.
5. TOSLINK, an optical S/PDIF input.
6. On the front panel, a 3.5mm optical S/PDIF input. (The 3.5mm input is commonly used by Mac and PC sound cards.) A 3.5mm analog phone jack shares this connector.

Analog Outputs

The DAC-9 provides RCA and XLR analog outputs. The true-balanced XLR output produces twice the gain of the RCA output. The remote and front panel controls allow for fixed and variable voltages.

Front Panel Control



Pressing 1 to 6 selects the corresponding digital inputs. The Up arrow is a volume-up key; the Down arrow is a volume-down key.

Note: The Volume keys are not capable of acceleration. Each press of the key increases or decreases the volume by one step. To achieve accelerated volume, use the remote control.

Front Panel Displays

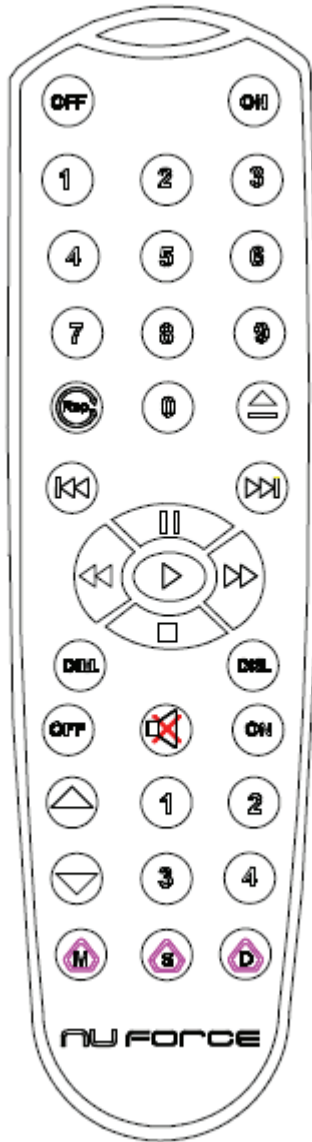
From the left, the first digit indicates the selected Digital Input. The Volume Level follows. (When the unit is powered on, the default position is 40.) The right-side display shows the detected sampling rate: 44, 88, 176, and 192. If the sampling rate does not correspond to a standard frequency, or if the signal is in error, the display produces a dash (—).

Headphone Output

The DAC-9 includes a high-performance headphone amplifier with an independent volume control operated via the front-panel knob. (We recommend against using the provided 6.3mm and 3.5mm phone jacks simultaneously unless the two headphones in operation are identical models with the same impedance.)

The 3.5mm Phone Jack doubles as an optical input (typical of the S/PDIF optical output MAC and PC peripherals employ).

Remote Control



The supplied remote also controls the NuForce P8S, P9, IA7, and CDP-8. The following keys apply to the DAC-9:

Volume Up/Down – Via the remote, the DAC-9’s volume default (at 50) can be elevated to 99. To accelerate the volume level, depress the Up or Down key until you achieve the desired volume.

M – Mute. The Mute key mutes the DAC-9’s output. The front volume indicator will consist of a blinking dash (—).

S – Select Input. Pressing the S key shifts operation to the next input.

D – Dim. Dim shuts off the front panel LED and digital display. During dimmed operation the remote and front-panel operate as usual. The display will light up briefly when any button is pressed.

Selecting Fixed Analog Output level

With its digitally controlled Analog Volume Control, the DAC-9 operates as a preamp. Where the DAC-9 is used with a separate preamp, the DAC-9's analog output can be locked to fixed outputs. When enabling the Fixed function, a relay will bypass Analog Volume.

To enable Fixed Output, using either the front panel control or remote control, raise the volume level to 99. Using only the front-panel Volume-Up key, raise the volume level to the 1 step. The display will go blank, thus indicating that Fixed Output has been achieved.

Note: The remote control's Volume Up/Down keys are disabled when the DAC-9 is set to Fixed Output.

To disable Fixed Output, use the front panel's Volume-Down key. The display will show 99, indicating that the fixed output has been disabled.

Specifications:

Digital Inputs:

6 selectable digital inputs, transformer or optical isolated, AC coupled.

Maximum bit depth: 24 bit

Maximum sample rate: 192kHz; USB spec (96k option): 44.1kHz, 48kHz, 96kHz

Analog Outputs

Output Impedance: RCA, 0.01 Ohm; XLR, 50 Ohm; Headphone 10 Ohm

Output voltage 0dB 1kHz: RCA 2.0/4.0Vrms, XLR 4.0/8.0Vrms (Low output/High output versions)

Headphone power spec:

288mW rms @ 30 Ohm

210mW rms @ 120 Ohm

152mW rms @ 300 Ohm

THD+N: 0.01, 0dB, 1kHz

Signal to Noise ratio: 103dB, 1kHz, A-weighted

Frequency Response: 20-20kHz +/- 0.25dB

Power consumption: 9W

AC voltage: 100V/110V/220V/230V depending on countries

Dimension: 215mm (w) x 400mm (d) x 60mm (h)

Weight: 3.2Kg net, 4.5Kg shipped

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 THREE(3) 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.

THIS WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED. NUFORCE SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF NUFORCE CANNOT LAWFULLY DISCLAIM IMPLIED WARRANTIES UNDER THIS LIMITED WARRANTY, ALL SUCH WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY. No Nuforce reseller, agent, or employee is authorized to make any modification, extension, or addition to this warranty. NUFORCE IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOST PROFITS, DOWNTIME, GOODWILL, DAMAGE TO OR REPLACEMENT OF EQUIPMENT AND PROPERTY, ANY COSTS OF RECOVERING, REPROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED IN OR USED WITH NUFORCE PRODUCTS, AND ANY FAILURE TO MAINTAIN THE CONFIDENTIALITY OF DATA STORED ON THE PRODUCT. NUFORCE SPECIFICALLY DOES NOT REPRESENT THAT IT WILL BE ABLE TO REPAIR ANY PRODUCT UNDER THIS WARRANTY OR MAKE A PRODUCT EXCHANGE WITHOUT RISK TO OR LOSS OF PROGRAMS OR DATA.



Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages or exclusions or limitations on the duration of implied warranties or conditions, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary by state or province.

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. NUFORCE SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.