15V Linear Power Supply Series

LPS-1
LPS-2U-96K
LPS-2U-192K
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 this instruction 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.

When in use:

- 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 proudly introduces a series of linear power supplies that more than meet the needs of the most discriminating audio enthusiasts. Whether for desktop applications or main-system use, the LPS Series delivers crystal-clear low-noise power for devices requiring 15 volts DC at 4 amps or less.

Designed for use with NuForce products such as the Icon HDP Desktop DAC/Preamp and CDP-8 Compact Disk Player, an LPS is likely to improve the performance of any audio device requiring up to 4 amps of DC current, particularly with respect to detail and transparency.

The LPS line-up starts with the LPS-1, which features a single 15V/4A output for users requiring power for only one device. The LPS-1’s highly regulated delivery system operates by way of a large, proprietary transformer, high-energy storage capacitors and high-speed regulator circuit.

The LPS-2U-96K features a high-quality USB to S/PDIF converter circuit operating at a data-transfer rate of up to 96kHz. Note that the S/PDIF signal is transformer-coupled in order to eliminate the possibility of ground-loop-based noise, which is notoriously difficult or even impossible to deal with by other methods. An LPS-2U-96K spares the user from hours of wasted time in tracking down elusive noise “gremlins.” Equally as important, an LPS-2U-96K improves a sound system’s performance characteristics.

Finally, for computer-based music systems, NuForce offers the LPS-2U-192K. Sharing the same features as those of the LPS-2U-96K, this unit ups the ante with a USB data-transfer rate of up to 192kHz. Fans of high-resolution recordings will appreciate the LPS-2U-192K’s significantly lower noise floor as the rock-solid foundation of any quality sound system.

**Companion Product:** Icon Amp (15V/4A), Icon HDP (15V/1A or 15V/4A), Icon HD (15V/1A or 15V/4A), Icon-2 (15V/4A), CDP-8 (15V/4A)

**Specifications:**

**LPS-1**
- Input Power:
  - 115VAC@1A or 230VAC@0.5A
- Output Power:
  - 15VDC/4A

**LPS-2U-96K**
- Input Power:
  - 115VAC@2.6A or 230VAC@1.3A
- Output Power:
  - 15VDC/4A (the connector under “DC OUTPUT DC 12V or DC 15V”) and 15VDC/1A (the connector under “DC OUTPUT” and next to USB input)
- USB to S/PDIF Converter
  - Data transfer rate up to 96kHz (source data rate dependent, no up sampling)

**LPS-2U-192K**
- Input Power:
  - 115VAC@2.6A or 230VAC@1.3A (select using a switch)
- Output Power:
  - 15VDC/4A (the connector under “DC OUTPUT DC 12V or DC 15V”) and 15VDC/1A (the connector under “DC OUTPUT” and next to USB input)
- USB to S/PDIF Converter
  - Data transfer rate up to 192kHz (source data rate dependent, no up sampling)

**LPS (all versions)**
- Dimension:
  - 8” x 6.5” x 1.7; Package: 12” x 10.5” x 3.5”
- Weight:
  - 5.8 lb; Package: 6.9 lb
- Package Contents Include:
  - AC power cord, DC power cord Data transfer rate up to 96kHz (source data rate dependent, no up sampling)
A Beginner’s Guide to Good Audio

What qualities distinguish a good audio system?

Let’s start with a misconception. “Wow! I’ll bet that can play loud!” This, or something like it, is typical of the newcomer’s reaction to an audiophile’s setup, particularly if the speakers are large.

Why a system’s loudness capability should be the measure of excellence isn’t difficult to understand. People install often quite costly sound systems in their cars. Some of the larger specimens seem capable of shaking their host vehicle apart. The pavement trembles when one passes by. A club’s sound system is in the same league: ear-splitting, gut-wrenching, floor-buckling output. With the exception of classical music, which is rarely ever amplified, the same is true for most live concerts. Domestically, the average boom box can break a lease. TV ads featuring hard-pumping woofer cones say it all.

On actually sitting down and listening to our hypothetical audiophile’s sound system, the newcomer will likely say “Wow!” again, followed this time by “It’s so clear!”

Clarity. The term takes in a host of qualities. As strange as this may seem, one of clarity’s principal components is silence. A silent audio system — an audio system that contributes little to no noise of its own — reveals the music all the more clearly at listening levels from soft to loud.

Resolution likewise contributes to clarity. Imagine two mounds of sand in bright sunlight. One mound is mixed with mud. It’s difficult to see its individual grains. The other mound is free of mud. You have no trouble seeing its tiny, glittering bits. And so it is with high-quality audio. The music shines through. Nothing muddies the sonic image. You hear the texture of a singer’s voice almost as if she’s in the room. Instrumental timbres allow you to distinguish the purposeful grunge of the rockers’ guitars. Violas differ from violins, likewise oboes from English horns. A good sound system allows you to make these listening distinctions.

Soundstage. Another critically important measure of an audio system’s quality is its ability to project a convincing soundstage. Can you perceive its width and depth? Is it realistically proportioned? Can you hear the venue as large or small? Is it clear to you where the musicians perform within the soundstage? Depending on the style of recording, our audiophile’s sound system provides the answers. And of course the pleasures.

Speed. An audio system’s superior speed produces crisp, clean attacks: a violin or trumpet’s edge, a drummer’s rim shot, a marimba’s wooden loveliness — all those little delights that mimic live music.

Bass. To return to trembling pavements and hard-pumping woofer cones, the audiophile’s guest will be pleasantly surprised to discover that a high-quality sound system’s low end is as tuneful and clean as the rest of the audio spectrum. Again, no mud. Just lovely, well-defined sounds. A good audio system aims at naturalness.

Size. Good audio is not necessarily big audio. If you shop wisely, you need not spend a fortune to achieve a high level of audio performance. With these pointers as a guide, the newcomer has a good idea of what to listen for. The least expensive NuForce components will more than satisfy modest applications. With our reference-grade components serving as the culmination of all our efforts, our entire line answers to the same ideal: accurate, vibrant, lifelike sound.
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.

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