



Owner's Reference

Owner's Reference DLIII Digital Link DAC

Instructions for use



DLIII Digital Link DAC

Important Safety Instructions



**Read these instructions
Heed all warnings
Follow all instructions**



WARNING. TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

Clean only with a dry cloth.

Do not place flammable material on top of or beneath the component.

All PS Audio components require adequate ventilation at all times during operation. Rack mounting is acceptable where appropriate.

Do not remove or bypass the ground pin on the end of the AC cord unless absolutely necessary to reduce hum from ground loops of connected equipment. This may cause RFI (radio frequency interference) to be induced into your playback setup. All PS products ship with a grounding type plug. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. Unplug this apparatus during lightning storms or when unused for long periods of time.

When making connections to this or any other component, make sure all components are off. Turn off all systems' power before connecting the PS Audio component to any other component. Make sure all cable terminations are of the highest quality.

There are no user serviceable fuses inside this product.

THERE ARE NO USER-SERVICEABLE PARTS INSIDE ANY PS AUDIO PRODUCT. REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL

Please contact your authorized dealer, distributor, or PS Audio if you have any questions not addressed in this reference manual.

This product is manufactured in the United States of America. PS Audio® is a registered trademark of PS Audio International Inc., and is restricted for use by PS Audio International, Inc., its subsidiaries, and authorized agents.



The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the papers with the appliance.



The lightning flash with arrowhead within a triangle is intended to tell the user that parts inside the product are a risk of electric shock to persons.





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PS AUDIO

Introduction

Owner's Reference DLIII Digital Link DAC

Thank you

Thank you for your purchase of the DLIII Digital Link.

The DLIII is a state-of-the-art Digital to Analog Converter (DAC). It can accept any USB or SPDIF digital input from a transport, CD (or DVD in stereo) player or computer and will output two channel stereo analog. The input can be selected from the front panel.

96kHz or 192kHz upsample

The DLIII upsamples to the user's choice of either 96kHz or 192kHz. The DLIII features the latest balanced D to A converter, the TI PCM1798DB at its heart. This generation of 192kHz processors from Texas Instruments (formerly Burr Brown) features 24-Bit resolution, 123dB dynamic performance, and its rated THD is just 0.0005%. The circuitry also features differential outputs and an 8 times oversampling filter.

100% discrete class A output

The DLIII has a 100% discrete analog output stage and IV converter for a warm and rich sound. No op-amps are used in the signal path for the DLIII.

High current power supply

The DLIII also features a large, high current, oversize power supply for great performance benefits.



Getting Started

Owner's Reference DLIII Digital Link DAC

Location	Once your new DLIII DAC is unpacked, you'll need to find a convenient place to set it. There are several ways to mount the DLIII DAC: on a rack shelf, or on a shelf near your preamplifier and or transport or CD player.
Cautions	If your transport is located a long distance from the preamplifier, it is best to run a long digital interconnect and place the DLIII close to the preamp.
Isolation	The DLIII can benefit from aftermarket isolation devices such as cones, spikes and Sorbothane pads.
Power Cables	Once you have chosen the location for the DLIII you can use the supplied AC power cord to connect it to the AC wall receptacle or you can use an aftermarket power cord and receptacle. We strongly recommend the use of a PS Audio xStream Power™ AC cable and a PS Power Port™ AC receptacle to feed the DLIII power. While the supplied power cable is adequate for the task it is not going to provide the best performance. Choosing any xStream Power cable will make a significant performance improvement over the stock power cable.
Conditioners	We recommend the use of power conditioning equipment, such as a PS Audio Power Plant, UPC-200 or any of the Ultimate Outlet or Power Director series from PS. We do not recommend the use of simple AC filter power conditioners not made by PS Audio as most of these will "bleach" the sound and rob the music or video soundtrack of life and dynamics. If you do not use PS Audio power conditioning equipment, you would be advised to plug the DAC directly into the AC wall receptacle.

Once you have decided on the location and chosen the appropriate power cables, you are ready to install the DLIII.

Power down first

We would recommend that you power the entire system down before attempting to insert the DLIII.

Insert the DLIII into the system. Make sure the DLIII is unplugged from the AC source.

Connect the inputs

There are two methods of connecting the digital inputs of the DLIII: SPDIF and USB. SPDIF is a serial digital interface available as either an optical source (TOSLINK) or a coaxial source (RCA). This is the typical output you would find on a CD player, DVD player, or even a few computer products.

Any type of SPDIF input is most likely going to be fine for the DLIII. If you are connecting a computer for the digital input, you can use the optical output if it has one (most MAC computers do, most PC computers do not). The preferred method of connection for a computer would be USB. Connect the DLIII to your computer using a standard USB cable.



“Bits ain’t bits”

Please note that “digital bits ain’t just bits”.

The quality of your digital interconnect cable, or USB cable can have a major impact on the sonic performance of your DLIII. Make sure you invest some time and money in choosing the right digital interface cable.

Choose your input

You can connect one or all three inputs at the same time. For instance, you can connect the USB input to your computer and the coax input to your CD player. Then you can simply choose which one to listen to from the front panel button that selects the input. The USB does not need a driver but it does need to install its own driver. If you are using USB, make sure both the computer and the DLIII are connected and powered up. The computer should recognize the new hardware and self install the necessary drivers.

Autoscan

Autoscan is the default mode for the input selector. This means that when you power the DLIII up, it will automatically step to the first input with a digital signal and lock onto that input. You can tell when it is locked because the front panel locked light will be illuminated.

If you wish to override the autoscan feature, simply manually select the input you want and this will disable Autoscan. To re-enable, scroll to the last input and press the input select twice. This will enable the Autoscan feature.

There are two types of audio outputs on the DLIII, balanced (XLR) and unbalanced (RCA).

Balanced

To use balanced requires a preamp, integrated or Control Amp that has a balanced Input. These outputs are the preferred method of connection as a balanced XLR type of output allows the lowest noise connection between DLIII and preamp, and allow owners to take advantage of the high common mode rejection characteristics of balanced. Be sure to use a high quality well shielded and well regarded interconnect for this critical link. PS Audio makes an entire line of excellent choices for interconnects, perfectly matched to your equipment's needs.

Single ended

RCA or single ended inputs will be the typical inputs as many preamplifiers, surround processors, receivers and integrated amplifiers have only this standard type of input. Be sure to use a high quality well shielded and well regarded interconnect for this critical link. PS Audio makes an entire line of excellent choices for interconnects, perfectly matched to your equipment's needs.

You can use both RCA and XLR outputs at the same time if needed, however, this is not recommended.

Plug either the RCA or the XLR outputs of the DLIII into a line level input on the preamp, integrated, Control Amplifier or Receiver. Do NOT plug the output of the DLIII into a phono or equalized input of any type.

Select the sample rate

Select the sample rate you wish. There are two choices available on the front panel: 96kHz and 192kHz. What comes out of your transport or CD player is 44.1kHz. The DLIII will upsample this to a higher, and better sounding sample rate. Choose which sample rate you wish by simply listening and deciding which sounds best on your system.

You can change the sample on the fly (as the music is playing).

Use only a high quality shielded power cable

Once everything has been connected, use a high quality AC cable to power the DLIII. DAC's in particular are quite sensitive to AC power and produce a bit of line noise themselves. Make sure you have a high quality, shielded power cable to power the DLIII. PS Audio produces an entire line of high quality shielded power cables that are generally accepted as being the best in the industry.





Questions And Answers

Owner's Reference DLIII Digital Link DAC

Should the unit be on all the time?	The DLIII is best left powered on at all times. The current draw is negligible and keeping it powered on will make sure the internal AC capacitors stay working properly. There is no harm in leaving the unit on at all times as the lifespan of the DLIII will be unaffected by leaving it on.
Are there any internal fuses?	There are no user replaceable internal fuses inside the DLIII. There is an internal fuse that should only be replaced by an authorized service center if needed. The components inside the DLIII have lethal voltages when powered and even when un-powered. Capacitors inside the DLIII can retain an electrical charge after the unit has been powered down. Do not attempt to get inside the unit for any reason unless instructed to do so by your dealer or an authorized service representative. Should the DLIII cease to function, contact your dealer or PS Audio's service center for help.
Placement?	Placement of the DLIII is not critical. Placement with respect to other equipment can be important. In general, place the DLIII close to the transport or CD player as possible. It is always preferable to have long digital interconnects and short audio interconnects if there is a distance problem. Long interconnect cables may degrade the performance of the DLIII.
Isolation?	Isolation through the use of spikes, cones or Sorbothane feet is recommended for the DLIII if space and budget allows. Isolation of any piece of high-end stereo and theater equipment is always recommended wherever practical.
Do cables make a difference?	Yes, cables make a difference. It is important to use the best power cables, digital interconnects and audio interconnects when operating the DLIII.
Power switch	There is no master power switch for the DLIII.
Which sample rate is best?	Choosing an appropriate sample rate, either 96kHz or 192kHz all depends on your system. Generally, a higher sample rate sounds better, but on some systems it may sound bright. Listen carefully to your choices to see which one sounds more like live music to you. It is fine to select this while you are playing music.
How do I manually select an input?	You can easily select any of the three inputs manually or let the Autoscanner feature of the DLIII work for you. The default or factory setting is Autoscanner and if you only have one input connected to the digital in, we recommend leaving the DLIII in the default Autoscanner mode. The Autoscanner feature will look for which input has a digital signal and automatically go to that input and lock on it. You can simply turn your CD player, computer or digital source on or off and Autoscanner will figure it out for you and go to the proper input.
What if I can't get a locked light?	If you have multiple sources connected to the digital inputs and you wish to use the front panel input selector manually, simply using it in this manner will disable the Autoscanner mode. If you do not get a "locked" light on the front panel, check and make sure your digital source and digital

interconnects are working properly.

Do I need to install a software driver for the USB?

You do not need to install a driver for the USB connection. The DLIII has a built in driver that should communicate with your computer automatically. Make sure the computer is booted properly and on. Make sure the DLIII is on. Connect a USB cable and the computer should indicate it recognizes a new device has been installed and should install the appropriate software drivers to operate it.

You can check and see by going to your computer's control panel and look under USB devices. See if the DLIII is recognized.

What voltages can the amp run on?

The DLIII is specific to your country's voltage. Do not use the DLIII on a voltage higher than it is rated for. For instance, do not take a 120 volt rated DLIII and attempt to use it in a 230 volt country. Failure to observe this cautionary note will void your warranty and may damage the DAC. If you need to operate the DLIII at a voltage other than the voltage it was designed for, contact your dealer, distributor or the factory.



No sound comes out of the system

If no sound comes out of the system with the DLIII connected, there are several areas to check. Either you are not getting an audio signal into the preamplifier, or you don't have a good digital source feeding the DLIII.

Check the input

First, check to make sure your preamp, integrated, receiver or Control Amplifier is switched to the same input the DLIII is connected to. Test the connection and the cables to make sure. Keeping the input selected and using the same cable, connect this input to a known good source like a tuner or the direct analog output of a CD player. If that works, then it is most likely not a connection problem between the DLIII and the preamp, integrated, receiver or Control Amplifier.

Try another source

Next step is to check and see if the digital input is properly connected. Look on the front panel of the DLIII to see if the locked light is illuminated. If it is not, this is most likely the problem. You can troubleshoot this by making sure the DLIII is on the proper input and that you have connected the input correctly. If this fails, try replacing the digital interconnect or try using another type. For instance, if you are using a coax connection, try using the CD player's optical output instead or try replacing the cable.

If you suspect a USB problem

If you are using a USB connection, it is necessary for the computer to recognize the DLIII as a connected device. Check in the computer's control panel under USB devices and see if the DLIII is recognized. If not, with both the DLIII and your computer powered up, remove the USB cable from the computer and then re-insert it. Watch the computer monitor for an indication it has found the hardware.

If there is no sound and you are convinced the DLIII has power and its front panel light is lit, you've taken all the appropriate steps listed above to remedy it, call your dealer, distributor or PS Audio for help..

If you have hum or buzz

If you experience a hum through the speakers this can be caused by several things. The first is the source. If there is an excessive amount of buzz or noise from the loudspeaker, it may be caused by a ground loop, a light dimmer in the home, poor AC power, or any number of causes. The quickest way to determine where to start your search is to simply turn the preamplifier, integrated, receiver or Control Amplifier off, disconnect the audio cables between it and the DLIII, and see if the hum goes away when you turn the preamplifier, integrated, receiver or Control Amplifier back on. If it does, it's most likely a ground loop or buzz from a dimmer.

If this doesn't solve the problem, reconnect the DLIII and follow these easy humbusting tips.

The easiest way to figure out where ground loop problems lie is by the process of elimination. You need to determine where the hum or buzz is coming from within your system.

If the hum/buzz goes away when you remove the inputs to the power amp, your next step will be to reconnect the amp and move further down the chain. If you were working with a receiver or an integrated amplifier, you will need to jump to step 4. If you have a preamp, or processor that is feeding the power amp, your next step would be to disconnect all inputs to the preamplifier or processor. Once

Finding a ground loop

these are disconnected, and the preamp or processor is connected only to the power amplifier, turn the system on and again, listen for hum. Should the hum now appear, it is a problem with your preamp or processor or their interaction with the power amp. Before returning the preamp or processor to the manufacturer, try a cheater plug to break a ground loop. Cheater plugs are simple devices that convert a three prong AC plug into a two prong AC plug and in the act of converting three prongs, to two prongs, they disconnect the ground from the wall socket. Try one of these on the preamp, or the power amp, or both.

Process of elimination

If you determine that there is still no hum present when the preamp, processor or receiver is connected with no inputs, then selectively begin plugging in your various inputs one at a time. After each connection, check for hum until you discover the humming culprit.

It could be the cable TV

VCR's, surround processors, and any device that is connected to a television cable or satellite dish can cause a loud buzz and should always be suspect. If, by the process of elimination described above, you determine it is a component like a VCR that is causing the hum/buzz to occur, and using a cheater plug or removing the ground pin on a PS xStream Power Cable doesn't help matters, it may be necessary to isolate the cable connection (CATV) with an isolation transformer. This inexpensive device is available at most Wal Mart, Radio Shack or department store type outlets and is sometimes called a 'matching transformer'. If you have problems finding one, call your local cable TV company for advice. The matching transformer will be placed between the cable TV cord and the VCR, TV or processor.

Just remember, take the system down to its simplest level of connection. Find a way to hook the system up with as many pieces of the system missing or not connected. Keep it simple and get it to the point where the hum's gone. Then start adding back components one at a time until the hum returns.

Finding the problem is 9/10th of the work in finding a solution.



PS AUDIO

Troubleshooting

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Warranty

Owner's Reference DLIII Digital Link DAC

TERMS AND CONDITIONS

PS Audio warrants the product designated herein to be free of manufacturing defects in material and workmanship, subject to the following conditions, for a period of 90 days from the date of purchase by the original purchaser or date of shipment to the authorized PS Audio dealer, whichever comes first. This warranty period can be extended to three (3) years by registering your product. To register, go online www.psaudio.com.

Conditions

This Warranty is subject to the following conditions and limitations: the Warranty is void and inapplicable if the product has been used or handled other than in accordance with the instructions in the owner's manual, abused, or misused, damaged by accident or neglect or in being transported, or the defect is due to the product being repaired or tampered with by anyone other than PS Audio or an authorized PS Audio repair center.

- a. The product must be packaged and returned to PS Audio or an authorized PS Audio repair center by the customer at his or her sole expense in the original packing material. PS Audio will pay return freight of its choice for original purchasers.
- b. Return Authorization Number (RA Number) is required before any product is returned to our factory for any reason. This number must be visible on the exterior of the shipping container for PS Audio to accept the return. Units shipped to us without a Return Authorization Number or without a visible RA Number on the exterior of the shipping container will be returned to the sender, freight collect.
- c. RETURNED PRODUCT MUST BE ACCOMPANIED BY A WRITTEN DESCRIPTION OF THE DEFECT.

PS Audio reserves the right to modify the design of any product without obligation to purchasers of previously manufactured products and to change the prices or specifications of any product without notice or obligation to any person.

Remedy

In the event the product fails to meet this Warranty and the above conditions have been met, the purchaser's sole remedy under this Limited Warranty shall be to return the product to PS Audio or an authorized PS Audio repair center where the defect will be repaired without charge for parts or labor.

This Warranty is for the benefit of the original purchaser of the covered product if the product has been purchased through an authorized PS Audio dealer, distributor or agent. PS Audio will not honor this warranty without valid proof of purchase from an authorized PS Audio dealer, distributor or agent and or a valid serial number as proof the product is a valid PS Audio product manufactured by PS Audio International.

This warranty does not cover the cost of custom installation, customer instruction, setup adjustments or signal reception problems.

Miscellaneous

This warranty does not cover cosmetic damage or any damage due to accident, misuse, abuse, negligence or modification of, or to any part of the Product, without initial express consent from PS Audio. This warranty does not cover damage due to improper operation or maintenance, **connection** to improper voltage supply, or attempted repair by anyone other than a facility



Warranty

Owner's Reference DLIII Digital Link DAC

authorized by PS Audio to service the Product.

This warranty is invalid if the factory applied serial number has been altered or removed from the Product.

This warranty is invalid if proof of manufacture by PS Audio International cannot be determined to the satisfaction of the company either by verification of a valid serial number and or a valid receipt that includes the serial number from an authorized PS Audio dealer, distributor or agent.

To locate the servicer or dealer nearest you, or for service assistance or resolution of a service problem, or for product information or operation, call or email PS Audio.

ANY IMPLIED WARRANTIES RELATING TO THE ABOVE PRODUCT SHALL BE LIMITED TO THE DURATION OF THIS WARRANTY. THE WARRANTY DOES NOT EXTEND TO ANY INCIDENTAL OR CONSEQUENTIAL COSTS OR DAMAGES TO THE PURCHASER. Some states do not allow limitations on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, 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 from state to state.

Inquiries regarding the above Limited Warranty may be sent to the following address: PS Audio International, Inc., 4826 Sterling Drive, Boulder, Colorado 80301 ATTN: Customer Service; Email: customerservice@psaudio.com; Voice 720-406-8946; FAX: 720-406-8967.

Outside the US

PS Audio has authorized distribution in many countries of the world. In each country, the authorized importing retailer or distributor has accepted the responsibility for warranty of products sold by that retailer or distributor. Warranty service should normally be obtained from the importing retailer or distributor from whom you purchased your product. In the unlikely event of service required beyond the capability of the importer, PS Audio will fulfill the conditions of the warranty. Such product must be returned at the owner's expense to the PS Audio factory, together with a photocopy of the bill of sale for that product, a detailed description of the problem, and any information necessary for return shipment.



If you require service in North America

In the unlikely event there is a problem with your PS Audio component, please contact your dealer, distributor, or the PS Audio corporate research center to discuss the problem before you return the component to our California manufacturing facilities for repair. Products shipped to either the factory or the corporate research facilities will be refused and returned freight collect if not accompanied by a PS Audio Service Department issued return authorization number (RA Number).

Obtain an RA number

Return authorization numbers must be prominently displayed on the outside of the box and an accompanying letter describing the problem and re-listing the RA number must be inside the box to qualify for service.

Contact information

To contact the PS Audio Service Department:

TELEPHONE	866-406-8946 (toll Free)
HOURS M/F	9:00 am to 5:00 pm MST
FAX	720-406-8967
E-MAIL	service@psaudio.com
WEBSITE	http://www.psaudio.com

If you are in the United States or Canada

If you are in the United States or Canada use the following procedure:

1. Obtain a Return Authorization Number (R/A number) and shipping address from the PS Audio Service Department.
2. Insure and accept all liability for loss or damage to the product during shipment to the PS Audio factory and ensure all freight (shipping) charges are prepaid.

The product may also be hand delivered to the California or Colorado facilities if arrangements with the Service Department have been made in advance. Proof of purchase from an authorized PS Audio dealer, distributor or agent will be required for warranty validation at the time of hand delivery.

Use original packing

Use the original packaging to ensure the safe transit of the product to the factory, dealer, or distributor. PS Audio may, at its discretion, return a product in new packaging and bill the owner for such packaging if the product received by PS Audio was boxed in nonstandard packaging or if the original packaging was so damaged to the point it was unusable. If PS Audio determines that new packaging is required, the owner will be notified before the product is returned.

To purchase additional packaging, please contact your authorized PS Audio dealer, distributor, or the PS Audio Service Department for assistance.

If you are outside the US or Canada

If you are outside the United States or Canada and require service you must contact your country's dealer or distributor for instructions. PS Audio warrants its products (see warranty section) worldwide. Service for PS Audio products outside the United States and Canada is handled through your country's distributor or dealer.

1. Obtain a Return Authorization Number (R/A number) and shipping address from your dealer or distributor's Service Department.
2. Insure and accept all liability for loss or damage to the product during shipment to the dealer or distributor's Service Department and ensure all freight (shipping) charges are prepaid.

If you have problems

If you feel your country's authorized dealer or distributor is either unwilling or unable to service your PS Audio products, please contact our service department at service@psaudio.com or at the above contact numbers to discuss the situation.

Voltage changes

Voltage changes to match your country's voltage and frequency requirements to your PS Audio product are possible only at the time of purchase. The GCA amplifier series is set to a fixed voltage to match your country's requirements and may not be changed.

Your serial number

Your PS Audio product serial number is:

Please fill in the dealer or distributor's information from where you originally purchased the unit.

Your purchase information

Date of purchase