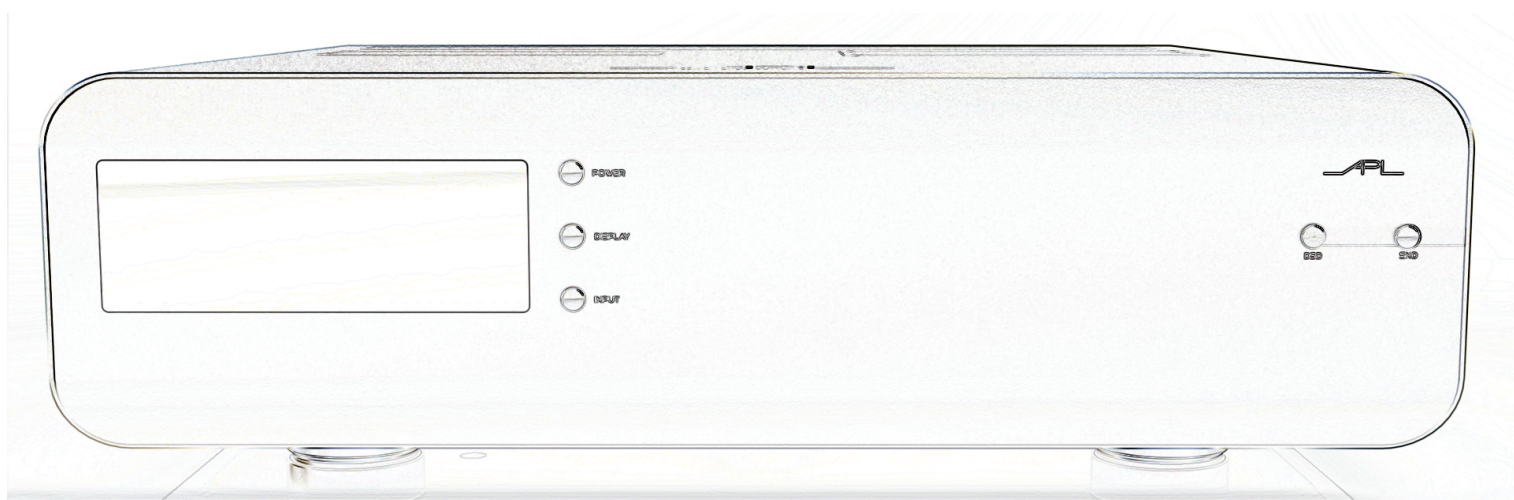




OWNER'S MANUAL



DIGITAL TO ANALOG CONVERTER

DSD-GR

**CONGRATULATIONS ON YOUR NEW
DSD-GR PURCHASE !**

**THIS IS A TRUE ALL-HANDMADE BOUTIQUE
PROVIDING A VERY UNIQUE PERFORMANCE.**

**WE HOPE IT WILL BRING YOU
MANY YEARS OF MUSICAL
ENJOYMENT AND HAPPINESS !**

**THANK YOU FOR CHOOSING
OUR PRODUCTS !**



www.aplhifi.com

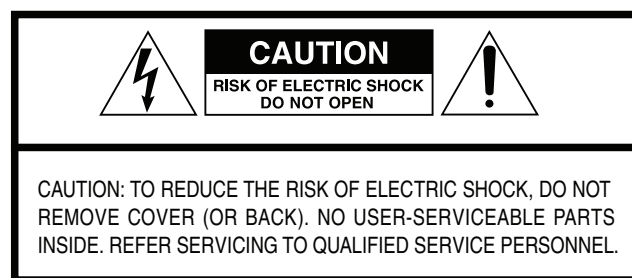
WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

Batteries or batteries installed apparatus shall not be exposed to excessive heat such as sunshine, fire or the like.

PRECAUTIONS

To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus. Install this unit so that the AC power cord can be unplugged from the wall socket immediately in the event of trouble



The lightning flash with arrowhead symbol, within an Equilateral triangle, is intended to alert the user to the Presence of uninsulated “dangerous voltage” within the Product's enclosure that may be of sufficient magnitude to Constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is Intended to alert the user to the presence of important Operating and maintenance (servicing) instructions in the Literature accompanying the appliance.

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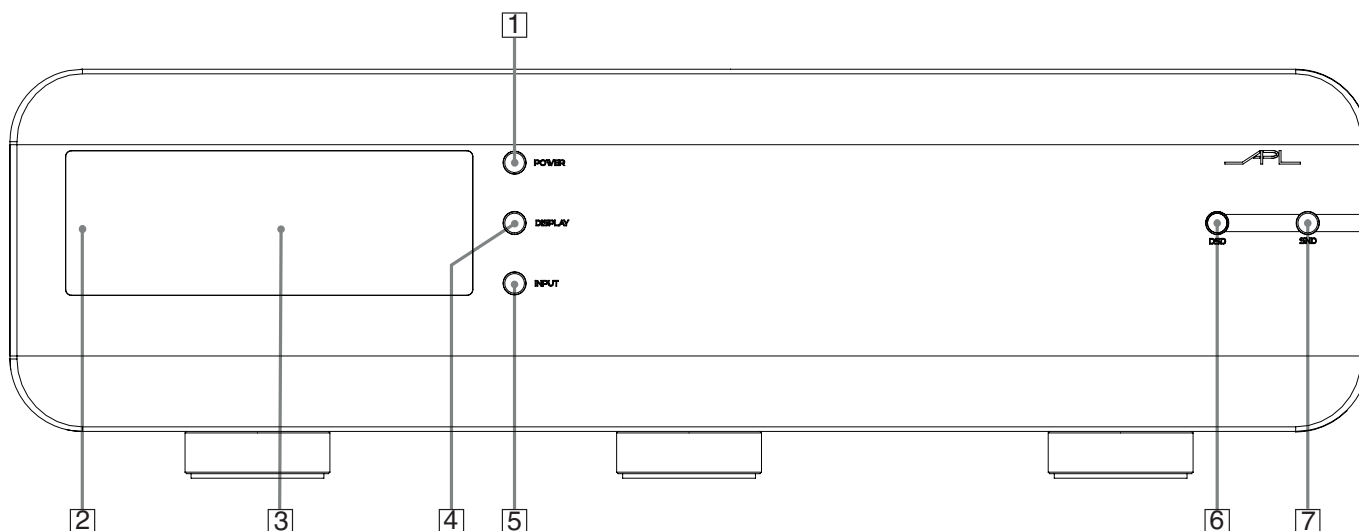
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Front panel



1 POWER BUTTON

Turns the unit ON, or sets to Standby mode.

Note: When the unit is not going to be used for a longer time, it is recommended to unplug the power cable.

2 REMOTE SENSOR

Receives signals from the remote control unit. Point the remote control unit at this sensor when operating the remote control.

3 FRONT PANEL DISPLAY WINDOW

Please see description on page 7.

4 DISPLAY BUTTON

Use this button to select from the four brightness levels and display OFF. When the display is OFF the next push of the button will be maximum brightness.

5 INPUT SELECT BUTTON

Use this button to switch the input source selection between Coax1, Coax2, USB, DTR1, DTR2, Optical and AES/EBU.

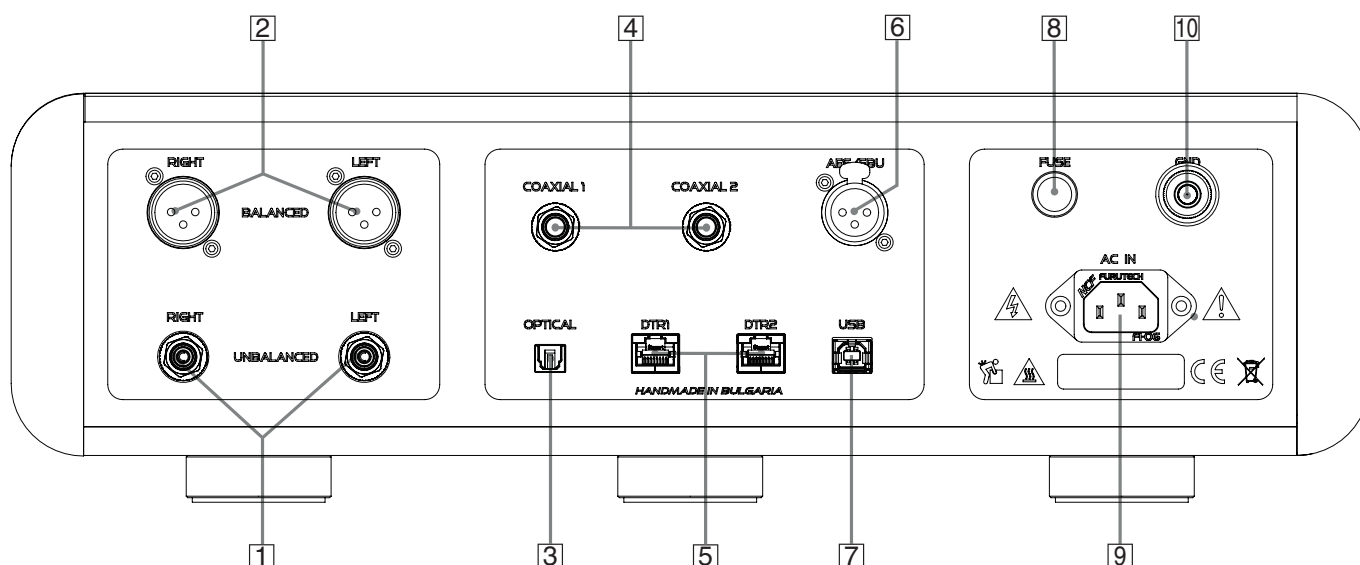
6 DSD

Sets the PCM to DSD conversion rate - the DSD modulator speed.

7 SOUND BUTTON

Alternates between two sound modes for the DSD modulator when converting PCM to DSD.

Back panel



- 1 ANALOG OUT UNBALANCED RCA L/R jacks
Connects a component with analog input jacks, such as pre-amplifier using an RCA audio connection cable.
- 2 ANALOG OUT BALANCED XLR L/R jacks
Connects a component with XLR input jacks, such as pre-amplifier using an XLR (balanced) cable.
- 3 OPTICAL IN jack
Connects a component with the Toslink optical output jack, such as CD player/transport, MD deck, computer, etc.,
- 4 DIGITAL IN COAXIAL1 and COAXIAL2 jacks
Connects a component with the coaxial digital output jack, such as CD player/transport, MD deck, computer, etc., using RCA S/PDIF digital coaxial cable.
- 5 DTR1 IN and DTR2 IN jacks
Proprietary Digital I2S-like balanced connection to use with APL Hi-Fi Digital sources only!
- 6 DIGITAL IN AES/EBU jack
Connects a component with balanced digital output jack, such as CD player/transport, MD deck, computer, etc., using AES/EBU digital cable.
- 7 DIGITAL IN USB jack
Connects a computer via USB. Please see page 10.
- 8 FUSES.
Main power fuse 2A 125v/250v.
- 9 AC IN jack
Connects the AC power cable. The connector used is the highest grade Furutech NCF.
- 10 Ground Terminal
Connects the Grounding cable. The connector used is high grade WBT.

Front panel display



1 DIGITAL INPUT INDICATOR

Displays the current digital input source selection.

2 INPUT SAMPLING RATE FREQUENCY INDICATOR

Displays the sampling frequency and digital format (PCM or DSD) present at the selected digital input.

3 MODULATOR FINAL DSD SAMPLING RATE FREQUENCY INDICATOR

Displays the final PCM to DSD upsampling rate, prior to D/A conversion.

4 DFILT

Displays the Digital Filter selection. Normal (sharp rolloff), Slow (slow rolloff) and Zero (no filter). The digital filter selection affects only PCM playback. DSD is not processed in any way.

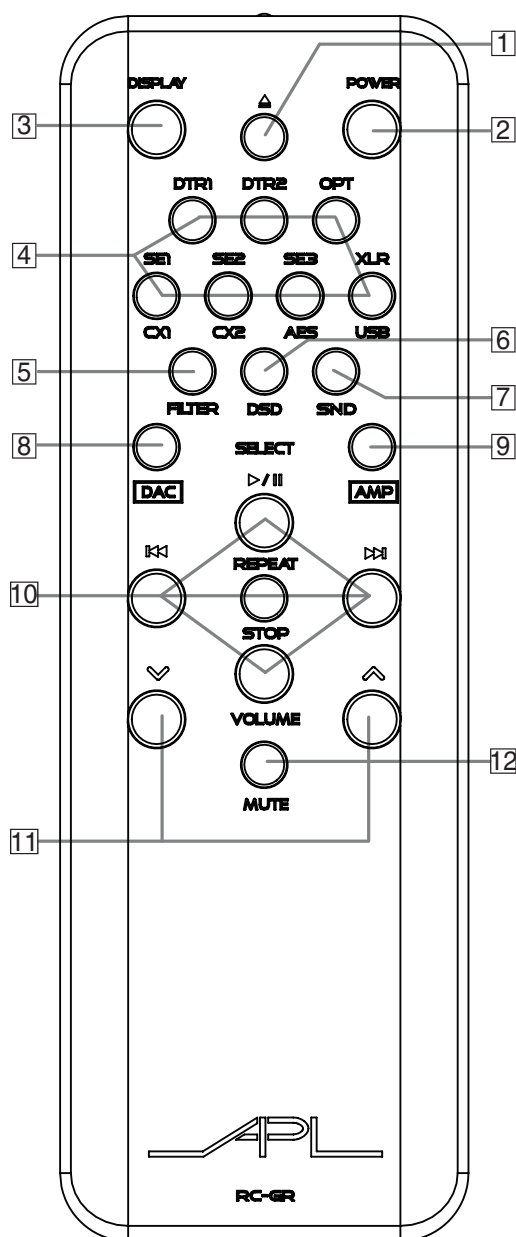
5 PCM TO DSD ENCODER INDICATOR

Displays PCM to DSD modulator rate, user selectable between DSD256 and DSD512.

6 SOUND MODE

Displays the selected Sound Mode of the DSD modulator. This affects only PCM files.

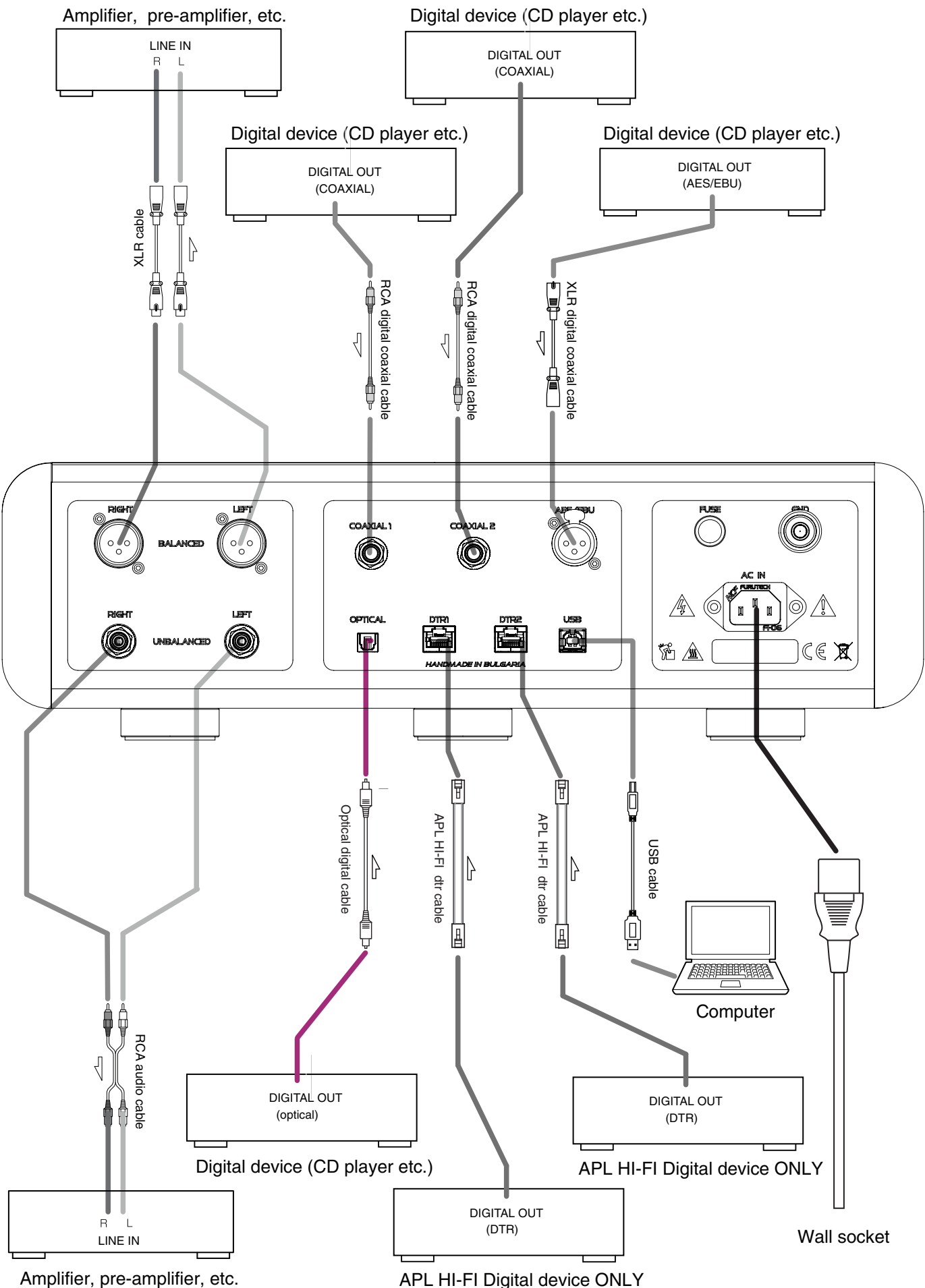
Remote control



RC-GR is a universal remote control that can be used with other APL Hi-Fi products.

- 1** OPEN/CLOSE BUTTON
For DTR-MR digital transport.
- 2** POWER BUTTON
Turns the unit ON, or sets to Standby mode.
To turn ON or OFF the DTR-MR transport, press and hold the power button for 3 seconds.
- 3** DISPLAY DIMMER AND DISPLAY OFF MODE BUTTON
Use this button to alternate between 3 display dimming modes and OFF. Next step after display OFF is maximum brightness.
- 4** DIGITAL INPUT SELECT BUTTONS
Use this button to switch the input source selection:
Coax1, Coax2, USB, DTR, OPT and AES/EBU for DAC.
SE1, SE2, SE3 and XLR for PRE or AMP.
- 5** FILTER BUTTON
Toggles between Normal, Slow and Zero digital filters for DAC.
- 6** DSD BUTTON
Sets PCM to DSD modulator upsampling rate.
- 7** SOUND MODE BUTTON
Selects between two sound modes for the DSD modulator.
- 8** DAC SELECTION BUTTON
Always press this button first in order to control the DAC.
- 9** AMP SELECTION BUTTON
Always press this button first in order to control the PRE or AMP.
- 10** DIGITAL TRANSPORT CONTROL
These buttons control the DTR-MR and work independent from AMP or DAC selection.
- 11** VOLUME UP/DOWN BUTTONS
PRE or AMP attenuator control with 0.75dB step.
Holding one of those buttons for more than 2-3 seconds enables faster attenuation speed mode.
- 12** MUTE BUTTON
This button mutes the PRE or AMP outputs. It works in toggle mode.
Press again to un-mute.

Connection



Notes on use

USB Input:

The DSD-GR is equipped with an XMOS-based USB chipset that does not require a driver for Mac or Linux OS. However, a driver is required for Windows. Please contact us in order to obtain the latest Windows driver: info@aplhifi.com

After you have received the Windows driver from us, please connect the DSD-GR to the computer via USB cable and then initiate the driver installation. Please note that, if the DSD-GR is not powered On and connected to the computer with USB cable, the driver may not install properly.

Please note that the DSD-GR does not use the +5V power from the USB cable. It uses very clean internal low-noise linear power supplies.

DTR Inputs:

The DSD-GR features two proprietary DTR inputs – DTR1 and DTR2. These inputs are intended for connecting APL Hi-Fi digital sources only.

Please note that the DTR inputs are not LAN inputs and may be damaged if connected to your LAN.

Front FL Display:

The Fluorescent display is a beauty but it is highly recommended to turn it Off for best sound quality. This mode is set by pushing the DISPLAY button on the front panel or remote. It is intelligent in a way that it shows the changes made and then shuts Off again in 3 sec.

Digital Filters Selection:

DSD-GR digital filters can be selected by pressing the FILTER button on the remote. It toggles between Zero (no digital filter), Slow rolloff and Normal (sharp rolloff). Both Slow and Normal filters are of very special custom design based on a 64 bit architecture. The digital filters or zero mode works for PCM files only.

Sound Mode Selection:

DSD-GR includes two sound modes for the PCM to DSD modulator. Please try both and decide which one to use. Please note the sound modes do not work with DSD files.

Using the RCA and XLR outputs:

The DSD-GR output stage is transformer coupled and ground-referenced. There are 2.7V RMS on the RCA output, and 2.7+2.7V RMS on the XLR output. It is not recommended using the RCA and XLR outputs simultaneously, but if such connection is needed, please make sure the connected devices have input impedance above 20k Ohms.

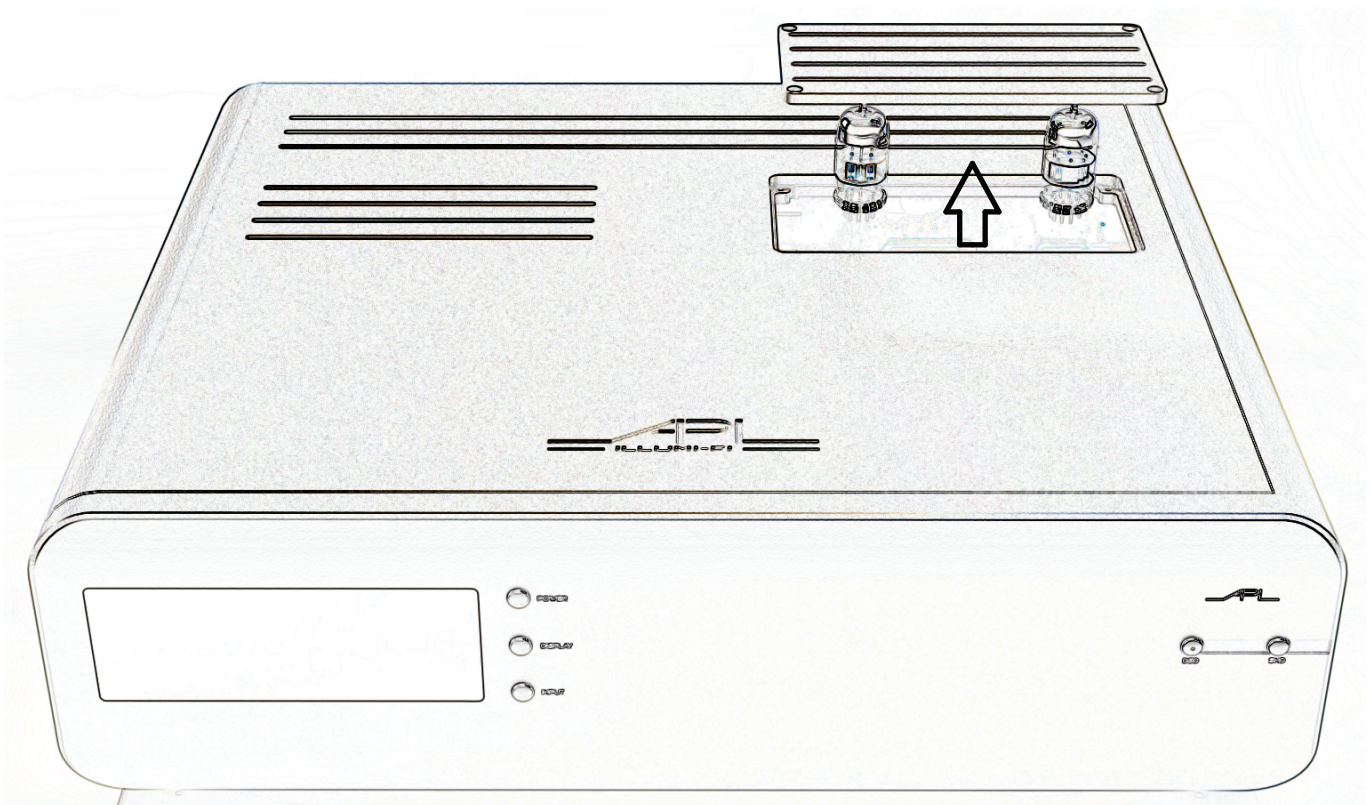
Notes on use

General use guidelines:

It is not recommended leaving the DSD-GR working 24 hours non-stop. Please make sure to always give it at least 8 hours rest. In our experience, this also helps for faster burn-in period.

The DSD-GR is equipped with a pair of current production ECC99 tubes made by JJ Electronic. These tubes usually last for 10,000 hours. There is a gold pin version of this tube. However, we feel the regular ECC99 sounds more natural. Please note that the ECC99 are the best tubes we have found for our application. No other similar tube (vintage or not) will improve the sound.

In the case tubes need replacement, please turn the DSD-GR OFF first and wait at least 15 minutes for the tubes to cool off. Then remove the 4 screws holding the small cover above the tubes. Please be very careful to not drop anything metal inside the DSD-GR. Please gently remove the old tubes and carefully install the new ones. Install the small cover back on its place, reconnect all cables and turn the DSD-GR back ON.



As reported by DSD-GR owners, it takes around 100-200 hours break-in time to settle. Interestingly enough, due to the use of audio transformers, this also applies for units that had some hours on them, but were shipped around. Please make sure to run the DSD-GR in your audio system for a minimum of 3 days, prior to any critical evaluation.

If you have any questions or concerns, please do not hesitate to contact us - info@aphifi.com

Specifications

Digital Inputs

- Two S/PDIF Coaxial digital inputs.
- AES/EBU professional standard balanced digital input.
- Optical TOSLINK digital input.
- Note: Coax, AES/EBU and Optical inputs accepting up to 192kHz/24bit PCM.
- PCM rates from all inputs are converted to DSD256 or DSD512, user selectable.
- USB input accepting up to 384kHz/32bit PCM, up to DSD128 in DoP format and up to DSD512 in NativeDSD format. NativeDSD format is recommended
- Two proprietary DTR inputs for connecting APL Hi-Fi digital sources only.

Analog Outputs

- Single Ended RCA outputs with top line Furutech RCA connectors.
- Balanced XLR outputs with top line Furutech connectors.
- Output level - 2.7V RMS at 0dBFS for RCA and 2.7+2.7V RMS for the XLR outputs.
- Output impedance - approximately 150 Ohms for RCA and 150+150 Ohms for XLR, ground centered.
- Recommended minimum load impedance - 10 k Ohms for RCA and 10+10k Ohms for XLR.

Power input and fuses

- IEC power inlet made by Furutech, top line NCF series.
- 115V or 230V / 50-60Hz, factory pre-set. .
- 1A special ceramic fuse for main power supply.

Dimensions and weight

- W450 x H120 x D380 millimeters.
- Front panel width - 450 millimeters.
- Height with feet included - 140 millimeters.
- Weight - 23kg unpacked.

Included Accessories

- Infrared Remote Control.
- User Manual
- Certificate of Authenticity

Warranty

Overall Warranty Information

- The DSD-GR comes with a standard 2 years parts and labor warranty coverage, except for the tubes.
- The output ECC99 tubes pair warranty is 6 months.
- The standard 2 years warranty can be extended to 3 years by registering your DSD-GR.
Please visit our web page and select “Register your product” on the right of the top menu.

Voiding the warranty

- The warranty sticker on the bottom of the unit shows signs of removal.
- The unit is serviced by unauthorized person or service.
- There are signs of liquid spill damage inside the unit.
- There are metal objects causing shorts found inside the unit.
- There are damages caused by improper use.
- The electronics is damaged by over-voltage at the IEC inlet.
- The tubes are replaced with a different model than ECC99.

