



D-3000

DIGITAL TO ANALOG CONVERTER



OWNER' S MANUAL

Allnic Audio

D-3000

Digital to Analog Converter

Thank you for purchasing this Allnic Audio D-3000 Digital to Analog Converter (DAC). We are certain your trust in Allnic Audio and Audiomentors, as well as your appreciation for the sound of this innovative and ground-breaking device, will be rewarded by its excellent operation for many years to come.

Please read this entire manual before you connect the D-3000 to the other components of your system and the electrical receptacle.

Audiomentors(Allnic Audio Marketing company)

**3f. GanaPlaza, 8-3 Sunae-dong, Bundangdong, Gyeonggy-do
South Korea**

Direct Telephone: 0082-31-716-3311

email: audiomentors@naver.com

Website: www.audiomentors.co.kr

**** Information and specifications for the Allnic Audio product described in this manual are subject to change without notice.**

WHAT IS IN THE BOX?

Please check that the shipping box contains the following:

- One (1) Allnic D-3000 DAC – in natural aluminum or black, depending on your order specification
- One (1) Apple remote control
- One (1) Owner's Manual

Note:

- 1) The D-3000 DAC ships with the tubes installed and equipped with an O-ring each.
- 2) The D-3000 will work with most IEC type aftermarket power cords. Of course, only you can determine the power cord that works most synergistically with the D-3000 in your system.
- 3) Be sure the D-3000 DAC is labeled for the AC voltage of your location. If it is not, please contact Audiomentors.

We advise that you keep the box and other packing materials that your D-3000 DAC came in. They will be useful if you sell your D-3000, or in the unlikely event you need to ship the unit for service.

SAFETY!!

- Disconnect power cords by pulling the plug, not the cable.
- Do not attempt any repairs. Do not remove the unit's chassis cover without specific authorization from Audiomentors.
- Keep all cables away from heat sources.
- Ensure there is plenty of free space around and above the unit.
- Keep the unit away from liquids – do not allow any liquid to enter the interior of the unit.
- When the unit is moved from a cold to a warm environment, allow sufficient time for any condensation to evaporate before plugging the D-3000 into an AC connection.
- See the notes on "Location, Location, Location".

CLEANING

A. Chassis

Use only a soft, lint-free cloth dampened slightly with water only (NO cleaning fluids!) to clean the faceplate and chassis of the D-3000 DAC.

B. Connectors

You may use any good quality contact cleaner recommended for such applications to clean the contacts from time to time, as you deem appropriate.

INITIAL SET-UP

A. LOCATION, LOCATION, LOCATION

Like all audio products using tubes, the Allnic Audio D-3000 needs to be placed on a solid base that is not subject to vibration or sudden shock, and that provides good air circulation around, above and below the unit.

- DO NOT cover the top of the D-3000 tube chimneys.
- DO NOT drop the unit! For those who may want to place the D-3000 on some kind of aftermarket isolation feet or similar devices, dropping one side of D-3000, or the whole unit may result in damage to the unit or tubes that will not be covered by warranty.
- DO NOT place the unit near a strong light or heat.
- DO NOT place anything heavy on the unit.
- DO NOT allow rubber or vinyl materials to rest on the unit's chassis for long periods of time. This could discolour the metal.
- DO place the unit on a shelf or stand that is stable and not subject to vibration or sudden shock.
- DO consider using a high quality power cord, as well as inter-connects for both inputs and outputs. The D-3000 is a highly sensitive piece of electronic designed for neutrality and will output what you put into it.
- DO try to place the D-3000 well away from major sources of RFI and EMI; though well shielded, the D-3000 will function best away from large power transformers and other sources of such interference.

B. POWER CONNECTION

The D-3000 DAC uses a standard three prong male IEC connection for AC input on the right hand of the rear of the unit's chassis. You need a power cord with a female three prong IEC connector at one end.

The D-3000 will be set internally for your location's electrical system characteristics. Please check the setting for electrical input on the label on the rear of the unit to confirm that your D-3000 matches your location's electrical system. For North American customers, the D-3000 is set internally for AC 110/220 volt – 60 HZ operation. There is no way to change this to another AC setting without return of the unit to the factory for re-wiring, at the owner's cost, including transport both directions.

C. INPUTS

The D-3000 DAC has the following inputs:

- One optical (“Toslink”) digital
- One USB
- One AES/EBU digital
- Two (2) coaxial digital

To select the input you want to play, rotate the knob on the right of the D-3000’s front panel clockwise and counter-clockwise, or use the appropriate part of the remote control (See the section “The Remote Control” below).

The D-3000 utilizes a non-PLL digital receiver for lower noise. To avoid introduction of noise and/or connectivity issues, the user should be sure to use high quality digital sources and cables that meet applicable standards for the selected input (e.g., AES/EBU, S/PDIF).

D. OUTPUTS

The D-3000 is equipped with one pair of unbalanced or “single-ended” (RCA) outputs and one pair of true balanced (XLR) output connections. Each output pair is oriented horizontally. WHEN FACING THE REAR OF THE DAC , the:

- XLR and RCA output connections are to the left of the IEC power connection;
- switch to change between balanced and unbalanced connection is between the AC power IEC connection and the XLR (balanced) output connector pair;
- RCA (unbalanced) connectors are to the left of the XLR (balanced pair); and
- left channel output connector for each output pair is to the right of the right channel connector.

The left channel output connectors are labeled “L”, and the right channel output connectors are labeled “R” .

As noted above, the switch to change between balanced and unbalanced connection is between the AC power IEC connection and the XLR (balanced) output connector pair. The switch is labeled to indicate that the upper position is for the balanced (XLR) output connectors, with the lower position being for the unbalanced (RCA) output connectors. You may have both balanced and unbalanced outputs connected at the same time without introducing hum PROVIDED you have the output switch set to unbalanced output.

E. EXTERNAL CLOCK CONNECTION

The D-3000 is equipped with BNC type in and out reference word clock connectors for use with an external clock.

INITIAL POWER-ON

Once you have your D-3000 DAC in place, connected it to the electrical source, and all connections have been made to your digital sources and preamplifier, you are ready to turn on the power for your D-3000 .

Before you power up the D-3000, though, be sure you have:

- checked that all your connections are snug
- selected the output connections that you want to use, single ended (RCA) or balanced (XLR), on the switch on the back of the DAC
- turned the volume down or muted your preamplifier

To turn on the D-3000, press in the rocker switch on the left side panel near the front of the unit and marked with on and off icons. To turn on the D-3000, press the top of the rocker switch in. Of course, the “Off” position is the reverse, pressing the bottom of the rocker switch in.

OPERATION

When the D-3000 DAC is powered on, the current meter on the left of the front panel will illuminate. When D-3000 is connected to a powered on source and the appropriate input for that source is selected, the LED in the top centre of the front panel, labeled “Link”, will illuminate. Note: In some cases, the “Link” LED might not illuminate until signal is passing from the source).

The USB input accommodates:

- DSD 64, DSD 128
- PCM 44.1 KHz, 48 KHz, 88.2 KHz, 96 KHz, 176.4 KHz, 192 KHz, 352.8 and 384 KHz.

Please note that the digital inputs and the customized S/PDIF receiver accommodate rates up to 192 KHz (so long as the source is of sufficiently high quality). However, because it utilizes a non-PLL digital receiver for lower noise, users may find occasionally that some signals over 96 KHz may be problematic, particularly with the optical/Toslink input. Users may mitigate this problem with appropriate down-sampling at the source.

From this point on, operation is straight-forward. All functions can be accessed from the front panel. The button “in” position makes the selected function “active”, and the associated LED/LEDs will illuminate. The button “out” position means the function is inactive; the associated LEDs will not be illuminated. The desired input is selected by rotating the knob on the right of the D-3000’s front panel clockwise and counter-clockwise, or by using the appropriate part of the remote control and the section “The Remote Control” below).

DSD Playback and “CONV” (Conversion to DSD)

In the case of playback of a native DSD signal from the source, the D-3000 employs DSD over PCM (“DOP”). The user should set up the source software to output for the DOP standard. Whenever the

D-3000 is used to playback DSD files, the DSD LED indicator will illuminate, as well as the LED indicator for one or the other of the 176/192 or 352/384 sample rates, indicating the DSD rate. The 176/192 indicator means the input signal is DSD 64, and the 352/384 indicator means the input signal is DSD 128. During playback of a native DSD signal from the source, the "CONV" and "UPSAMPLE" buttons are not used.

The button labelled "CONV" is used to implement real-time conversion to DSD. The LED indicator for CONV illuminates when CONV is selected (this will occur even when playing a DSD file and CONV is selected; however, in that case, no conversion is occurring). You may notice that gain in the DSD conversion mode is slightly lower than that in the source input sample rate and upsampling modes. This is normal and is compensated for by adjusting your volume control.

Please note that the DSD indicator light has two meanings; it indicates either that the D-3000 is playing a native DSD signal from the source, OR that conversion to DSD has been selected by the user.

PCM Playback and UPSAMPLE

When the D-3000 is playing a PCM signal from source, the appropriate LED indicator for the source sample rate will illuminate.

Please note that some high sample rate PCM signals may carry background white noise in addition to the audio; this is because many freely distributed high resolution PCM files are generated using either a software or hardware up-sampler that is not of sufficiently high quality. It is recommended that, if possible, the source software or device is used to down-sample such signals to improve the sound quality.

Please also note that while the D-3000 filters incoming low quality SPDIF interface signals, some source devices in the market do not meet S/PDIF standard or are otherwise of insufficient quality and can be noisy.

The button labelled "UPSAMPLE" is used to select the desired up-sampling rate (See Figure 1). Repeated presses of the UPSAMPLE button move the unit through the available up-sampling rates as indicated on the front panel.

NOTE: The user cannot control the up-sample rate for conversion to DSD; the D-3000's conversion to DSD and PCM "UPSAMPLE" functions are discrete processes.

Drivers are not required for Mac/Linux operating systems. The Thesycon driver is compatible for Windows applications and is available on-line. It is currently planned to have a Windows compatible driver that will specifically recognize the D-3000 DAC available for download from the Audiomentors and Allnic Audio websites.

Of course, BE CAREFUL about differences in gain between your sources. Generally, disc players and tuners will have greater gain than phono-stages. That means the volume setting for listening to your turntable might be too high for listening to CDs.

When you are finished listening, turn off your power amplifier(s); then turn off your preamplifier and then turn off your sources last, including the D-3000 by pressing in the bottom of the on/off rocker switch, located on the left side panel near the front of the unit.

NOTE: While the D-3000 DAC is run in and tested at the factory, users have reported that the sound improves steadily through the first two to three hundred hours of use.

In the case of any failure, please contact your Allnic dealer for assistance.

THE REMOTE CONTROL

The remote control allows remote operation of all the functions on the front panel of the D-3000. It does not support the on/off function. The remote control provided is a standard Apple product. All functions controllable by the remote are manipulated by using the large button at the top of the remote control, which is surrounded by a black ring with a white dot at its top and bottom and left and right sides.

The DAC functions are selected as follows:

- Pressing the upper part of the black main button ring selects the various inputs from right to left on the face of the unit
- Pressing the lower part of the black main button ring selects the various inputs from left to right on the face of the unit
- Pressing the right side of the black main button ring toggles CONV, conversion to DSD, on and off, i.e., between conversion to DSD and a source's incoming sample rate, or one of the up-sampling rates (the latter only if you were previously in up-sampling)
- Pressing the silver central "enter" button toggles UPSAMPLE on and off and when on, cycles through the various up-sampling rates

The remote control's "left" side of the black main button ring, the "Menu" and the "Play/Pause" buttons have no functions for the D-3000 DAC.

If you are using an Apple device as a source or controller, or have any other Apple device nearby, it may also respond to the D-3000 remote control. If you need to use an Apple device at the same time as you are using the D-3000 and cannot move your Apple device out of range of the D-3000 remote control, you should be able to disable the remote control sensor of the Apple device in the device's System Preferences. Instructions for doing this are available on-line.

THE CURRENT METER

The illuminated meter on the D-3000's front panel indicates the current supply to the tubes in the D-3000. The meter will indicate failure or damage to the function of the unit. The needle should be between the two almost vertical lines just to the right of centre on the meter face. Any failure of the tubes or circuits in one or the other of the D-3000's channels is indicated by the needle on the meter moving out from between the two lines. If the needle moves to the right of the two lines, a type of

tube short circuit is indicated. If the needle moves to the left of the two lines, either a tube is losing emissions or has an open filament, or the power supply circuit requires adjustment. It would be highly unlikely for any of these events to occur; however, if the meter should indicate an issue, please contact your Allnic dealer for assistance.

TUBES

The D-D-3000 uses the following tubes :

- Four (4) x 5842 (WE417A)

It is optional to remove the O-rings from the tubes. Some customers prefer them on; others off. Allnic Audio recommends leaving them on.

All consequences of changing or attempting to change tubes are borne by the user unless by express agreement between the owner and the Allnic dealer. The Allnic dealer, Allnic Audio and Audiomentors are not liable in any way whatsoever for any injury or loss incurred by the user or for damage to the D-3000, any of its parts, or tubes or replacement tubes resulting from the user changing or attempting to change tubes.

SPECIFICATIONS FOR THE ALLNIC AUDIO D-3000 DAC

Inputs:

- One (1) X optical ("Toslink") digital
- One (1) X USB
- One (1) X AES/EBU digital (XLR)
- Two (2) X coaxial digital (RCA)

Outputs:

- One (1) pair X unbalanced (RCA)
- One (1) pair X balanced (XLR)

Output Frequency Range:

- 20Hz - 20KHz flat

Output RMS Voltage:

- 2.5 volts

Output Impedance:

- 150 Ω (Constant)

Total Harmonic Distortion (THD):

- Less than 0.1%

Signal to Noise (S/N) Ratio:

- - 86db (CCIR, 1KHz)

Power Consumption:

- 23W at 230 V / 110/120 V / 50 / 60 Hz

Tubes:

- Four (4) x 5842 – Output stage tubes: equivalent is WE417A

Fuse:

- AC 3A, 250V

Dimensions:

- 430mm (16.93 inches) x 290mm (11.42 inches) x 150mm (5.91 inches) (W x D x H)

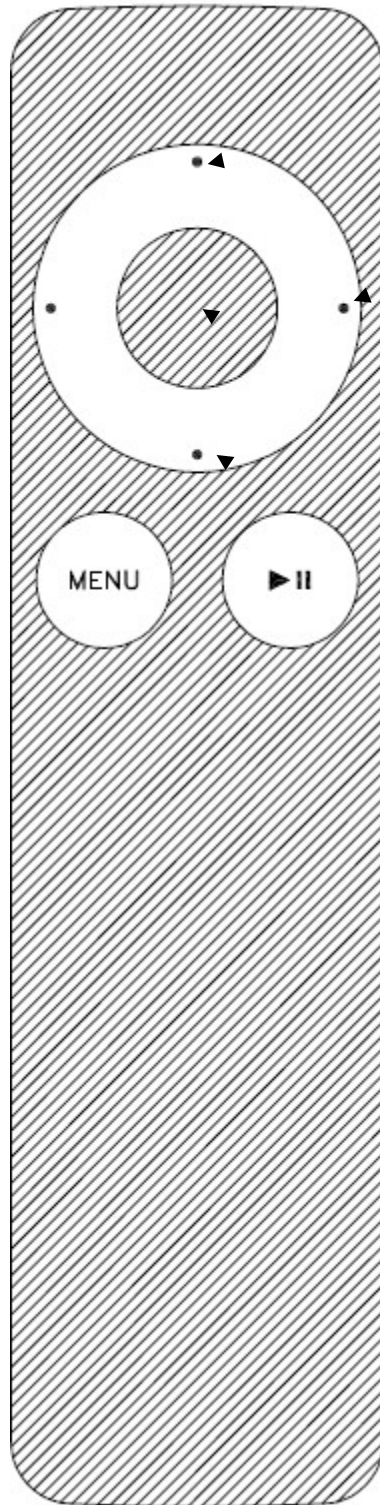
Weight:

- 9.2 Kg (20.3 lbs.) unpacked
- 11 Kg (24.3 lbs.) in original packing

WARRANTY

All Allnic Audio amplifier products are warranted against materials and manufacturing defects for parts, excluding tubes, and labour for two (2) years from date of purchase. Tubes are warranted against materials and manufacturing defects for one (1) year from date of purchase. The warranty is transferable for the balance of the original purchaser's warranty period, provided, as stated below, no unauthorized repairs or modifications have been performed on the product. Date of purchase is the date indicated on the invoice for the product issued by your authorized Allnic Audio dealer.

For the warranty to be valid, a defective product must be returned to your authorized Allnic Audio dealer for service prior to any unauthorized attempt to repair. Any repair work on an Allnic Audio product not expressly and specifically authorized by your authorized Allnic Audio dealer will void the warranty on the product.



Selects the various inputs from right to left on the face of the unit

Toggles CONV, conversion to DSD, on and off, i.e., between conversion to DSD and a source's incoming sample rate, or one of the up-sampling rates (the latter only if you were previously in up-sampling)

Toggles UPSAMPLE on and off and when on, cycles through the various up-sampling rates

Selects the various inputs from left to right on the face of the unit