

# User's Manual



Calyx 500

Mono Block  
Power Amplifier  
Class-D Algorithm  
for High-End User

[www.calyxamp.com](http://www.calyxamp.com)

※ This manual may have some differences depending on the version of the product.



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# 1. Introduction

Music is the most important messenger of human emotion as well as a meaning of its expression since human beings appeared on this earth. Music created by amazing inspiration of many gifted composers makes people moved and our normal lives enriched.

The absolute sound and real music performed in real space like concert halls are the most important experience that makes people get to the musical essence. Besides, audio products re-producing music are a way of modern civilization making our lives better.

Since 1999, the year of establishment, **Digital & Analog Co., Ltd.** (as known as **D&A**) has been providing class-D I.C.s to various audio OEM companies. And **D&A** started to make its own high-end audio products since 2008 and as a result, we succeeded to build audio products with excellent measured performance which any other amplifiers were not able to reach so far. **Calyx** is the by-product of such an effort based on **D&A**'s many experiences like designing, manufacturing and selling of class-D ICs and supporting its customers to make their audio products using **D&A**'s I.C.s. **Calyx** has been tested subjectively as well as objectively under a lot of test circumstances.

A great Chinese poet 'Bai Ju Yi' of the Tang Dynasty expressed sound as followings in on of his book; "A poem has passion as its root, words as its buds, sound as its flower and meanings as its fruits" So we named our products as **Calyx**, in the meaning of corolla of music described as flower by the renowned poet.

**Calyx** will enrich your life as a strong support of musical flower. This coincides exactly with our slogan;

**"Technology making the world affluent."**

**Calyx** is high-end products, which you can be proud of possessing it.

**Digital & Analog Co., Ltd.** has developed class-D amplification technology with many patents on the technology.

From now on, we provide high-end audio products to music lovers like you

Thanks and enjoy the music.

Seungmok Yi

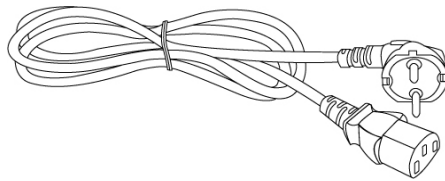
CEO/President

## 2. Unpacking

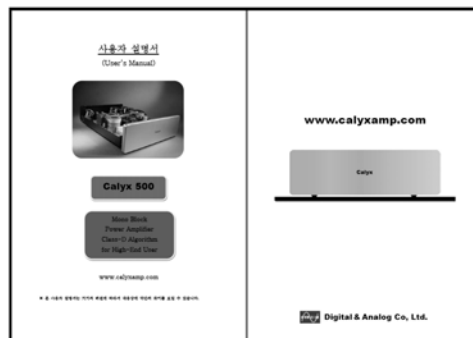
You will find in Calyx 500 Box :



< Calyx Amp >



< Power Cord >



< Manual >

If, when you open the Calyx 500 Box, the item is damaged or missed, please contact your dealer.

The inside of Calyx 500 amplifier :

1. Power Stage
  - High efficient audio power
2. Amplifier Stage
  - High quality audio amplifier
3. Parts
  - High-end grade terminal (RCA, XLR, SPEAKER...)
  - High quality electronic components (op-amp, audio grade capacitor, OFC wire...)

### 3. Cautions

Please take a moment to read these notes before installing your Calyx Amp, as they will enable you to get the best performance and prolong the life of the unit.

As our engineers are striving for the constant research and development to develop the quality of products, shape or structure of our model can be changed without previous notice.

※ **We advise you follow all instructions, heed all warnings and keep the instructions for future reference.**



This symbol indicates that dangerous voltage which can cause electric shock is present inside this unit.



This symbol alerts you to important operating and maintenance instructions accompanying the unit.

Do not overload outlets or extension cords

- ▶ This can result in a risk of fire or electric shock.

Never touch the power cords or the unit with wet hands.

- ▶ This can result electric shock.

Never use the frayed or damaged or cracked or broken power cords.

- ▶ This can result in a risk of fire or electric shock.

Do not expose the unit to rain or moisture.

- ▶ This can result in a risk of fire or electric shock..

Do not expose the unit to direct sun radiation or other heat sources.

- ▶ This could lead to overheating and malfunction of the unit.

During thunderstorms, disconnect the power cords from the wall outlet.

- ▶ Voltage peaks due to lightning could damage the unit.

Never attempt to repair, disassemble or reconstruct the unit.

- ▶ Serious electric shock could result

Do not put any objects on top of the unit.

- ▶ If the objects fall, it may cause harm to the user.

Please ensure there is ample ventilation

- ▶ The unit will become hot when in use

To clean the unit, please follow next instructions.

- ▶ Wipe its case with a dry, lint-free cloth.  
Do not use any cleaning fluids containing alcohol, ammonia or abrasives.  
Do not spray an aerosol at or near the amplifier.

Do not move the unit, while it is powered on.

- ▶ This can cause harm to the unit

Do not place the unit on an unstable surface or shelf.

- ▶ If the unit falls, it may cause harm to the unit or to the user.

Do not use attachments not recommended by your dealer

- ▶ This may cause harm to the unit

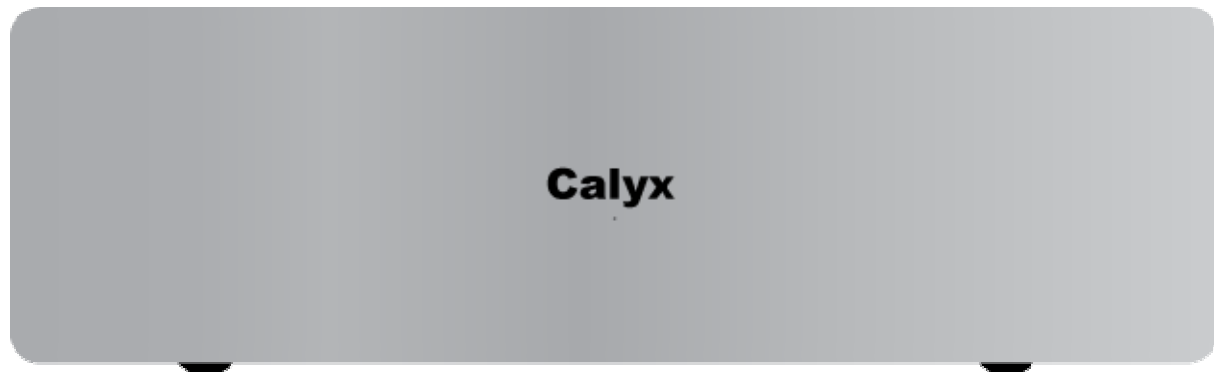
Do not listen to loud music for a long time.

- ▶ This may cause harm to user's hearing ability

※ If the product needs to repair, please contact the calyx service center.

## 4. Installation

Before you begin installation, you should not make any connections to the mono power amplifier or to any other component in your system whilst the AC power supply is connected and switched on.



< FRONT >



< REAR >

1. Make sure your preamplifier gain is set to its minimum.
2. Connect audio interconnects between the preamplifier and each of the power amplifiers.
3. Move the input select switch. :  
 UNBALANCED INPUT (RCA) : If you want to select unbalanced input, move the switch to left.  
 BALANCED INPUT (XLR) : If you want to select balanced input, move the switch to right.
4. Connect the speaker cable to the speaker terminal at the rear plate of the amplifiers.  
 (Important : Make sure that you connect amplifier positive to positive at the speaker and amplifier negative to negative at the speaker.)
5. Connect the power cords to the back of each amplifier after main power switch "OFF" and plug them in the nearest wall plug. (AC 110~120V : Use a 3 lugs grounded plug, for safety.)
6. Power on the amplifier by turning on the power switch at the rear plate of the amplifiers. :  
 If the amplifier is powered on normally, the LED lights up on the front plate of the amplifier.  
 The amplifier is powered off by turning off the POWER switch.



## 5. Trouble-Shooting

Problem	Check
There is no power	<ul style="list-style-type: none"> <li>▶ Ensure the AC power cord is connected securely.</li> <li>▶ Ensure the plug is fully inserted into the wall socket and is switched on.</li> </ul>
There is no sound	<ul style="list-style-type: none"> <li>▶ Check that your source unit is properly connected.</li> <li>▶ Check that your speakers are properly connected.</li> <li>▶ Check that the volume level of the source unit is set to minimum.</li> <li>▶ Make sure your source unit is not in mute mode.</li> <li>▶ Check interconnects.</li> </ul>
There is a loud buzz or hum	<ul style="list-style-type: none"> <li>▶ Ensure no interconnects are loose or defective.</li> </ul>
There is weak bass or diffused stereo imaging	<ul style="list-style-type: none"> <li>▶ Ensure that speakers are not wired out of phase.</li> </ul>

※ For more frequently asked questions (FAQ's), technical advice and information on getting the most out of your Calyx 500, please visit the Support section on Calyx Amp's website: [www.calyxamp.com](http://www.calyxamp.com)

## 6. Specifications

### ◎ Function

- One-channel high quality audio power
- Class-D power amplifier with analog audio input
- High audio performance based with Class-D Architecture

### ◎ Application

- A/V receivers
- Home Theater systems
- High-end stereo and multi-channel amplifiers

### ◎ Features

- 10W @ 0.005% THD+N, 1kHz, 4Ω
- THD+N < 0.1%, 0.1W – 500W, 4Ω
- Input Sensitivity 1.1V @ 500W, 4Ω
- Input Impedance : XLR=47k Ω, RCA=57k Ω
- SNR 110dB @ Balanced Input , 1kHz, 4Ω
- Bandwidth limit = 80 kHz (8Ω)
- Total efficiency 81 % @ 100W, 8Ω
- Selectable mains 110~120Vac / 220~240Vac (The voltage is fixed when factory out.)

### ◎ Dimension

- Net Dimension : 224mm X 295mm X 66mm (Width X Depth X Height)
- Net Weight : 4.37kg

## 7. Warranty

Product	Mono Block Amplifier	Model	Calyx 500
Purchase Date	/ /	Warranty Period	1 year
Purchased From			
User's Name			
Street Address			
City		State	
Zip Code		E-mail	
Telephone		Mobile	
Serial Number			
<p>Concerning products which have gone out of production, we will continue to supply the spare parts required for repairs during a period of 3 years after production stop, counting from the month and year when the production stop occurs.</p>			
<p>Read through the warranty conditions carefully.</p> <p>To obtain warranty service, you must deliver the product, freight prepaid, in either its original packaging or packaging affording an equal degree of protection to the Digital &amp; Analog authorized service facility specified.</p> <ol style="list-style-type: none"> <li>1. For a period of one year from the original date of purchase of the product, Digital &amp; Analog will repair or replace with new or refurbished product or parts, any product or parts determined to be defective without charge.</li> <li>2. In the following cases, the purchaser must pay the service charge to repair the product. <ol style="list-style-type: none"> <li>(1) After the warranty period has expired</li> <li>(2) Although the warranty period has not expired, the purchaser must pay the service charge in the following cases. <ul style="list-style-type: none"> <li>- This warranty does not cover damage which occurs from unauthorized repair, alteration of any kind.</li> <li>- This Warranty does not cover damage due to improper maintenance or improper installation</li> <li>- This Warranty does not cover the product that was not purchased from authorized dealer.</li> <li>- The factory-applied serial number has been altered or removed from this product</li> </ul> </li> </ol> </li> <li>3. If you want the service, please enclose warranty certificate and dated purchase receipt.</li> <li>4. We don't republish the warranty. Keep your warranty carefully.</li> <li>5. This Limited Warranty is valid only in the United States.</li> </ol> <p>Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This Limited Warranty gives you specific legal rights and you may have other rights which vary from state to state.</p>			



MEMO

[www.calyxamp.com](http://www.calyxamp.com)



Digital & Analog Co, Ltd.