

Calyx femti

Instruction Manual



www.calyxaudio.com

Thank you for purchasing calyx product

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 reproducing 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 one of his books;

"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

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1. WARNINGS

Please take a moment to read these notes before installing your Calyx Femti Amplifier, 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, read 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 repair, please contact your local Calyx dealer.

2. Unpacking

Be sure to check the following items within the package.

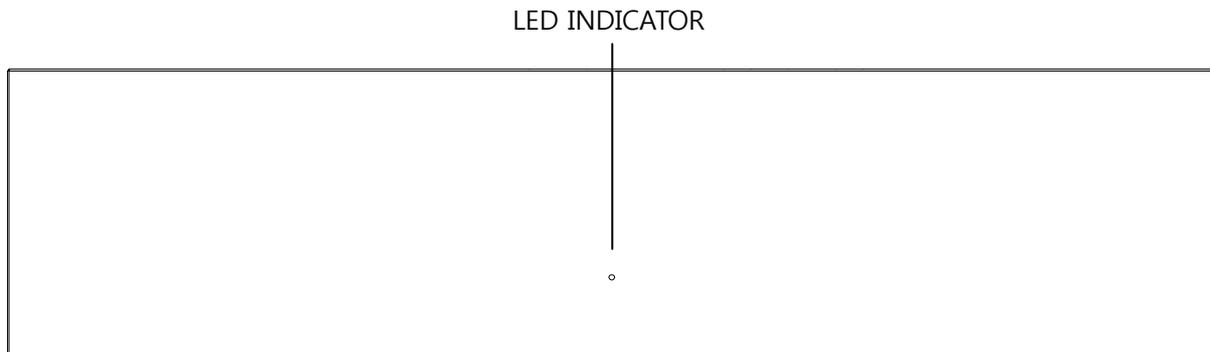
1. Calyx FEMTI Amplifier Unit
2. Power Cord
3. Owner's Manual

3. Preparation

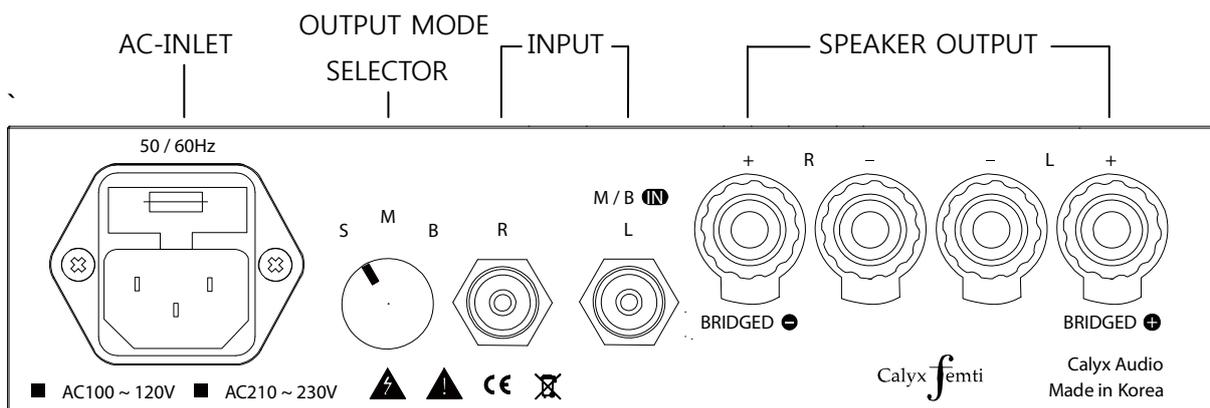
- Calyx FEMTI Amplifier is set to 100~120V or 210V~230V depending on your local requirement. If you want to change the voltage, please contact your Calyx audio retailer.
- Turn off the unit when selecting the output mode.
Calyx Femi Amplifier has three output modes. (Stereo mode, Mono mode, Bridged mode).
- Unbalanced cable is sensitive to environmental noise and we recommend that you use shorter length. Care must be taken when the Calyx FEMTI Amplifier is used in bridged mono mode as its power is increased 4 times.
- The Calyx FEMTI Amplifier is designed to be very stable, but the unit may generate some heat after a prolonged period of operation. Rest assure that is normal.
- Calyx FEMTI Amplifier's speaker output is designed as balanced + and -. Care should be taken not to touch the chassis or exposed speaker connectors of touching each other.
- On and Off sequence
Power On : Preamplifier on -> Calyx FEMTI Amplifier
Power Off : Calyx FEMTI Amplifier off -> Preamplifier off
- Do not remove the cover unless you are a certified technician.
- The Calyx FEMTI Amplifier is designed to exacting standard by applying highly technical tuning and expert listening test. Your warranty will be void if you tune, modify or change any part of the unit without prior consent from the manufacture.

4. Description of Functions

Front Panel



Real Panel



1 Power Switch

This is located on the right side panel when you see from the front.

Press once to turn the unit on and once more to turn it off.

2 LED

Violet

The violet LED light indicates that the amplifier is normal status.

Blue

The blue LED turns on if a short circuit is detected on the speaker output terminals.

Red

The red LED turns on if the amplifier temperature becomes too high.

3 AC-Inlet

Insert the supplied power cord into this connector and plug the other end into a wall AC outlet.



WARNING

- Do not use the unit with any other than the supplied power cords.
- The shape of the AC inlet and the plug of the supplied power cord depend on the voltage rating and destination country. Using any other type of cable except the supplied power cord poses the risk of fire and damage.
- This product is available in version for 100V~120V, or 210~230V AC. Make sure that the voltage shown on the rear panel matches the AC line voltage in your area.



WARNING

- Do not open the unit, as this involves a severe risk of electric shock.
- If the unit does not operate, the internal fuse may have blown. Never attempt to replace the fuse yourself. Be sure to contact your Calyx dealer or an authorized service station.

4 Output Mode Selector

This switch selects the speaker output mode.

S : Stereo Mode (Refer to page 8.)

M : Bi-Wiring Mode (Refer to page 9.)

B : Bridged Mono Mode (Refer to page 10.)

5 Input

Connect the RCA cables from your source unit to RCA input terminal.

M/B  : M/B  (or 'L') is used as input when selecting Bi-Wiring or Bridged Mono Mode

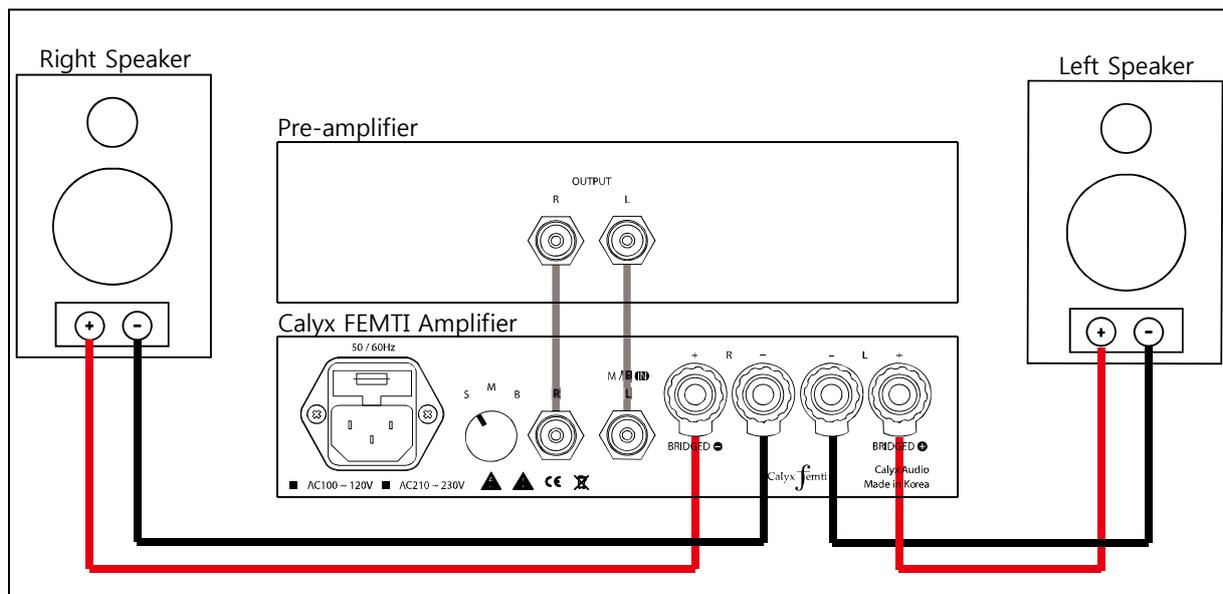
6 Speaker Output

Connect the speaker cables from your speaker to speaker output terminal.

5. Connection Diagram

S : Stereo Mode

⚠ Caution Turn off the power to all components before making connections.



Connect your preamplifier using RCA cable.

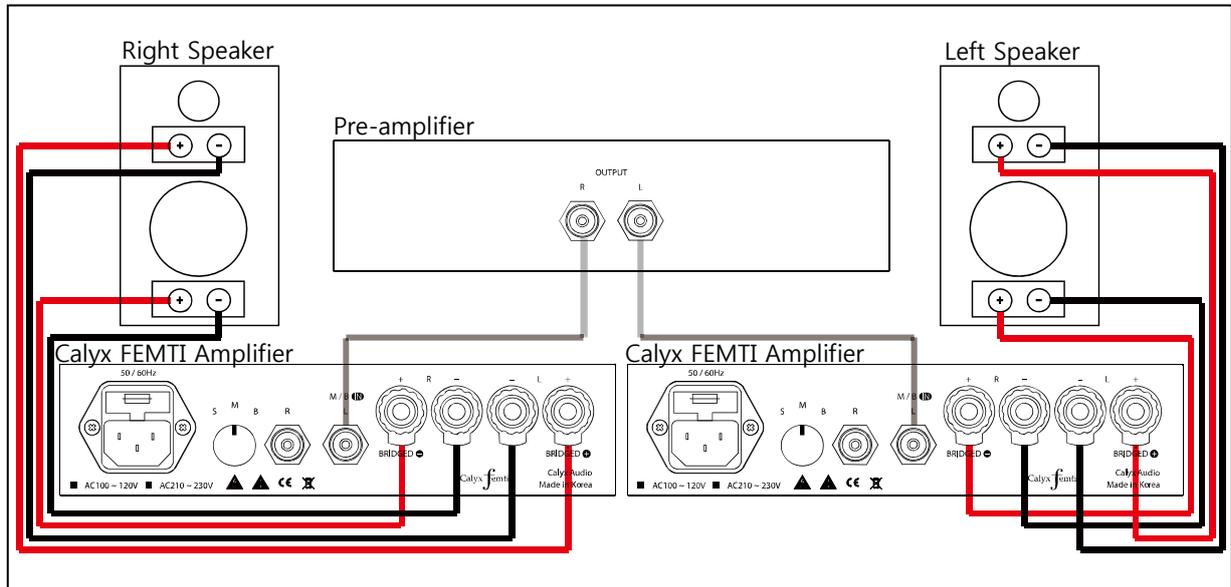
When connecting Calyx FEMTI Amplifier to preamplifier, take care to connect Left input from Left output and Right

Select the Output Mode Selector switch located on the rear to 'S'

After ensuring all connection, turn the Calyx FEMTI Amplifier power on and violet LED light will turn on. After 5 seconds, the amplifier will stabilize and switch to normal operation mode.

M : Bi-Wiring Mode

⚠ Caution Turn off the power to all components before making connections.



In this mode, the Calyx FEMTI Amplifier be used as a amplifier to operate bi-wiring speaker.
Connect your preamplifier using RCA cable.

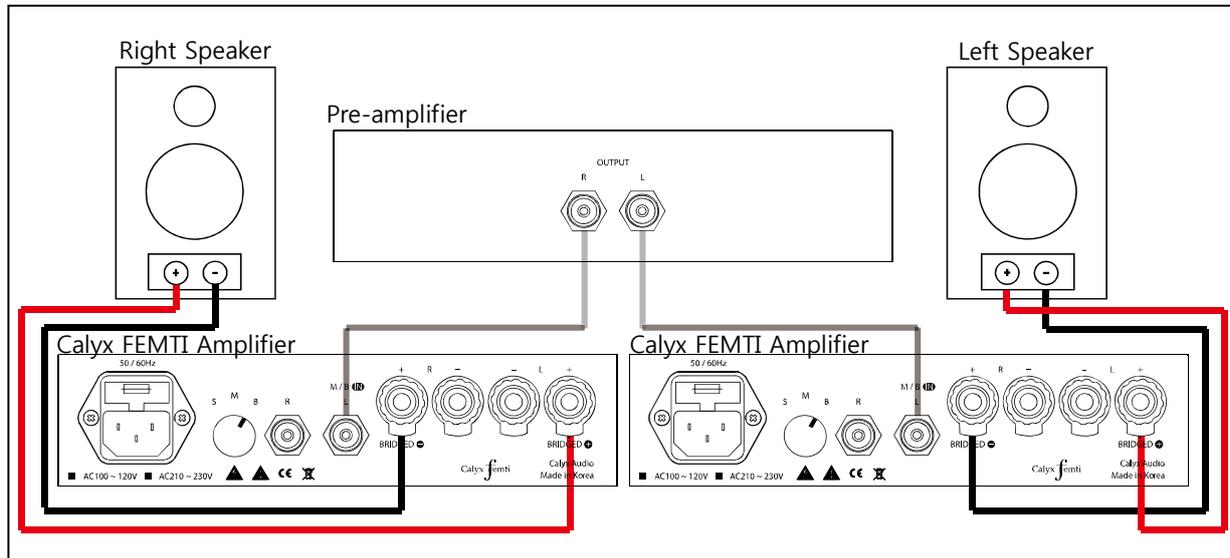
Input connection is located on the rear left labeled 'M / B **M**' or 'L'

Select the Output Mode Selector switch located on the rear to 'M'

After ensuring all connection, turn the Calyx FEMTI Amplifier power on and violet LED light will turn on. After 5 seconds, the amplifier will stabilize and switch to normal operation mode.

B : Bridged Mono Mode

⚠ Caution Turn off the power to all components before making connections.



In this mode, the Calyx FEMTI Amplifier be used as a monaural amplifier or multi-channel amplifier in 5 or 7 channel applications.

Connect your preamplifier using RCA cable.

Input connection is located on the rear left labeled 'M / B **IN**' or 'L'

Select the Output Mode Selector switch located on the rear to 'B'

Loudspeaker connection should be connected to the BRIDGED **+** and BRIDGED **-**. Make sure to connect the + and + and - and - between the amplifier and speaker.

After ensuring all connection, turn the Calyx FEMTI Amplifier power on and violet LED light will turn on. After 5 seconds, the amplifier will stabilize and switch to normal operation mode.

6. Guaranteed Specifications

OUTPUT POWER

STEREO : 125W/CH at 4 ohms

BRIDGE : 500W/CH at 4 ohms

FREQUENCY RESPONSE

20Hz~30kHz @ -0.25dB

THD+N

0.005% @ 10W

DYNAMIC RANGE

STEREO : 117dB

BRIDGE : 121dB

INPUT IMPEDANCE

47k Ω

INPUT SENSITIVITY

STEREO : 125W @ 1.3V

BRIDGE : 500W @ 1.3V

DAMPING FACTOR

>500

STANDBY POWER CONSUMPTION

10W

POWER REQUIREMENT

AC100~120V / AC210~230V, 50 or 60Hz (The voltage is fixed when factory out.)

FUSE TYPE

T6.3A 250(6.3A) slow-blow type 20 x 5mm Glass Tube

Maximum Dimensions:

Width : 220mm , Height : 61mm , Depth : 245mm

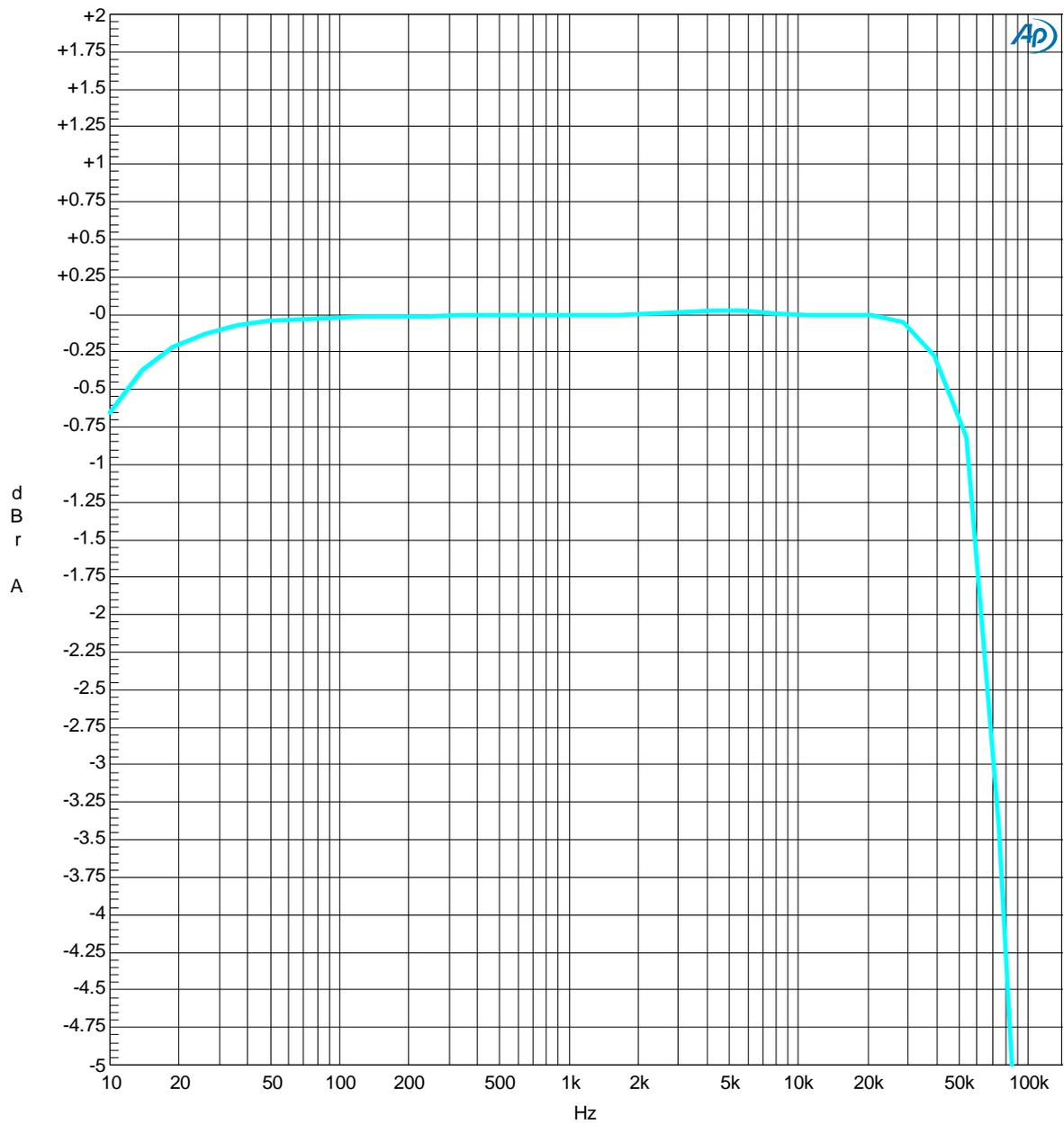
Mass:

3.9kg in Net

5kg in Gross

***Specifications and design subject to change without notice for improvements**

Calyx Femti Frequency Response – Stereo Mode / Bi-Wiring Mode

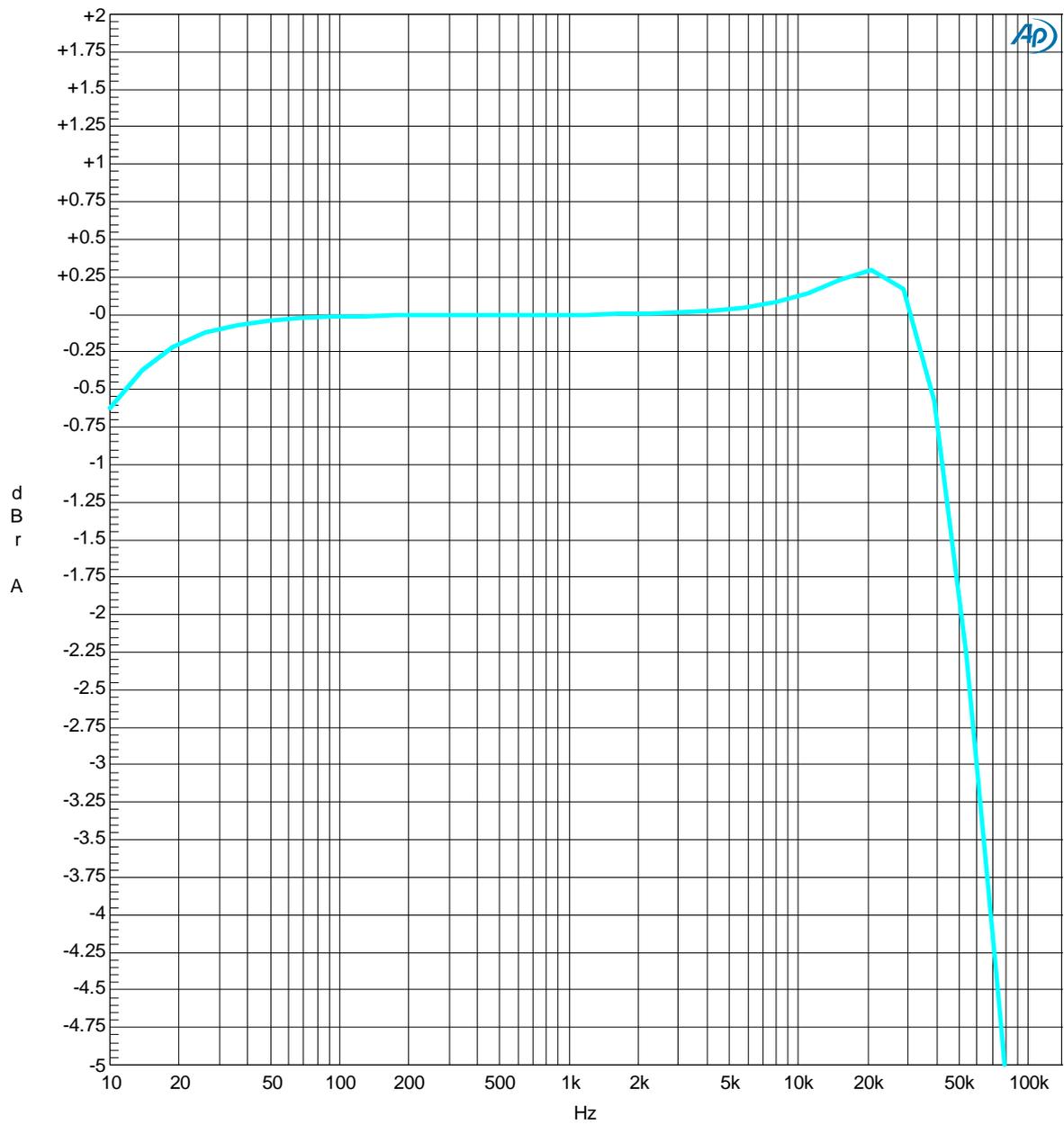


Test Condition

- Vout=10V

- Load=4ohm

Calyx Femti Frequency Response – Bridged Mono Mode

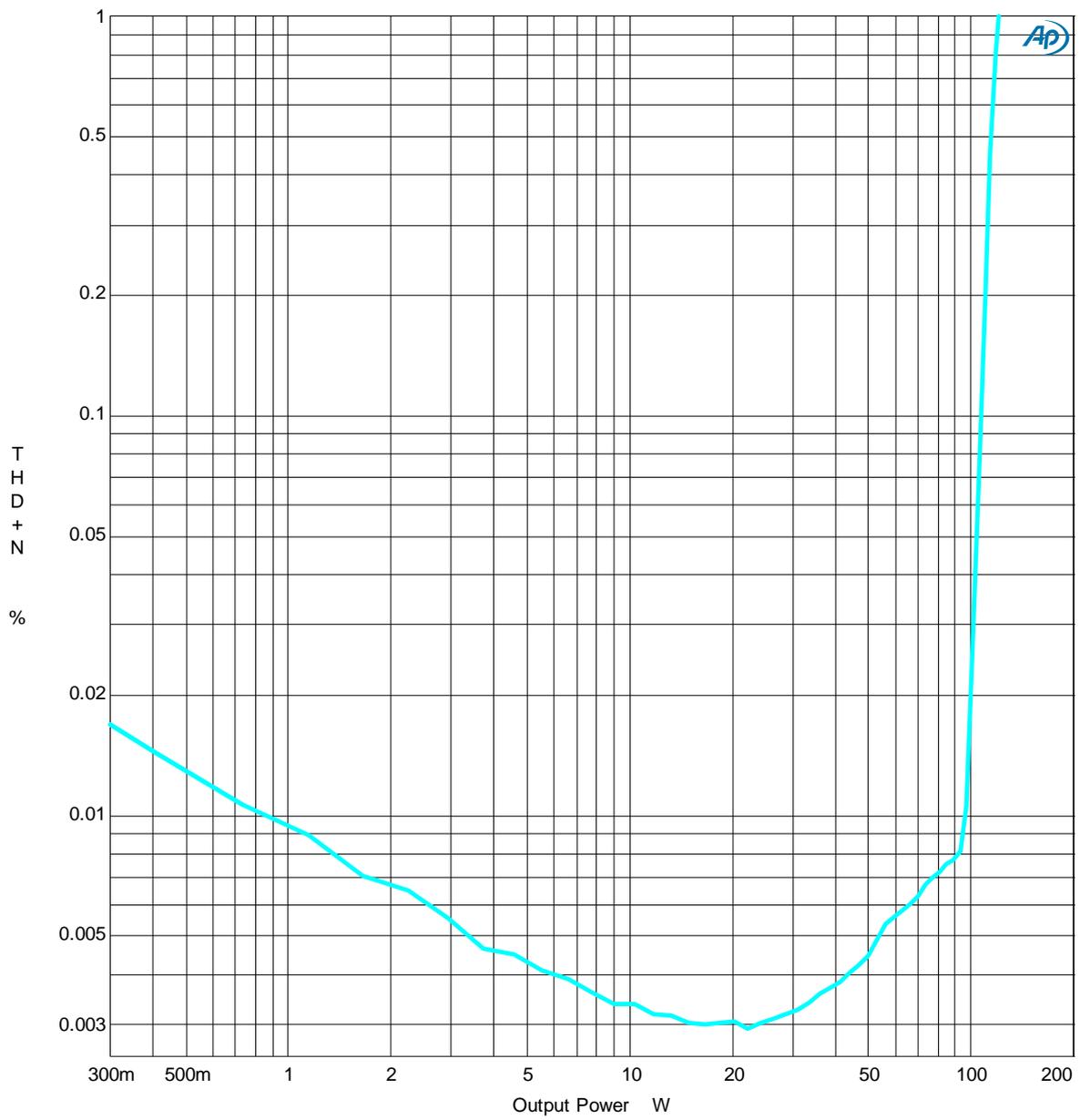


Test Condition

- Vout=10V

- Load=4ohm

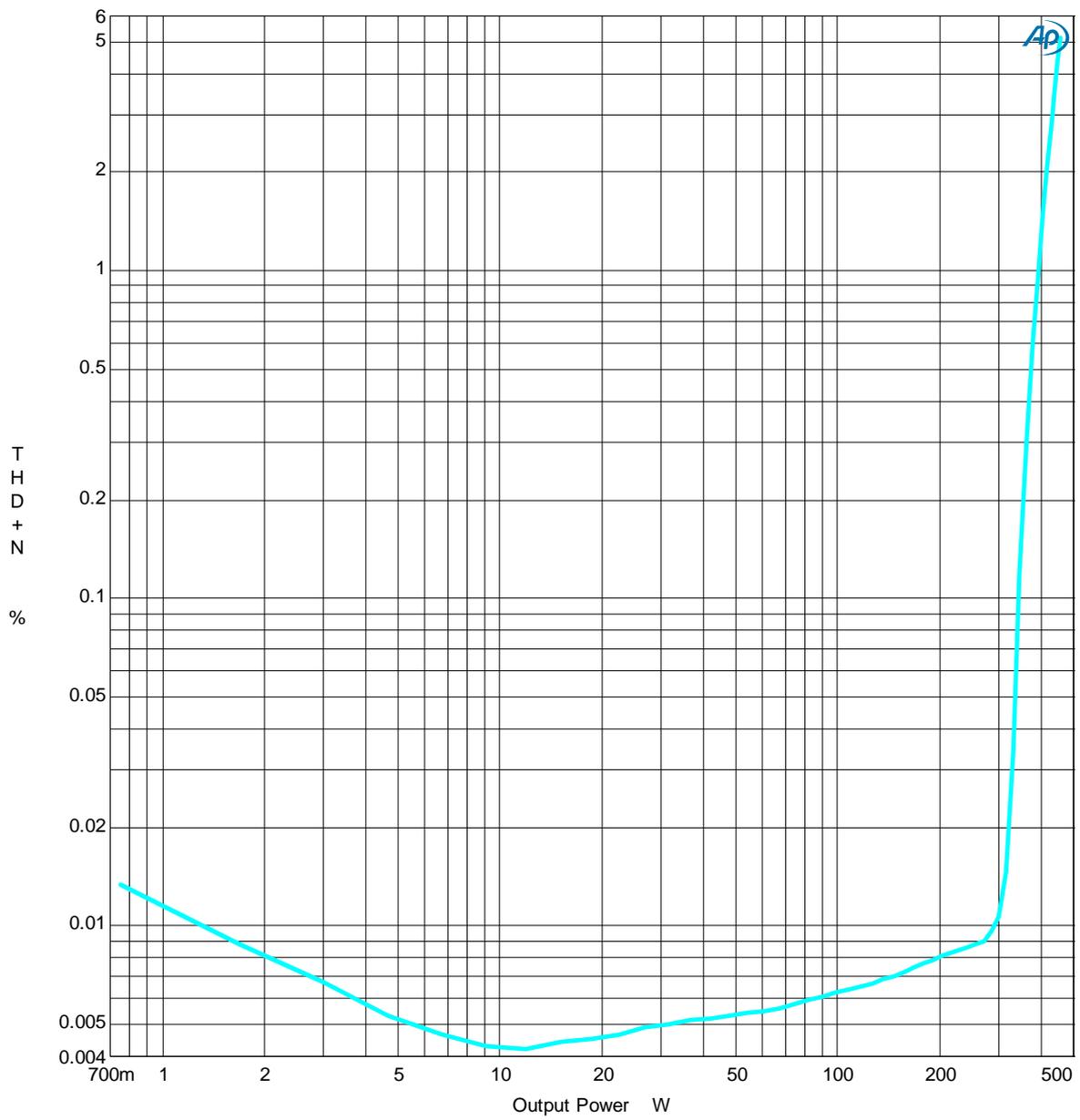
Calyx Femti THD+N vs Watt – Stereo Mode / Bi-Wiring Mode



Test Condition

- Freq=1kHz
- Load=4ohm

Calyx Femti THD+N vs Watt – Bridged Mono Mode



Test Condition

- Freq=1kHz
- Load=4ohm

7. Trouble-shootings

If there seems to be a problem with your unit, please check the following points first.
Please contact your local Calyx dealer or authorized distributor if the problem persists.

 **CAUTION** Before changing any connections, please be sure to turn **OFF** the all the components connected.

Power does not come on: Check whether the power cord is properly plugged in.

No sound or Level is low: Check whether the source component is turned on.

Check output mode selector setting.

Check if all cables are connected correctly.

Sound is briefly interrupted: Check for contact problems.

Check if the cable conforms to right specifications.

No sound from one channel: Check if all cables are connected correctly.

Check output mode selector setting.

8. Warranty

Product	Stereo Amplifier	Model	Calyx FEMTI Amplifier
Purchase Date	/ /	Warranty Period	2 year
Purchased From			
User's Name			
Street Address			
City		Country / State	
Zip Code		E-mail	
Telephone		Mobile	
<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 & Analog authorized service facility specified.</p> <ol style="list-style-type: none"> 1. For a period of one year from the original date of purchase of the product, Digital & Analog will repair or replace with new or refurbished product or parts, any product or parts determined to be defective without charge. 2. In the following cases, the purchaser must pay the service charge to repair the product. <ol style="list-style-type: none"> (1) After the warranty period has expired (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"> - This warranty does not cover damage which occurs from unauthorized repair, alteration of any kind. - This Warranty does not cover damage due to improper maintenance or improper installation - This Warranty does not cover the product that was not purchased from authorized dealer. - The factory-applied serial number has been altered or removed from this product 3. If you want the service, please enclose warranty certificate and dated purchase receipt. 4. We don't republish the warranty. Keep your warranty carefully. 5. This Limited Warranty is valid only on products bought through authorized resellers. <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>			