



# EX502

## Power Amplifier

OWNER'S MANUAL  
MODE D'EMPLOI  
MANUEL DEL USUARIO  
BEDIENUNGSANLEITUNG

ENGLISH

FRANCAIS

SPANISH

DEUTSCH



Dear Customer,

Thank you for choosing a BC Acoustique product. Its implementation has been our know-how, both in terms of design to the manufacturing. Electronic components and mechanical parts correspond to the selection criteria of very high quality. Operation and finish of each product have been checked before delivery. To obtain best results, please read the advice contained in this document.

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## Safety instructions

We invite you to read the instructions on the proper use of your product carefully. They will ensure the proper functioning of the latter and it safely.

- Do not use this device in a wet area or near water.
- Clean only with a dry cloth. As a precaution it is best to unplug the unit before handling.
- Never cover the ventilation of the unit. Be sure to install the unit in a well ventilated location.
- Do not install near heat sources.
- Take great care of the power cord and plugs electrical connection. In particular, do not walk, or press the power cord, specifically at plugs, power plant and the output of the power supply.
- Use only parts and accessories recommended by BC Acoustique.
- Be sure to use an appropriate power supply to the power jack on the unit outlet. Especially if the device is equipped with a ground, it is necessary to use it.
- Unplug the apparatus during lightning storms or when not in use for a long time.

## Glossary

 The CE mark indicates that this product complies with European directives called "low voltage" (2006/95/EC), Electromagnetic Compatibility (2004/108/EC) and apply eco-design requirements for energy products (2009/125/EC) when the appliance is installed and used in accordance with the user manual. For continued compliance only BC Acoustique accessories must be used with this product and servicing must be performed by specialized and qualified staff.



The WEEE symbol is that of the European Union regarding the recycling of electrical and electronic equipment. It indicates that this product contains electrical and electronic components that can be reused, recycled or recovered. Therefore this product should not be disposed of in your regular trash. Thank you to return the unit or contact your authorized dealer for more information.



This symbol alerts the user to the presence of "dangerous voltage" uninsulated which may pose a risk of electric shock to the user.



This symbol alerts the user that the documentation that comes with the device contains important instructions for maintenance and proper use of the product.

## Recommendations

In the case of headphones, do not use it to excessive noise. Otherwise, prolonged listening at high volume levels may cause permanent damage to your hearing.

When disposing of used batteries, please comply with governmental regulations or rules defined by the public statements relating to the environment applicable in your country.

Never expose the batteries (battery pack or batteries installed) to excessive heat such as sunshine, fire, etc ...

## Product recycling

At the end of its useful life, this product should not be disposed of with regular garbage, but returned to a collection point for the recycling of electrical and electronic components. This point is emphasized by the symbol on the product, the instruction manual and on the packaging.

The materials can be reused in accordance with their markings. Through reuse and recycling of raw materials or any other form of recycling, you make an important contribution to environmental protection. Your municipality can tell you where is the point of the nearest collection site.

## Location and precautions

Avoid placing it in direct sunlight or near a heat source. No source of light shall be placed on the apparatus. Also avoid all sources that could cause vibration, dust, cold or moisture. The recommended ambient temperature range is 5-35 ° C.

The device must be installed on a stable, level surface. Do not place the unit on an unstable surface or shelf. The unit may fall, causing serious injury to a child or adult as well as serious damage to the product. Do not place other equipment on top of the unit.

Due to stray, turntables or CRT TVs magnetic fields should not be located near the unit to avoid possible interference.

## Power sources

The unit should be operated only from the type of power source indicated on the label. If you are unsure of the type of power available to you, thank you to contact your dealer or the company responsible for the power supply in your area.

Turn off device if you do not intend to use this unit for a long time.

In case of prolonged absence from home, it is recommended to unplug from the electrical outlet.

Make sure each cable is correctly inserted. To prevent hum or background noise, do not mix different other antenna cable with the power cord or speaker wires.

## Warranty

BC Acoustics warrants this product parts and labor (under the conditions specified below).

BC Acoustics will repair or replace (at its discretion) this product or any defective parts. The warranty period may vary by country. If in doubt, contact your dealer. Always retain proof of purchase of this product.

For warranty service, please contact the BC Acoustique authorized reseller from which you purchased this product. If your dealer is not itself repair the product, it can be sent to BC Acoustique authorized after-sales service. If necessary, you will need to ship this product in its original packaging or packaging affording an equal degree of protection.

Proof of purchase such as an invoice stating that the product is covered by the Guarantee must be presented for any warranty claims.

This warranty is void if:

- The factory serial number has been altered or removed.
- This product was not purchased from an authorized reseller BC Acoustique. To confirm that the serial number has been altered or that the product was purchased from an authorized reseller BC Acoustique, you can call BC Acoustique BC Acoustique or distributor in your country.
- If the power supply cord or plug is damaged.
- If liquid has been spilled or if objects have fallen inside.
- If the unit has been exposed to rain or water.
- If the unit is dropped or damaged in any way.
- This warranty does not cover cosmetic damage or damage caused by or due to force majeure, an accident, mis use, abuse, negligence, commercial use or modification of part any product.
- This warranty does not cover damage caused by or resulting from misuse, a maintenance or improper installation or repairs made or attempted by anyone other in BC Acoustique or not BC Acoustics dealer or technician approved, authorized to carry out maintenance and repair under warranty for BC Acoustique. Any unauthorized repairs will void this warranty. This warranty does not cover products sold "AS IS".
- REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER.
- BC Acoustique NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

## Warranty

- Some countries do not allow the exclusion or limitation of incidental or consequential damages or exclusions of implied warranties. Therefore, the limitations or exclusions herein may not apply. This warranty gives you specific legal rights, in addition to other rights which vary from state to state or country to country.

## Basic instructions Quick starting guide

Make sure that the device is not plugged into the mains before making any connections. It is also recommended to turn off or disconnect all other devices associated while making connections to the product.

Connect the speakers to dedicated speakers plugs to the rear of the Power Amplifier, and the pre-amplifier to the corresponding input jacks (RCA) on the rear panel.

Connect the power cord to the connector on the one hand AC Mains product and the other to a wall outlet.

Turn the POWER switch to the ON position. The power switch is located at the rear panel (page4 - ⑧).

## Connection to the amplifier

### ① & ⑦ LOUDSEPAKER TERMINALS

Connect the speaker to the terminals marked RIGHT "+ R" and "R -" ensuring that "R +" is connected to the "+" terminal of the enclosure and "R -" is connected to the terminal "-" the same enclosure. Connect the LEFT speaker to the terminals marked "L +" and "L -" by doing the same.

Make sure that no wires are not insulated can bypass the speaker outputs. Make sure that the speaker terminals are tight enough to ensure a good electrical connection. If the terminal screws are not tight enough, the sound quality may be affected.

Use only dedicated wire to the speaker (a section of 1.5 mm<sup>2</sup> or more is recommended especially if the cable length is greater than 3m).

### Important Notes:

The EX502 has 2 pairs of speaker's terminals for easier connection of two pairs of speaker. We recommend you check the impedance of your speakers.

When using a single pair of speakers, you can use speakers with low impedance (less than 3 Ohms).

If you use two pairs of speakers, we recommend that you do not use speakers below 6 Ohms impedance.

In case you do not have the ability to comply with these precautions, it is necessary not to use the amplifier at high power for an extended period otherwise, it will now go into protection and sound will be muted automatically.

### ② BTL / STEREO (STEREO or MONO Connection mode)

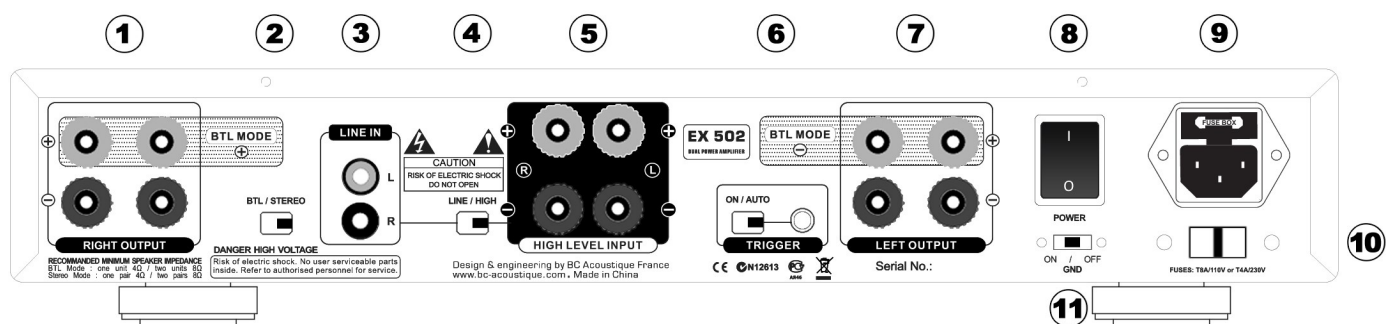
Depending on the selected mode, BTL (mono) or stereo, use:

**Input:** Use either RCA jack "R" or the "high-level input" speaker's terminals "R". The "L" remaining made without use.

**Output:** We will connect the amplifier to the speaker via terminals "L +" (acting as negative pole) and "R +" (acting as positive pole). The two other speaker's terminals are remaining without use.

## Rear panel

**Warning:** Be sure to turn off the power on your product before making any connections. Similarly it is best to cut the power of other devices you want to connect to your amplifier.



## Connections

### ③ ④ ⑤ LINE / HIGH (RCA INPUTS OR HIGH-LEVEL)

If your "source" has RCA outputs, it is recommended to use the RCA inputs of the amplifier EX502 ③.

Otherwise, the EX502 has "high-level" (High Level Input) input ④.

Use the "LINE / HIGH" switch to activate one or the other type of input.

In this case of high-level inputs, you must use the speaker cable to connect to the "high-level" inputs of the EX502 ⑤ the speaker outputs of your source by connecting them in parallel.

### ⑥ TRIGGER

The EX502 has functions of setting multiple standby:

If the "ON" mode is activated, then the EX502 is "controlled" through the "Trigger"the connections. Accordingly it is connected to the Trigger output of another device, the EX502 will be automatically paused simultaneously with this device. The EX502 running in "slave" mode.

If the "Trigger" input is not connected, then the EX502 will always remain in operation until it will not go out through the main switch ON / OFF.

If the "AUTO" mode is selected, then the EX502 will go into standby mode if there is no input signal for an extended period (about 10 minutes). An auto-detection system will enable the EX502 to resume from standby mode when there is a signal incoming.

### ⑧ ON/OFF BUTTON

This switch allows shutdown or operation of the amplifier. It is located below the front, left of right foot. He takes over the "Trigger" function in OFF mode becomes inoperative.

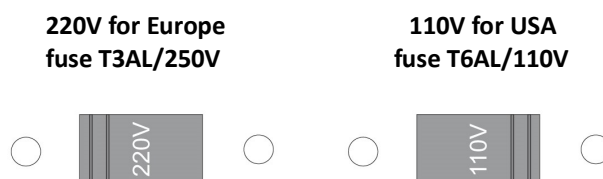
### ⑨ AC MAIN INPUT

Once all connections to the amplifier, plug the power cable into an outlet and turn the unit on. Your amplifier is now ready for use.

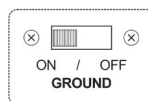
### ⑩ INPUT VOLTAGE

**IMPORTANT:** Before turning on your amplifier, check that you have positioned the voltage selector based on your geographic location: AC110V (USA, etc ...) and AC230V (EU, etc ...). Also be sure to use a fuse appropriate for the selected voltage sector.

Example position voltage selector:

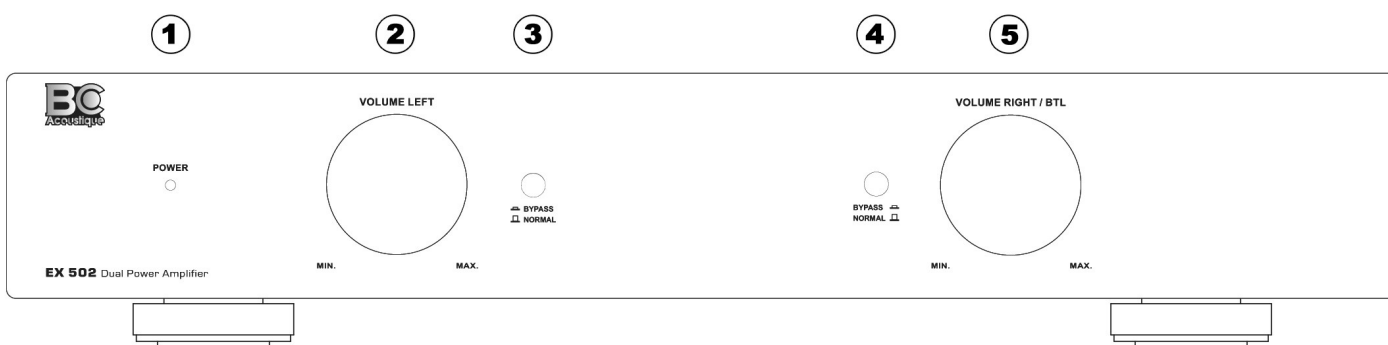


### ⑪ SWITCH ANTI-HUM (GROUND ON / OFF)



Your amplifier EX-502 has a mains socket outlet with a ground connection. The use of this type of connection is recommended for electrical safety reasons (including wetlands). However sometimes this connection "mass" is the origin of "hum" audible from the speakers in a hi-fi system to solve this problem, the cancellation of the ground connection is sometimes sufficient. To do this you have, under the amplifier, a switch to choose to connect or not the mass of the device to the mains.

## Front panel



## Connections and uses

### ① POWER - Control led

The LED lets you know the status of the amplifier: If the amplifier is turned on the LED is blue, if it is in standby, the LED turns red.

## Connections and uses

### ② & ⑤ VOLUMES

Each amplifier channel of the EX502 has its own volume control. However if you want to use it as a "power block", the gains functions can be "disabled" using switches located near ③ & ④.

In the case of operation of the EX502 in "MONO" mode, only the gain control "right" is effective.

### ③ & ④ BYPASS/NORMAL

It is possible to disable the gains of the amplifier through these switches when you want to use it as a "power block".

## Specifications

### Amplifier section

Line level input RCA

Sensitivity: 260 mV stereo and 240 mV for mono (BTL)

Impedance: 45 kOhms

Maximum input level: 5 V

Continuous average power into 8Ω :

In stereo mode 2 x 100 W

In mono mode 1 x 300 W

Continuous average power into 4Ω :

In stereo mode 2 x 170 W

In mono mode 1 x 360 W

Distortion: 0,08% (20 Hz - 20 kHz)

Signal/Noise ration: 90 dB

### Connections

1x RCA stereo input or high-level inputs on speakers terminals

1x Trigger input (on/auto)

8x Speaker terminals screw-compatible banana plugs

### General

Detachable power cable

### UNIT

Dimensions (W×H×D): 430 x 70 x 360mm / Weight: 9.5 kg

### BOX

Dimensions (W×H×D): 490 x 140 x 445mm / Weight: 10.6 kg

Volume: 0.03 m<sup>3</sup>

### EAN CODE

EX502 Black: 0628586586529

## Main uses of the EX502

It has four;

### With a **stereo integrated amplifier**:

This is called bi-amplification. The gain is all the more important that the speakers are "difficult" to drive. This is frequently the case with tower speakers in which manufacturers have long been used to practice low impedances (watch for the amp, even if the average impedance is reasonable, local impedance drop will induce a strong current demand).

A bi-amplification will allow both to improve the behavior of the integrated amplifier and power amplifier (in comparison with the mode of operation with a pre-amplifier).

### With a **stereo preamplifier**:

The gain is primarily qualitative towards a stereo integrated amplifier result of the complete separation of functions.

And the treatment of small signals (pre-amp) remains completely independent of power fluctuations depending on the power demand of the output stages of the amplifier.

### With **AV preamplifier**:

It's the same principle as for the stereo case knowing more than the integrated AV often suffer from a very dense structure is not conducive to a qualitative restoration of musical signals.

### With **AV integrated**:

As in the previous case, we will have the advantage of the separation between "small" and "strong" signals but again we will relieve the power of the AV amplifier to the load of a pair of speakers (most cases the main speakers).

# Troubleshooting

Here you will find a number of fault description and possible solutions we invite you to read in order to ensure the possibility of an actual breakdown of your device.

## **The unit does not turn on.**

- Make sure the power cord is properly connected.
- Make sure the plug is fully inserted into the wall outlet and there is power.
- Make sure the camera is turned on.
- Check the fuse in the mains plug or adapter if necessary.

## **There is no sound**

- Make sure the unit is not in standby mode.
- Check that the source component is connected properly.
- Make sure your speakers are properly connected.

## **One channel no sound**

- Make sure the balance control is in the correct position.
- Check the speaker connections.
- Check interconnects.

## **A loud humming or buzzing is noticeable**

- Check turntable or tonearm to capture an ground fault or a faulty connection.
- Make sure that interconnect cable is loose or defective.
- Make sure your tape deck or turntable is not too close to the amplifier.

## **The bass is weak or the stereo image is diffuse**

Make sure the speakers are not in phase.

## **The sound is distorted**

Make sure that the control settings of volume or tone is not too high.

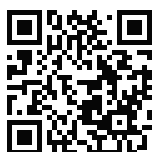
In case the above solutions do not remedy your problem, check our FAQ section (Frequently Asked Questions) on our website: [www.bc-acoustique.com](http://www.bc-acoustique.com)

For repair, during or after the warranty, please contact your dealer.

To obtain warranty service and technical support, thank you kindly to register your product online on the website [www.bc-acoustique.com](http://www.bc-acoustique.com) at the product registration section.



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