



# EX888

## Tubes Amplifier

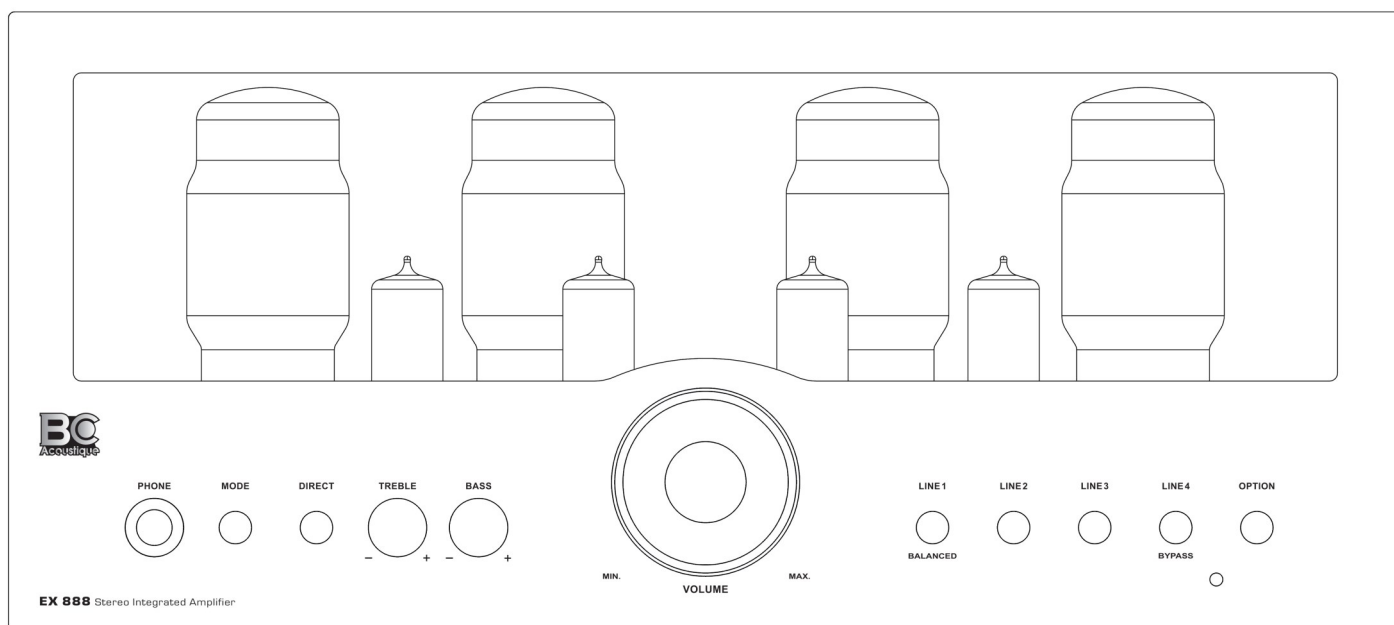
OWNER'S MANUAL  
MODE D'EMPLOI  
MANUEL DEL USUARIO  
BEDIENUNGSANLEITUNG

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.

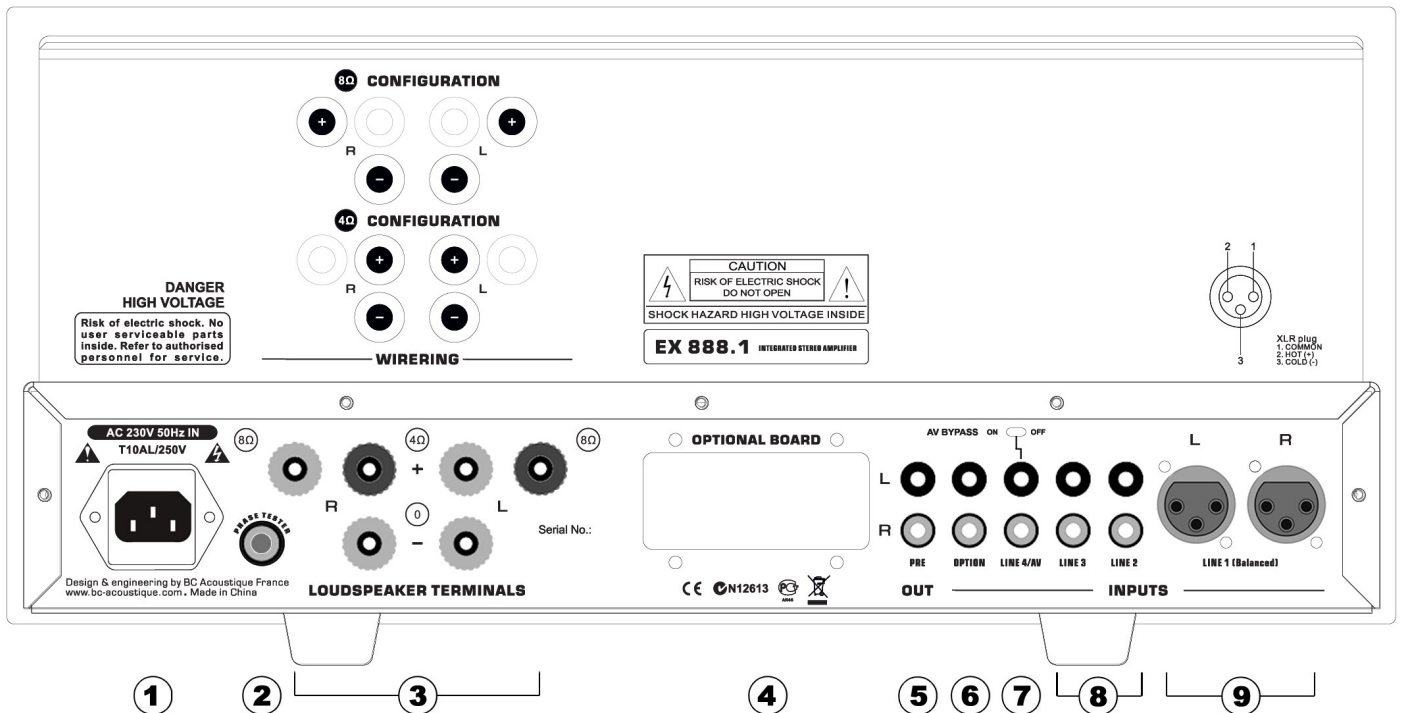
## Warranty

- 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

**Warning:** 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.

## Rear panel



## Connections to the amplifier

NEVER OPERATE THE AMPLIFIER WITHOUT HAVING FIRST CONNECT THE LOUDSPEAKERS. THE PRINCIPLE OF OPERATION AMPLIFIER TUBE IS DIFFERENT FROM AMPLIFIER TRANSISTORS; WITHOUT "CHARGES" ENERGY AMPLIFIER IS DISSIPATED IN TRANSFORMERS OUT WHAT IS HARMFUL FOR THE DURABILITY OF THE PRODUCT.

## Quick starting guide

Connect the speakers to the speaker jacks on the back and the sources of the corresponding input jacks on the back.

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 ON .[page 6, button ⑦ on front panel schematic under the amplifier].

If the unit is equipped with a standby, then press the STANDBY button to turn it on.

Press the input selector for the source you want to hear.

### ① 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.

### ② PHASE TESTER

The EX Series products feature 3-pins mains power cord. These 3-pins plugs are respectively the Ground, which is located in the center of the outlet, the Neutral, it is an electrical reference, and finally the Hot. The latter is that which "handles" the alternating voltage.

# Connections to the amplifier

According to the wiring of the multi-socket and a sense of connection to the outlet, the respective position of the Neutral and Hot out will change, according to this position a residual voltage may appear on the cabinet of the device. This tension can affect the result of listening to your hi-fi system.

In order to choose the most appropriate direction connection (one that will induce the lowest residual voltage on the cabinet), some EX Series products have a Test device at the rear panel of the product named: "Test Phase".

To test it is necessary to connect the device to the mains, and then use your finger to touch the metal ring located around the central lamp.

If the lamp lights it means that the residual voltage of the cabinet is high. You will therefore then reverse the connection of the outlet of the device (careful, the light intensity is low).

If the light remains off when you touch the ring around the central lamp, it means that the device is connected in the best way.

## Notes:

- To choose the direction of the outlet connection it is necessary to have a Schuko socket because the Ground is offset on the sides.



Schuko plug

- When the test is performed by touching the ring, make sure not to touch any other part of the product which would have the effect of putting to pair and thus invalidate the test.

## ③ 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 Note:** Check the impedance of your speakers. When using a pair of speakers, you can use speakers with an impedance of between 4 and 8 ohms. BE SURE TO USE THE MATCHING TERMINALS.

## ④ OPTIONAL BOARD

This slot allows you to add, when you want, one of the Optional cards for adding one more source, like a digital card that lets you listen to music from a computer.

## ⑤ PRE OUT (RCA OUTPUT)

This output allows you to use the amplifier as a preamplifier and Therefore connect a power amplifier to upgrade the system.

## ⑥ OPTION (INPUT)

Several optional boards (Phono, Wifi, Bluetooth ...) will allow you to add functionality to your amplifier. In case you have not added option card, the OPTION entry will still work as an AUX3 input.

## ⑦ LINE 4 & AV BYPASS

This switch "by-pass" stages gain adjustment through use in an Audio-Video system. In the context of the use of the amplifier Bypass mode, please turn the switch on the rear side above the entry LINE4/ByPass ON.

USE CAUTION WHEN AUX2 INPUT MODE BYPASS THE MAXIMUM GAIN THEN. SURE DO NOT CONNECT A Y SOURCE WITHOUT RULE BEFORE ITS OUTPUT VOLUME TO A MINIMUM.

## ⑧ LINE 2, 3 et 4 - INPUTS (RCA)

LINE 2 to LINE 4 inputs are for connecting "line level" sources to your amplifier. It is designed to receive an "analog" signal (as opposed to "digital" signal). To connect your source we are using a traditional "RCA" cable, they are usually identified by a color code "RED" to the RIGHT and "WHITE" to the LEFT channel.

**Connecting a turntable:** Most turntables have a "RCA" output but the signal is not compatible with the "line inputs" amplifiers.

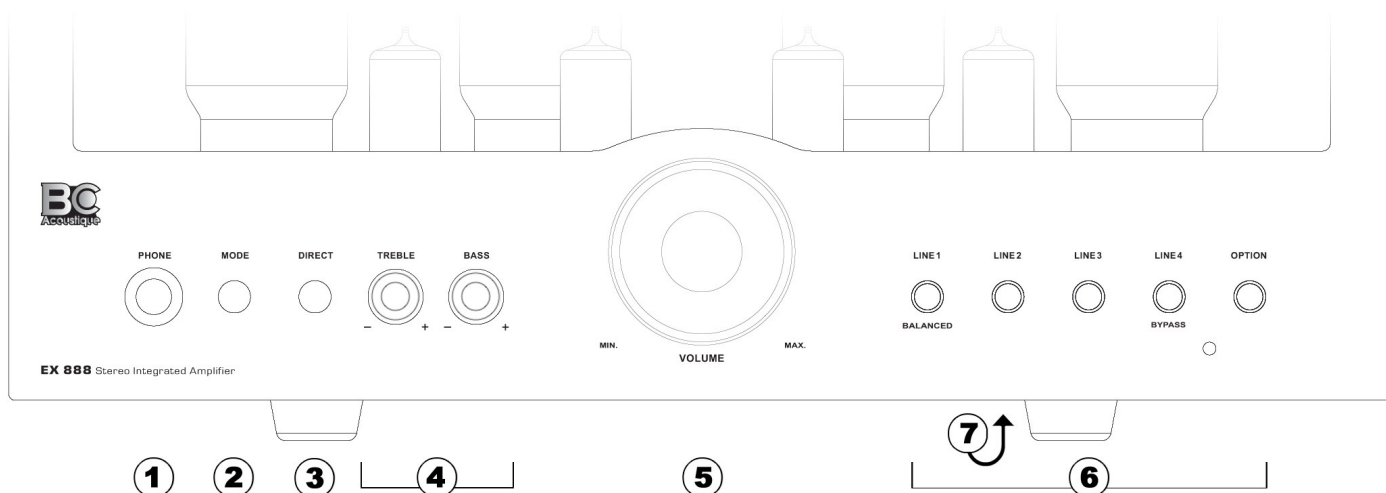
To use a turntable, it is necessary to use a "phono preamp" compatible with "cell phono reader" used. There are two families of cells; MM (Moving Magnet) or MC (Moving Coil). The majority of the public is using MM cells format.

## ⑨ LINE 1 - INPUT (XLR)

XLR input allows the use of balanced connections. This type of cables guarantee greater immunity to electromagnetic interference. Their use is recommended in particular when the distance between the devices is important.

## Front panel

## Connections and uses



### ① PHONE / HEADPHONES

**Important note:** Make sure the volume control is turned down before connecting or disconnecting headphones. Listening at high levels can cause permanent hearing damage.

This Jack plug size 6.35 mm allows connection of stereo headphones. It is advisable to use a listener with an impedance between 32 and 600 ohm headphones.

When the headset is connected, the output to the speakers are then cut.

### ② MODE

This function allows you to switch between the operating modes "triode" and "pentode (also referred ultra linear)." When the button illumination color is BLUE is that it is in triode mode, and when he is WHITE is that it is in pentode mode (ultra linear).

### ③ DIRECT

If this function is activated (light signal active), then the BASS and TREBLE functions are disabled. The purpose of this function is to shut down the electronic circuit's tone control and balance in order to best preserve the purity of the music signal.

### ④ BASS and TREBLE

The button "BASS" setting can act on the relative level of low frequencies to alter the tonal balance of the sound to suit your room acoustics and your tastes. The "TREBLE" button for meanwhile high frequencies.

When these buttons are in the middle position, it means that the tonal balance is not changed. The adjustable range is  $\pm 10$  dB.

+10 decibels knob turned in the direction of clockwise and - 10 decibels knob turned anticlockwise.

### ⑤ VOLUME

This knob adjusts the output volume of the amplifier at the speaker outputs.

### ⑥ SOURCE SELECTOR

These buttons select the active input of the amplifier and the signal sent to the speakers, to headphones and Preamp output and REC LINE. The buttons on the remote control are identical to those buttons. Once the selected button, the integrated LED corresponding entry under the particular input button will turn white.

#### LINE 1 to LINE 4/BYPASS

These buttons are used to select sources from the RCA inputs (line level) with the same name located on the rear panel of the amplifier.

#### OPTION

**Without Optional card:** This button selects the listening to a 5<sup>th</sup> source you have connected to the RCA OPTION connectors (rear panel).

**With Optional card:** This button allows you to select the source to play on your option card. (See notice of the said option card).

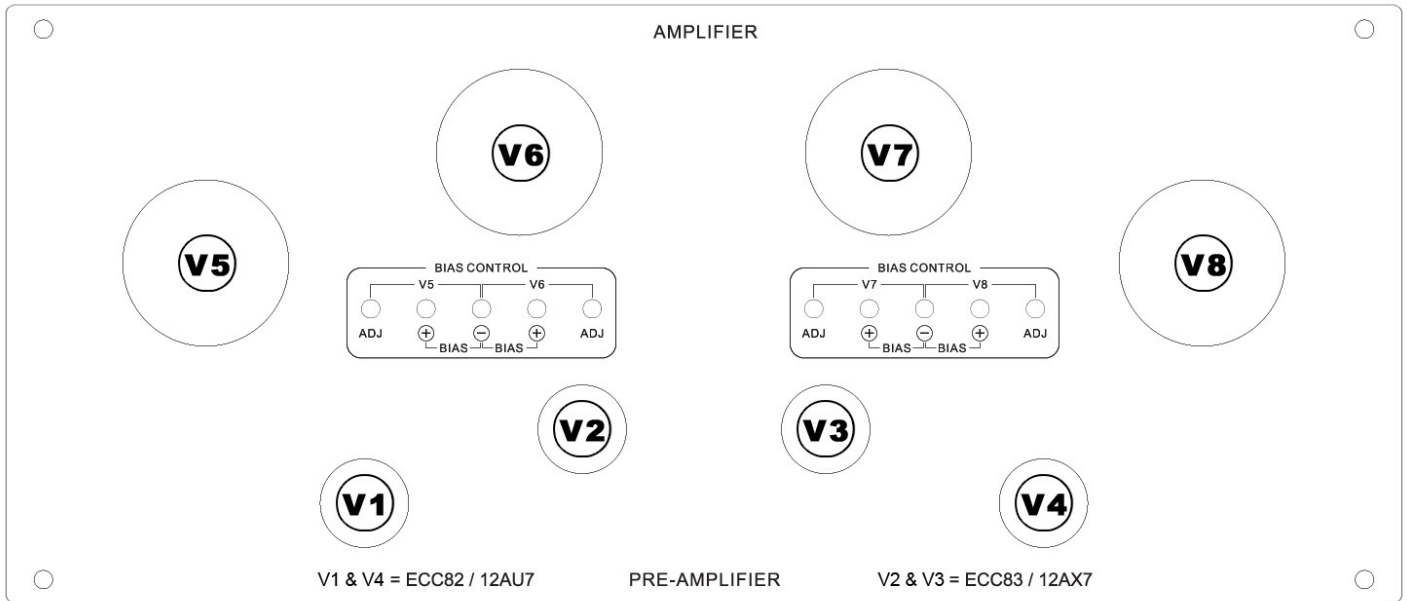
Example of option card: Bluetooth card allows you to listen to your music from your Smartphone.

### ⑦ ON / OFF BUTTON

This switch allows shutdown or operation of the amplifier.

Note: 4 rubber blocs are provided in order to raise the unit, to re-adjust the spacing between two products, providing better ventilation, reducing vibration and to allowing better access to the On / Off switch located under the front panel.

# Tubes



## Tubes installation

The top cover is easy to open by pressing on both sides of the grid. Then you just have to lift it.

Install the tubes according to the diagram below:

2x **ECC82** in V1 and V4 positions

2x **ECC83** in V2 and V3 positions

4x **KT-88** from V5 to V8 positions

**Warning, tubes are numbered (V1 to V8) since the factory settings have been made with a tube for each position, please position each tube accordingly.** Follow the instructions to install each tubes in the correct position.

When you replace the tubes, make sure that the pins are in the correct direction.

**Original tubes supplied with your amplifier BC EX888 have 50 hours "running in" period, their characteristics are already greatly stabilized.**

### WARNING!

No liquid must be in contact with the tubes.

## Bias adjustment method

### Setting procedure biases tubes KT88

**Warning: Setting Bias is normally not likely to vary over time. But you have to perform this settings when changing the tube. The original tubes have already been the subject of this procedure at the factory.**

- Set the voltage of your digital multimeter to DC 2V caliber.
- The red tip (here on this scheme in light gray colour) contacts the positive terminal (dot) ② and the black tip in contact with the negative terminal (test) ②.
- The bias voltage must be adjusted between 0.4 V and 0.45 V.

Using a screwdriver (bias) ② increase the voltage by turning in the direction of clockwise and the other counterclockwise to decrease it.

**The life of a tube depends on the particular use and the average output power.**

**As part of a "classic" use, a life of about 2500 hours is generally allowed.**



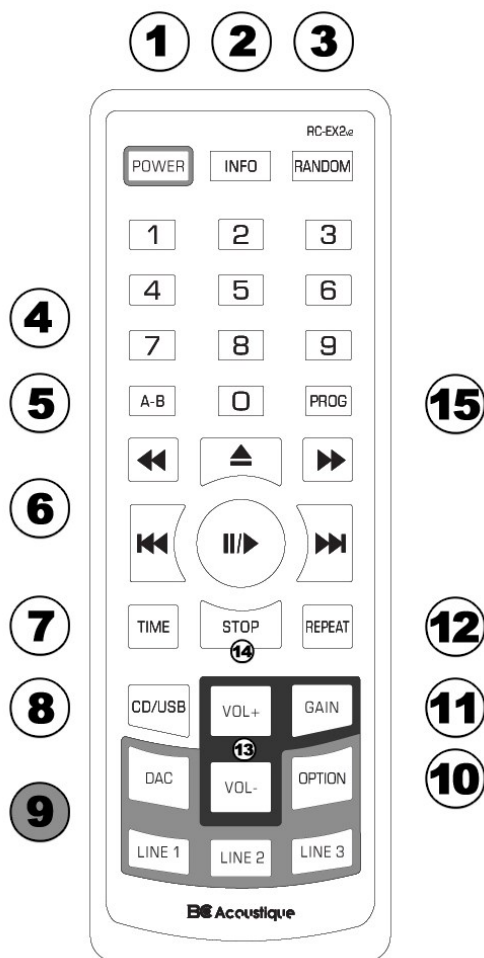
## Remote control

The tube amplifier EX-888.1 comes with an RC-EX2v2 remote control. It was designed to be both compatible with your amplifier but also the possible devices BC Acoustique (including CD players EX series) range.

- ① **POWER:** This button allows you to pause or resume from standby different electronic devices BC Acoustique with this feature.
- ② **INFO:** The display panel on the product provides information on the CD.
- ③ **RANDOM:** Play a random track on CD player
- ④ **1...9.0:** Keypad / Track selection
- ⑤ **A-B**
- ⑥ **PAVE CONTROL :** REV / STOP / FWD / PREV PAUSE/PLAY / NEXT
- ⑦ **TIME**
- ⑧ **CD/USB**
- ⑨ **SOURCES:** LINE 1 to 4 - OPTION
- ⑩ **OPTION:** Selects the source from your option card. If there is no option card, it will serve as input LINE 5.
- ⑪ **TONE:** bass and treble adjustment
- ⑫ **REPEAT**
- ⑬ **VOL+ / VOL-**
- ⑭ **STOP:** Stop the Repeat function
- ⑮ **PROG**

## Remote control

Note on the battery: Remove the transparent protective tab to activate the battery.



## Specifications

### Amplifier section

Continuous output power:

2 x 40W (ultra-linear mode) or 2 x 20W (in triode mode)

Output Impedance: 4Ω, 8Ω

Bandwidth: 10Hz ~ 38kHz (-1 dB)

Distorsion ≤ 1% (1kHz)

Signal/Noise ration ≥ 93dB

Tubes: KT88×4, ECC82×2, ECC83×2

Input Sensitivity: 360 mV (700 mV bypass)

Input impedance: 100kΩ

Settings of Treble and Bass tone with function "Direct" to shunt circuits correction.

Switching between Triode mode and Ultra-linear mode  
Remote control

### Connections

5x RCA inputs (gold plated) including:

\*1x RCA input (OPTION) can receive an optional board card

\*1x RCA input (LINE4) for "by-pass" stages of gain control in the context of use in an A/V system.

\*1x RCA "Pre-Out" output for adding an amplifier power in the context of a bi-amplification.

Gold plated terminals isolated

1x Headphone jack output (6.35 mm) in front

### General

UNIT

Dimensions (W×H×D): 430x200x405 mm / Weight: 25 kg  
BOX

Dimensions (W×H×D): 480x256x460 mm / Weight: 28 kg  
Volume: 0.057 m<sup>3</sup>

EAN CODES

EX888.1 Black: 0634654605757

EX888.1 Silver: 0634654605764



# 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.

## **The remote control does not work**

- Check that the batteries have not expired.
- Make sure nothing is blocking the remote sensor.

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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## Notes





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