

PREFACE .....	2
CONTENTS OF PACKAGE.....	3
TECHNICAL SPECIFICATION.....	4
FRONT PANEL CONTROLS .....	5
REAR PANEL TERMINALS .....	6
INSTALLATION .....	7
SAFETY RECOMMENDATIONS - PLACEMENT .....	8
SAFETY RECOMMENDATIONS - OPERATION .....	9
FIRST INSTALLATION .....	11
CONNECTING.....	12
VACUUM TUBES.....	13
REPLACEMENT OF VACUUM TUBES.....	14
TROUBLESHOOTING .....	16
MARKINGS .....	18
REPLACEMENT OF FUSE .....	19
WASTE MANAGEMENT .....	20
WARRANTY.....	21
DECLARATION OF CONFORMITY .....	22

## IMPORTANT SAFETY INSTRUCTIONS

PLEASE READ THEM BEFORE OPERATING THIS EQUIPMENT!



1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

## IMPORTANT SAFETY INSTRUCTIONS

PLEASE READ THEM BEFORE OPERATING THIS EQUIPMENT!



11. Only use attachments/accessories specified by the manufacturer.

12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



13. Unplug this apparatus during lightning storms or when unused for long periods of time.

14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

15. Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.

16. To completely disconnect this equipment from the AC mains, disconnect the power supply cord plug from the AC receptacle.

## **IMPORTANT SAFETY INSTRUCTIONS**

PLEASE READ THEM BEFORE OPERATING THIS EQUIPMENT!



17. The mains plug of the power supply cord shall remain readily operable.

18. Do not expose batteries to excessive heat such as sunshine, fire or the like!

19. Connect mains power supply cord only to a mains socket outlet with a protective earthing connection.

20. WARNING! To reduce risk of fire or electrical shock, do not expose this equipment to rain or moisture!

21. CAUTION! To reduce the risk of electric shock, do not remove cover!

22. No user-serviceable parts inside. Refer servicing to qualified service personnel.

## MARKINGS



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.



**CAUTION: Hot Surface! Do Not Touch!**  
Protective cover of the product may become hot when operating this product continuously.



The crossed-out wheeled bin is the European Union symbol for indicating separate collection for electrical and electronic equipment. This product contains electrical and electronic equipment which should be reused, recycled or recovered and should not be disposed of with unsorted regular

waste. Please return the unit or contact the authorised dealer from whom you purchased this product for more information.



The product meets the relevant directives and standards of the European Union.



Supplied with alternating current (AC).

**115 V / 230 V** Nominal supply voltage.

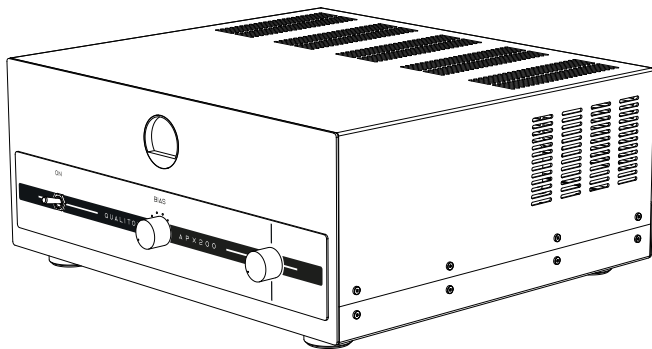
**50 Hz / 60 Hz** Nominal supply frequency.

## PREFACE

Before installing the **Qualiton APX 200**, please study this user manual carefully!

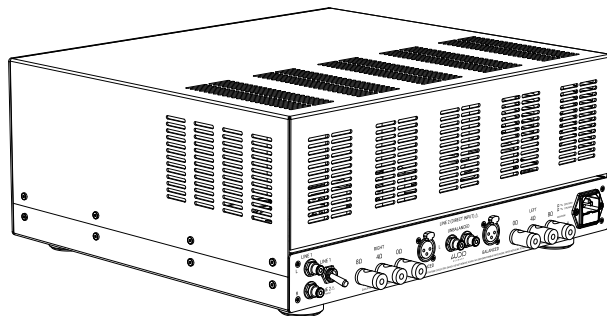
Operating your power amplifier in a manner it is designed for ensures you an utmost musical experience and a reliable operation.

If you have any questions on our products or services, please do not hesitate to contact us on our website [www.audiohungary.com](http://www.audiohungary.com)



## CONTENTS OF PACKAGE

- 1 pc – Qualiton APX200 stereo amplifier
- 1 pc – User manual
- 1 pc – Standard mains cable



## TECHNICAL SPECIFICATION

### NOMINAL OUTPUT POWER

2 X 100 W, stereo

### TOTAL HARMONIC DISTORTION

< 1 % (measured by 1 kHz sine wave - nominal output power)

### FREQUENCY RESPONSE

15 Hz - 100 kHz (-3 dB - nominal output power)

### INPUT SENSITIVITY (LINE1)

665 mV, asymmetrical

### INPUT SENSITIVITY (LINE2, DIRECT INPUT!)

665 mV, symmetrical  
1330mV, asymmetrical

### GAIN (FROM LINE 1)

32,5 dB (8  $\Omega$ ) ; 29,5 dB (4  $\Omega$ )

### INPUT IMPEDANCE (LINE1)

10 k $\Omega$

### NOMINAL LOAD IMPEDANCE

4  $\Omega$ ; 8  $\Omega$

### OUTPUT POLARITY

non inverting

### SIGNAL-TO-NOISE RATIO

> 101 dB

### POWER CONSUMPTION

150W (quiescent) and 640W (maximum)

### VACUUM TUBE SET

4 x KT90; 2 x 6922; 2 x 12AX7

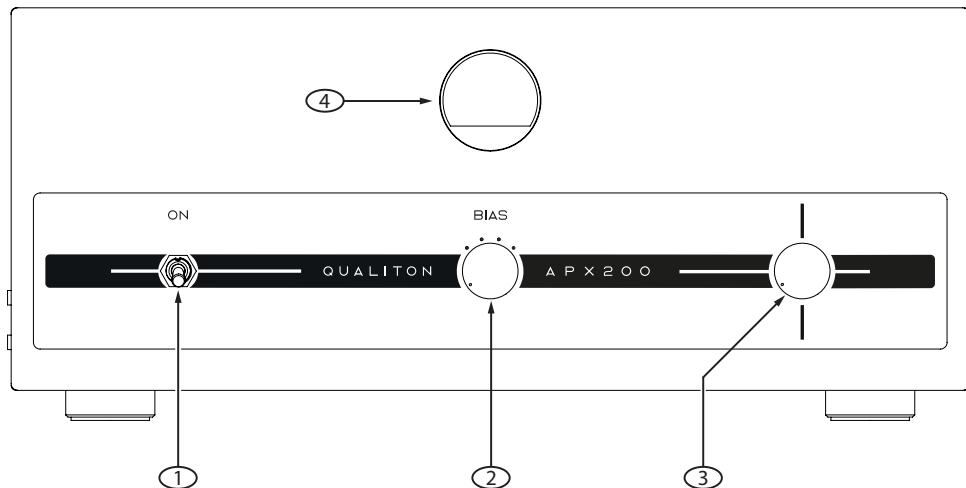
### WEIGHT

29,6 kg



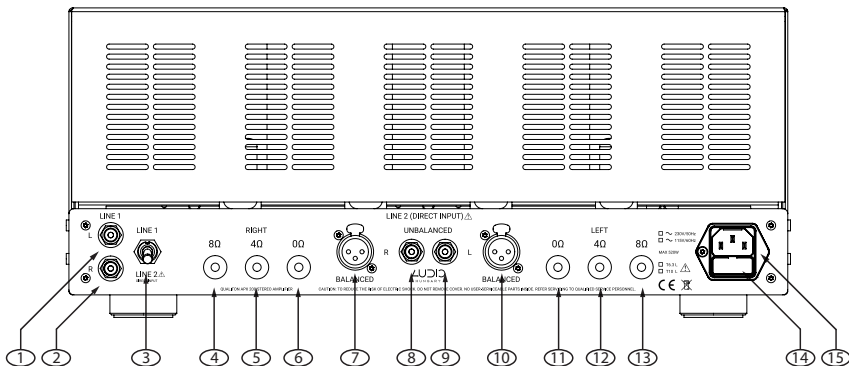
## FRONT PANEL CONTROLS

- ① Main switch
- ② Bias check rotary switch
- ③ Volume control
- ④ Front panel bias indicator



## REAR PANEL TERMINALS

- LINE 1
  - 1 Volume controlled input - Left side (L)
  - 2 Volume controlled input - Right side (R)
  - 3 Input selector
  - 4 Output - Right side (8Ω)
  - 5 Output - Right side (4Ω)
  - 6 Output - Right side (0Ω)
- LINE 2
  - 7 Direct balanced input - Right side (R)
  - 8 Direct unbalanced input - Right side (R)
  - 9 Direct unbalanced input - Left side (L)
  - 10 Direct balanced input - Left side (L)
  - 11 Output - Left side (0Ω)
  - 12 Output - Left side (4Ω)



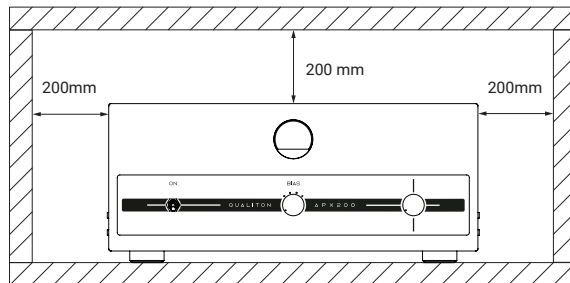
- 13 Output - Left side (8Ω)
- 14 Built-in fuse box in the AC socket
- 15 AC socket

## INSTALLATION

- Due to the vacuum tube construction of the amplifier, the it may heat up during use. Thus, choose a location for installation where the appliance can be well ventilated!
- Make sure that cables connecting the amplifier to the speakers as well as cables connected to the ports of the amplifier can be effortlessly connected.!
- Appliance can only operate with 50 Hz frequency and 230V AC voltage! The standard AC socket and the fuse box are placed at the rear panel.
- Never operate the amplifier through an ungrounded outlet!
- The amplifier can be connected to an audio system through RCA ports at the rear panel. Input sensitivity is 665 mV. (LINE1)
- According to the nominal impedance of the speakers used, the amplifier outputs are speaker ports marked 0  $\Omega$  and 4  $\Omega$  as well as 0  $\Omega$  and 8  $\Omega$ .
- Never operate the amplifier without a sufficient load! Do not power up the amplifier until correct loads (4  $\Omega$  or 8  $\Omega$ , marked on the amplifier) are connected to the output ports!

## SAFETY RECOMMENDATIONS - PLACEMENT

- Avoid relocating the appliance from cold to warm surroundings! Sudden temperature changes can lead to moisture condensation. Please wait until moisture is evaporated before putting your amplifier into operation!
- The aforesaid applies to the very first installation of the amplifier as well. Prior to the first installation, leave the amplifier at its place of operation at least for 2 hours. Once this time is over, the amplifier can be powered up!
- The appliance is designed for indoor use. Do not operate it in wet, humid surroundings!
- Do not store any electrical device or object in a perimeter of 200 millimetres around your amplifier!
- The ventilation holes of the amplifier must not be covered (by tablecloth, curtain, newspaper, book, etc.)! Impairing ventilation can lead to overheating and irregular operation conditions!
- Do not use the appliance next to heating sources and radiators! Keep it away from hot or dusty environment and flame!



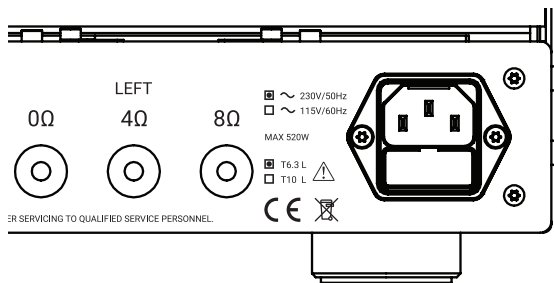
## **SAFETY RECOMMENDATIONS - OPERATION**

- Improper installation may cause breakdown!
- Before powering up your amplifier, make sure cover, ports, plugs and cables are checked for intactness!
- You must not start up damaged or faulty appliance. In case of any malfunction, unplug your amplifier immediately!
- Components must not be changed or repaired by the user. In case of a malfunction, the cover must not be opened or removed!
- In case of an emergency, unplug your amplifier immediately!
- In case of a faulty operation, contact our service!
- Improper repair may lead to a loss of warranty!
- The appliance may only be used by qualified adults or children above 14 years of age if supervised by a qualified adult!
- Keep the appliance out of the reach of children!
- Make sure your domestic animal does not lie or sit on the top of the appliance!
- Irrespective of protection circuits built in in your amplifier, always make sure it is connected and operated in a proper manner!

## SAFETY RECOMMENDATIONS - OPERATION

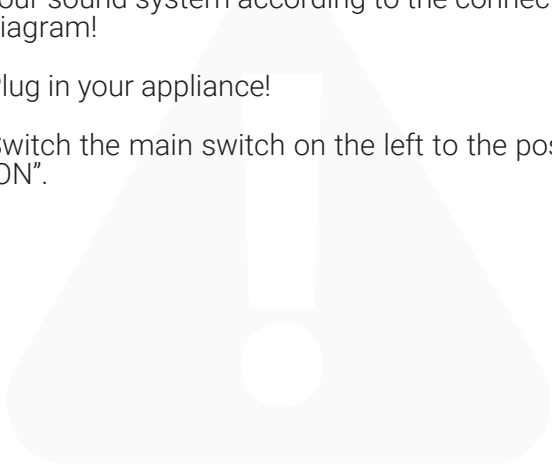
- At the mains cable and output ports, there is a risk of electric shock! They must be handled with care!
- If you do not use your amplifier for a long time, unplug the appliance carefully!
- Do not block the openings of your amplifier since this may lead to fire or electric shock!
- The protection rating of this appliance is IP20. This means the appliance is protected from solid objects larger than 12 millimetres. However, it is not protected from moisture!
- Operation voltage is 230V AC, operation frequency is 50 Hz!

- Never operate the amplifier through an ungrounded outlet!
- The AC socket features a built-in fuse box. Ensure replacement fuses with rating T 6.3 L (type time-delay)!

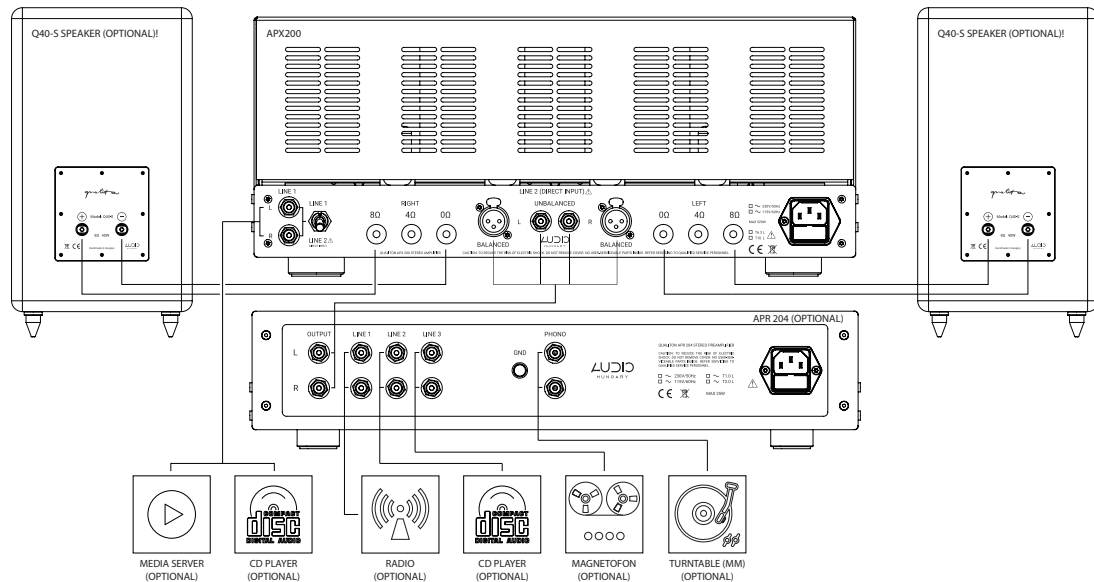


## **SAFETY RECOMMENDATIONS - OPERATION      FIRST INSTALLATION**

- Be careful with appliance cables! Do not lead them across sharp surfaces, do not clamp them together and do not leave them in a hanging position!
  - You must not operate the appliance with damaged cables!
  - In case of fire, you must not use water to extinguish the fire, even if the amplifier is powered down!
  - Never touch the appliance or its mains cable with wet hands!
  - Clean the appliance with a dry cloth while it is unplugged!
  - Never operate the amplifier without a sufficient load! Do not power up the amplifier until correct loads (4  $\Omega$  or 8  $\Omega$ , marked on the amplifier) are connected to the output ports!
- Connect your amplifier to the other elements of your sound system according to the connection diagram!
  - Plug in your appliance!
  - Switch the main switch on the left to the position "ON".

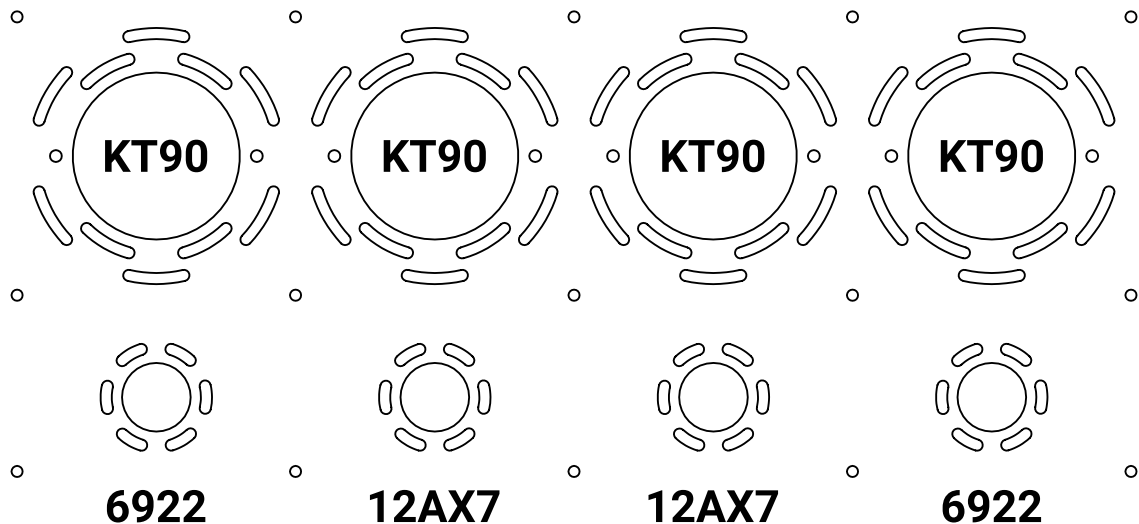


## CONNECTING





## VACUUM TUBES



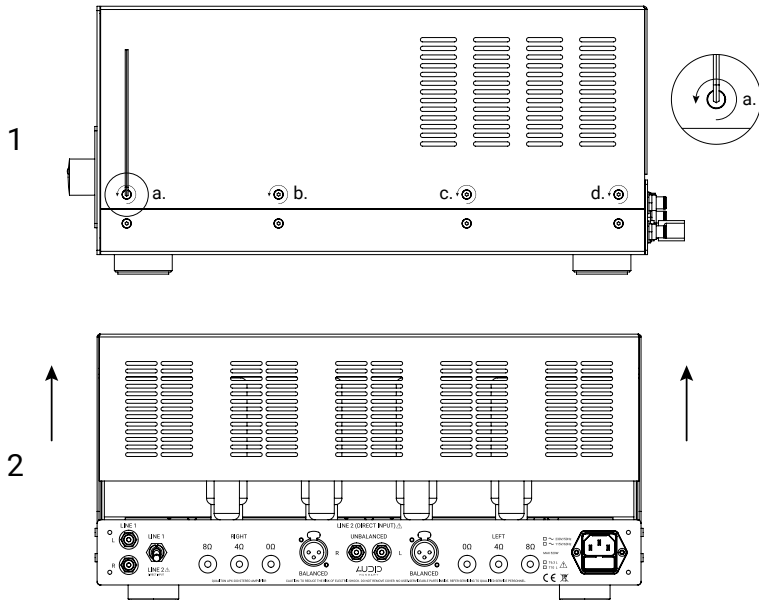
## REPLACEMENT OF VACUUM TUBES

Unplug your amplifier and do not operate it at least 2 hours before replacing tubes!

1. Unscrew the screws a.b.c.d. (on both side) with a 2mm allen key!

2. Remove the protective cover in the indicated direction!

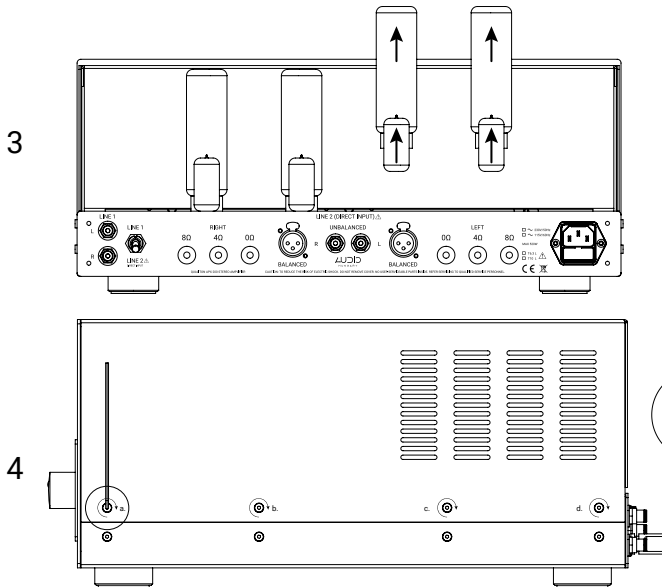
3. Remove the vacuum tubes carefully, then insert the replacement tubes on their spots!



## REPLACEMENT OF VACUUM TUBES

4. After putting back the protective cover, fasten it with the screws a.b.c.d.

(In the case of tube replacement, before you insert non-OEM tubes, please contact our company and enquire about their compatibility!)



## **TROUBLESHOOTING**

### **Malfunction 1: Amplifier does not power up.**

- 1.a Make sure the amplifier is plugged in!
- 1.b Be sure the main switch at the front panel is in 'ON' position!
- 1.c Should the fault persist after going through points 1.a and 1.b, carefully check the mains cable for intactness!
- 1.d Should the fault persist after going through points 1.a, 1.b and 1.c, check whether the front panel gauge illuminates red! If it does not, check the power supply of your flat!

- 1.e Should the fault persist after going through points 1.a, 1.b, 1.c and 1.d, check the fuse of the amplifier for intactness, according to the instructions stated in 'Safety Recommendations—Operation'!
- 1.f If the preceding points are all checked and the amplifier still does not power up (incl. the bias indicator), please contact our company!

## **TROUBLESHOOTING**

**Malfunction 2: The illumination of the front panel bias indicator does not turn warm white.**

2.a Wait 90 seconds until the start-up delay circuits are activated! Should the gauge illumination not turn into warm white after 90 seconds, please contact our company!

**Malfunction 3: No sound from the speakers.**

3.a Check the operation of the amplifier according to section 1!

3.b Be sure that the audio source is connected to the input ports of the amplifier!

3.c Be sure that the audio source is turned on!

3.d Be sure that the volume control knob is turned up!

3.e Be sure that the speaker cables are correctly connected to the correct ports!

3.f Check whether the speaker cables are correctly connected to the speaker ports!

3.g If the preceding points are all checked and the fault persists, please contact our company!




**Malfunction 4: No sound from one side, no stereo sound.**

4.a Check the operation of the amplifier according to sections 1 and 2!

## TROUBLESHOOTING

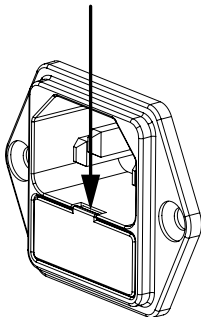
- 4.b Change your audio source! Make sure you are listening to a stereo record!
- 4.c Check the bias currents of the output power tubes according to the section 'BIAS'! In case of significant current differences, some tubes may need replacement.
- 4.d If the preceding points are all checked and the fault persists, please contact our company!

## MARKINGS

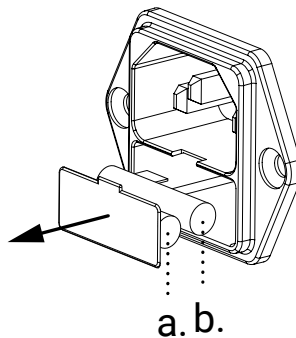
-  - The product meets the directives and standards of the European Union.
- 230 V - Nominal supply voltage.
- 50 Hz - Nominal supply frequency.
-  - Product requiring waste separation.
-  - Warning! This component can only be replaced by components specified in this user manual!

## REPLACEMENT OF FUSE

1. Open the fuse holder with a screwdriver!
2. Change the used main fuse (marked b.) for the spare fuse (marked a.)!



1.



2.

## WASTE MANAGEMENT

- The appliance and its packaging are made of recyclable materials.
- The appliance contains repairable or recyclable components and materials. Waste separation makes their recycling possible.
- A faulty appliance or an appliance meant to be discarded has to be sent or brought to an adequate waste collection place or to our company site!
- For further information on waste disposal please contact our company or local authorities.



## WARRANTY

The serial number of your appliance (engraved on a metal plate) is placed on its bottom. Please refer to this number while contacting our company.

---

Set of tubes used:

---

---

---

## DECLARATION OF CONFORMITY

We, Audio-Hungary Ltd., declare, taking this declaration under our total responsibility, that tube power amplifier model Qualiton APX200 is in conformity with EN 55013, EN 61000-3-2, EN 61000-3-3, and EN 55020 in accordance with the Directive 2006/95/EC of 12 December 2006.

**Document:** 2016/04.

**Manufacturer:**

Audio-Hungary Ltd.

Nádor Street 28.

4400 Nyíregyháza Hungary

We declare that the designated product(s): Qualiton APX200 is/are in conformity with the European Directives:

**EN 60065:2015**

**EN 55014-1:2006+A1:2009+A2:2011**

**EN 55014-2:2006+A1:2009+A2:2011**

This declaration certifies compliance with the indicated directives but implies no warranty of properties. The safety instructions of the accompanying documentation shall be observed. This declaration of conformity is issued under the sole responsibility of the manufacturer.

**Issuer:**

Audio-Hungary Ltd.

Nádor Street 28.

4400 Nyíregyháza Hungary

Legally binding signature:

**AUDIO-HUNGARY Kft.**  
4400 Nyíregyháza  
Nádor utca 28.

Andras Imre Fabian

**Place, date:** Hungary, 21.05.2016