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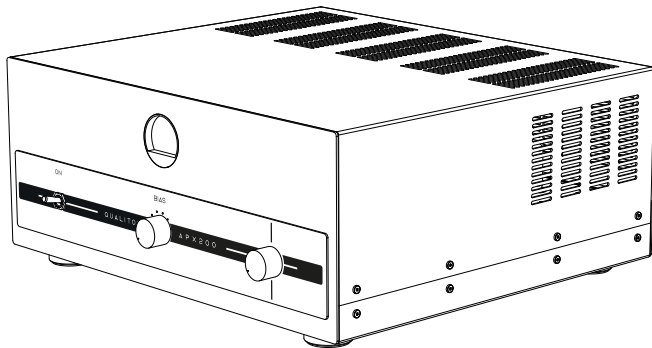
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PREFACE

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

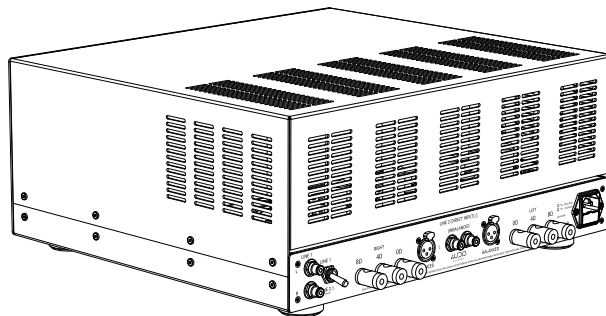
Operating your power amplifier in a manner it is designed for ensures you an utmost musical experience and a reliable operation.

If you have any questions on our products or services, please do not hesitate to contact us on our website www.audiohungary.com



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 Ω) ; 29,5 dB (4 Ω)

INPUT IMPEDANCE (LINE1)

10 k Ω

NOMINAL LOAD IMPEDANCE

4 Ω ; 8 Ω

OUTPUT POLARITY

non inverting

SIGNAL-TO-NOISE RATIO

> 101 dB

POWER CONSUMPTION

150W (quiescent) and 640W (maximum)

VACUUM TUBE SET

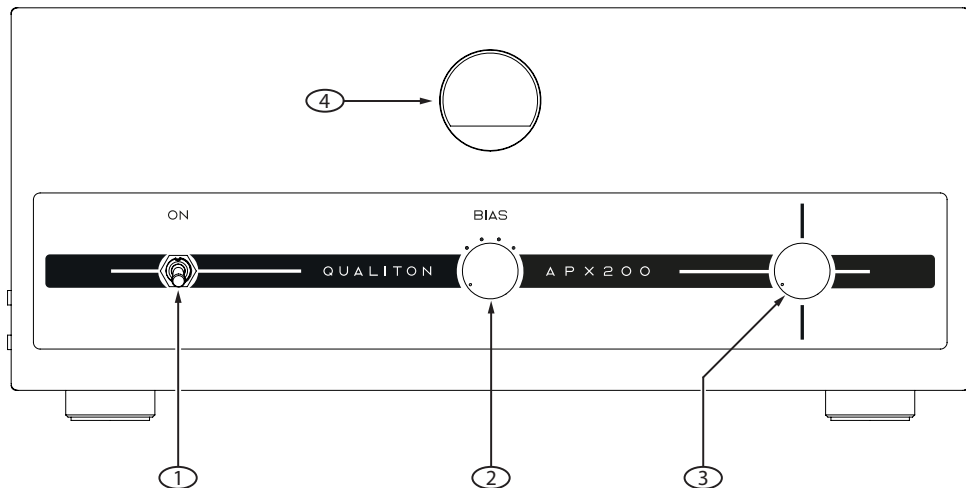
4 x KT90; 2 x 6922; 2 x 12AX7

WEIGHT

29,6 kg

FRONT PANEL CONTROLS

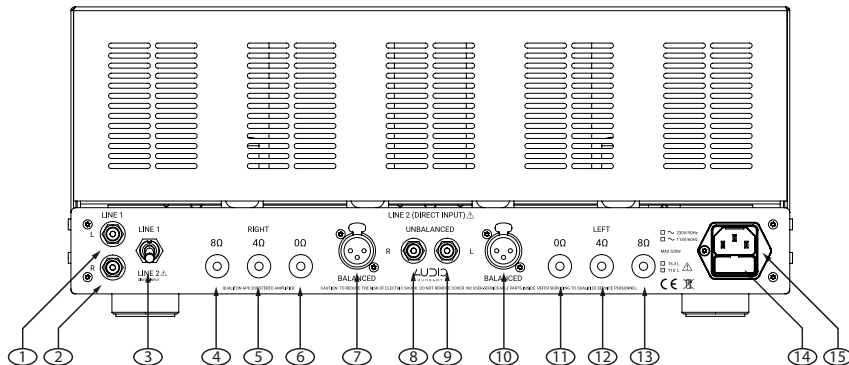
- ① Main switch
- ② Bias check rotary switch
- ③ Volume control
- ④ Front panel bias indicator



qualiton APX 200

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)



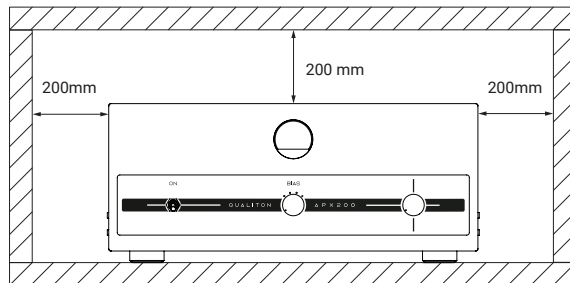
- ⑬ Output - Left side (8Ω)
- ⑭ Built - in fuse box in the AC socket
- ⑮ AC socket

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 Ω and 4 Ω as well as 0 Ω and 8 Ω .
- Never operate the amplifier without a sufficient load! Do not power up the amplifier until correct loads (4 Ω or 8 Ω , 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!

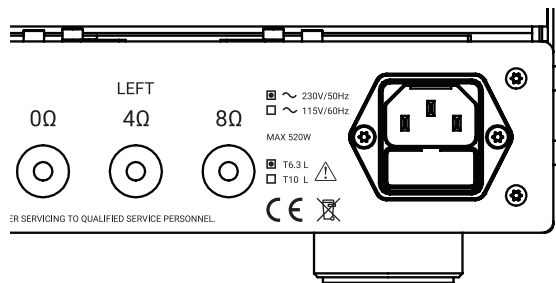


SAFETY RECOMMENDATIONS - OPERATION

- 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!

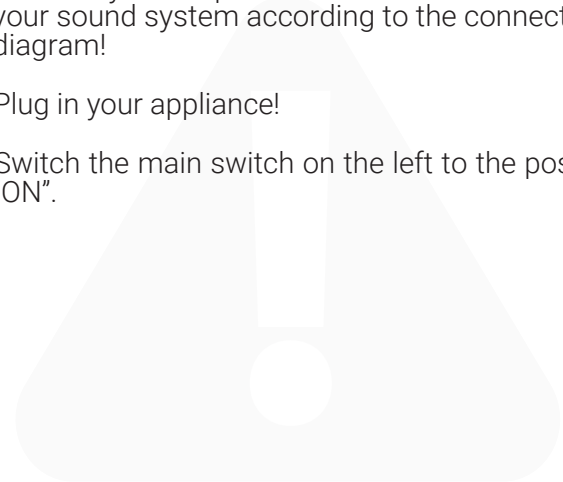
SAFETY RECOMMENDATIONS - OPERATION

- 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)!



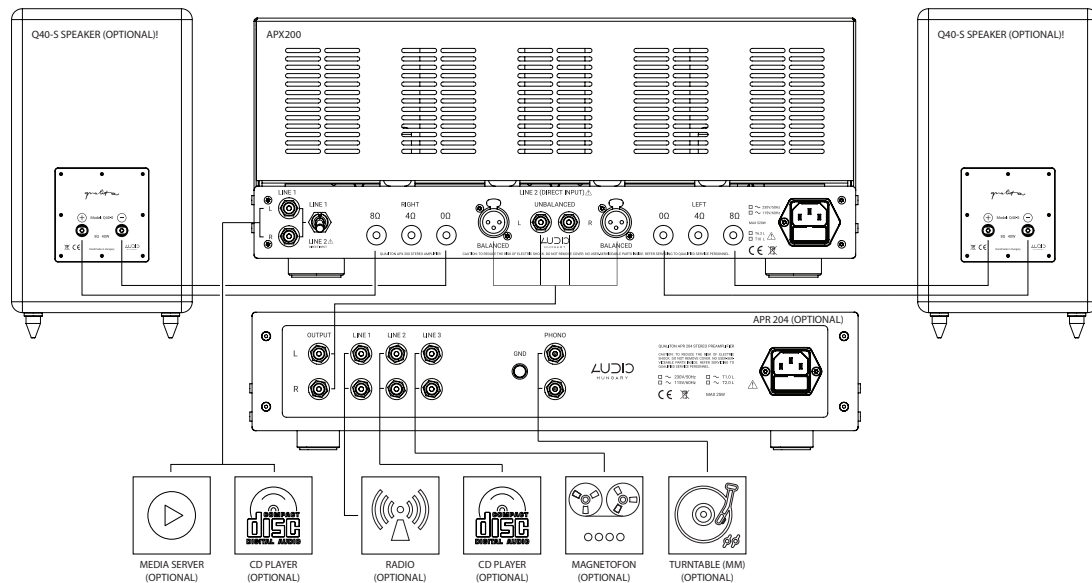
SAFETY RECOMMENDATIONS - OPERATION FIRST INSTALLATION

- 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 Ω or 8 Ω , 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".

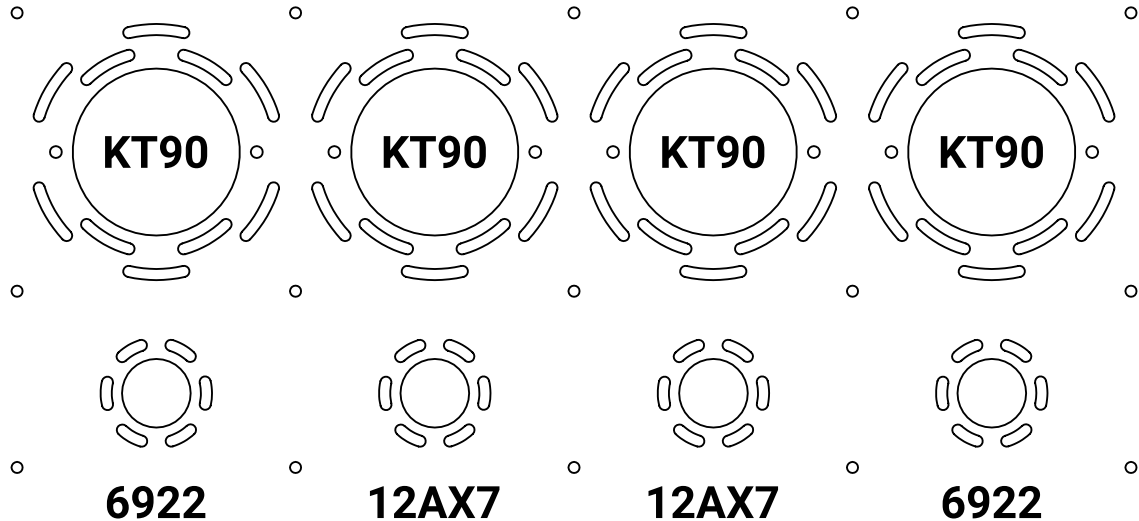


qualiton APX 200

CONNECTING



VACUUM TUBES



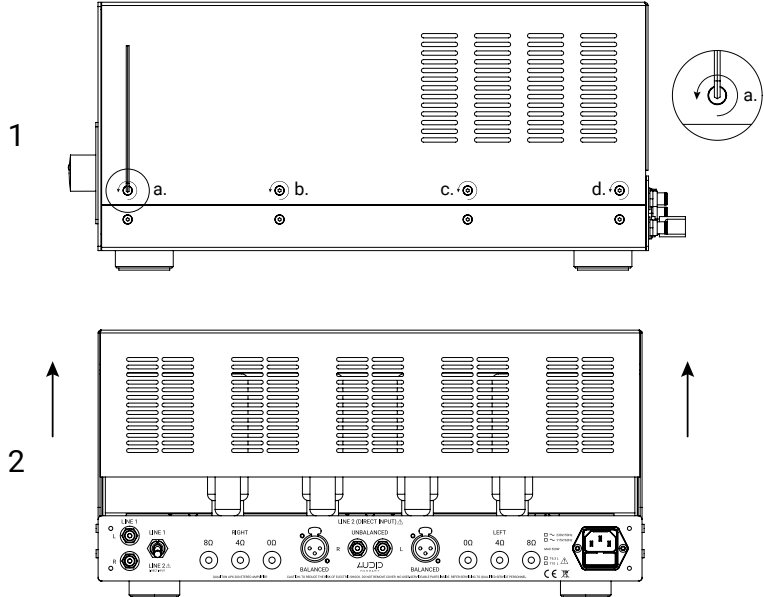
REPLACEMENT OF VACUUM TUBES

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!

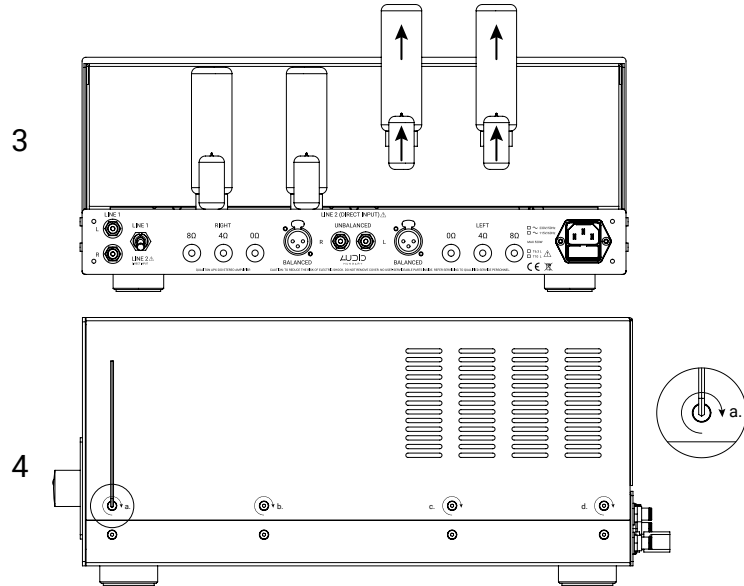
3. Remove the vacuum tubes carefully, then insert the replacement tubes on their spots!



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

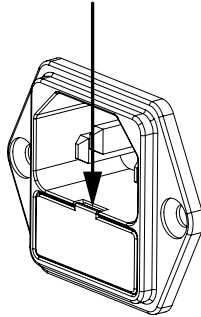
- 4.b Change your audio source! Make sure you are listening to a stereo record!
- 4.c Check the bias currents of the output power tubes according to the section 'BIAS'! In case of significant current differences, some tubes may need replacement.
- 4.d If the preceding points are all checked and the fault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

MARKINGS

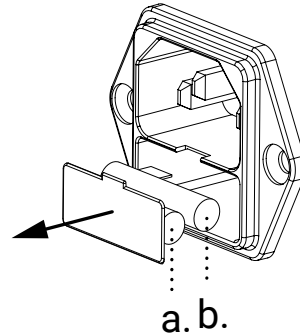
-  - The product meets the directives and standards of the European Union.
- 230 V - Nominal supply voltage.
- 50 Hz - Nominal supply frequency.
-  - Product requiring waste separation.
-  - Warning! This component can only be replaced by components specified in this user manual!

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:
