

qualiton A20i ● User's manual

## **Introduction**

Thank you for purchasing a **qualiton A20i** power amplifier!

It is designed to deliver a high standard of musical performance. The innovation in engineering and manufacturing this product guarantees amusement for a long time, thanks to the output transformer made by us.

We wish you many pleasant hours of musical experience with your **qualiton A20i!**

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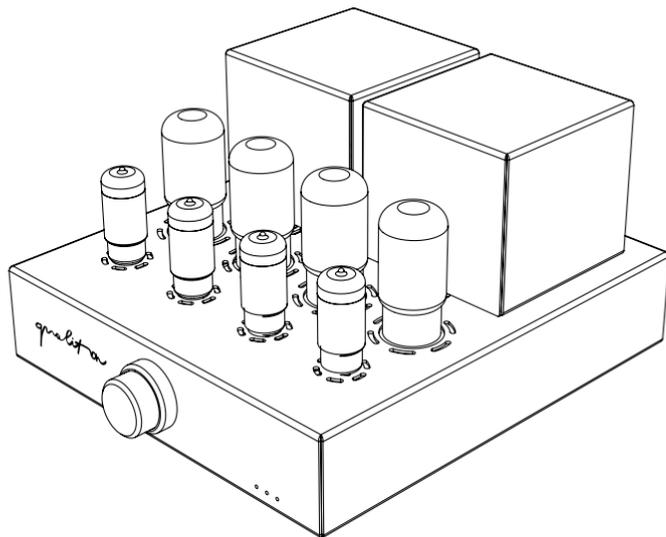
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## PREFACE

Before installing the integrated stereo amplifier **qualiton A20i**, please study this user manual carefully!

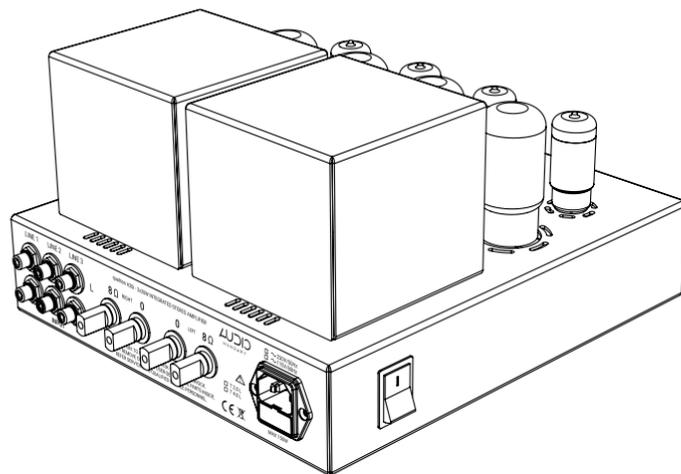
Operating your power amplifier in a manner it is designed for ensures you an utmost musical experience and a reliable operation.

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

- 1pc qualiton a20i stereo amplifier
- 1pc user manual
- 1pc standard mains cable
- 1pc remote control
- 1pc torx wrench (TX08)
- 1pc A23 battery



## TECHNICAL SPECIFICATION

### NOMINAL OUTPUT POWER

2 x 20 W, stereo

### TOTAL HARMONIC DISTORTION

< 0.3 % (measured by 1kHz sine wave - nominal output power)

### FREQUENCY RESPONSE

25 Hz - 100 kHz (-3 dB, nominal output power)

### INPUT SENSITIVITY

230 mV, asymmetrically

### GAIN

+34.8 dB

### INPUT IMPEDANCE

10 k $\Omega$

### NOMINAL LOAD IMPEDANCE

8  $\Omega$

### OUTPUT POLARITY

non inverting

### SIGNAL-TO-NOISE RATIO

> 90 dB

### POWER CONSUMPTION

150 W

### VACUUM TUBE SET

4 x 5881; 2 x E88CC; 2 x ECC83

### WEIGHT

16 kg

## FRONT PANEL CONTROLS

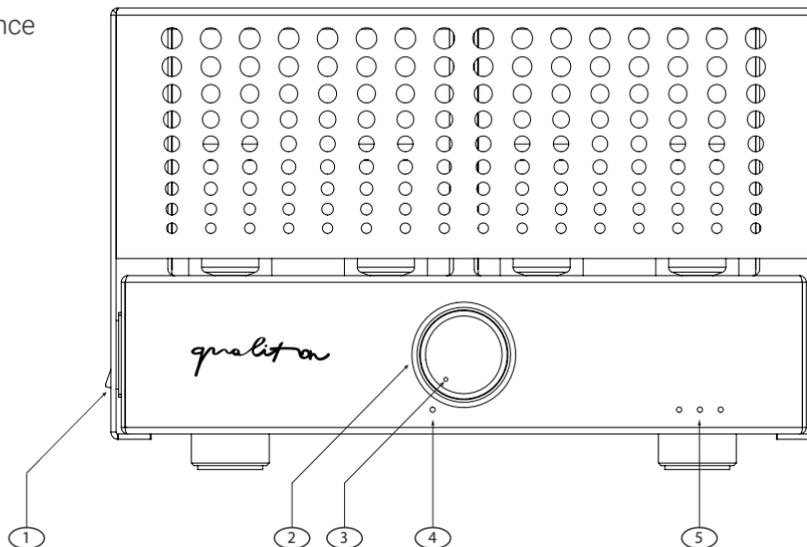
① Main switch on the side of appliance

② Input selector rotary switch

③ Volume control

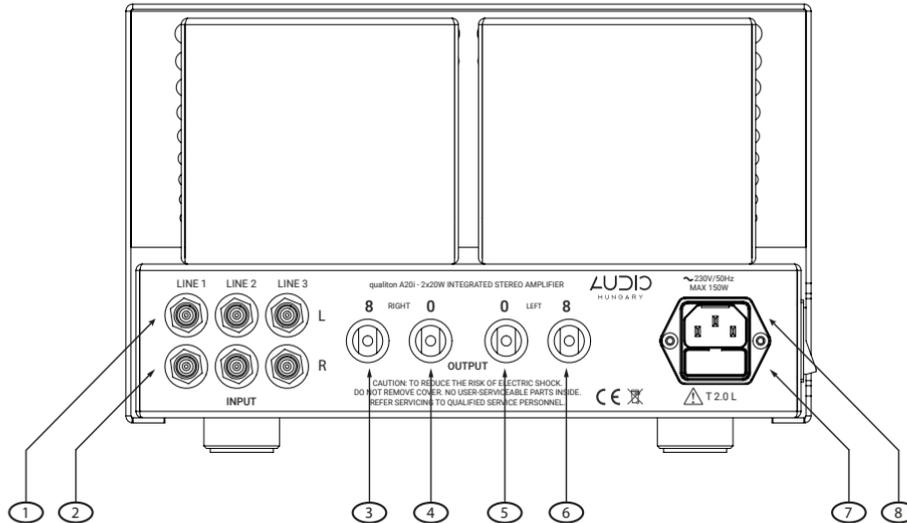
④ Status indicator led

⑤ Leds indicating active input



# qualiton A20i

## REAR PANEL TERMINALS



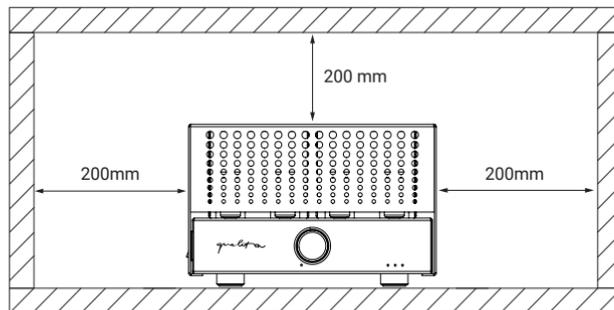
- 1 Inputs (3 RCAs placed horizontally) Left side (L)
- 2 Input (3 RCAs placed horizontally) Right side (R)
- 3 Output - Right side (8  $\Omega$ )
- 4 Output - Right side (0  $\Omega$ )
- 5 Output - Left side (0  $\Omega$ )
- 6 Output - Left side (8  $\Omega$ )
- 7 Built-in fuse box in the AC socket
- 8 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 placed at the rear panel.
- According to the nominal impedance of the speakers used, the amplifier outputs are speaker ports marked 0  $\Omega$  and 8  $\Omega$ .
- With the input selector rotary switch, the chosen input source can be activated. The activated source is indicated by one illuminated led, from the left to the right in order: LINE 1; LINE 2; LINE 3.
- Never operate the amplifier without a sufficient load!- Do not power up the amplifier until correct loads (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!

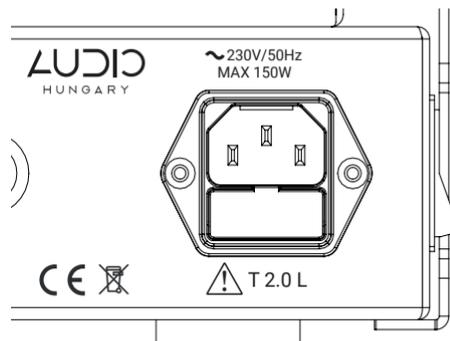


## SAFETY RECOMMENDATIONS - OPERATION

- 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 2.0 L (type time-delay)!

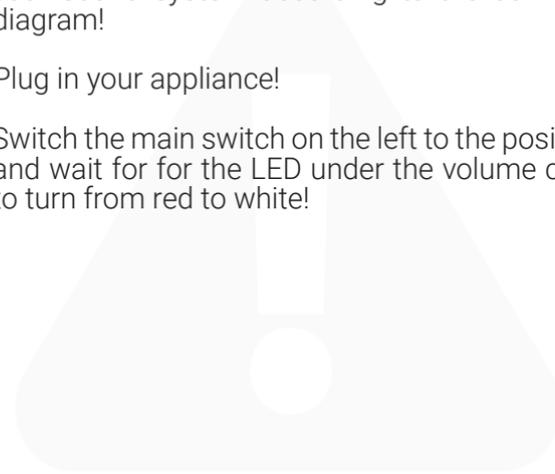


## SAFETY RECOMMENDATIONS - OPERATION

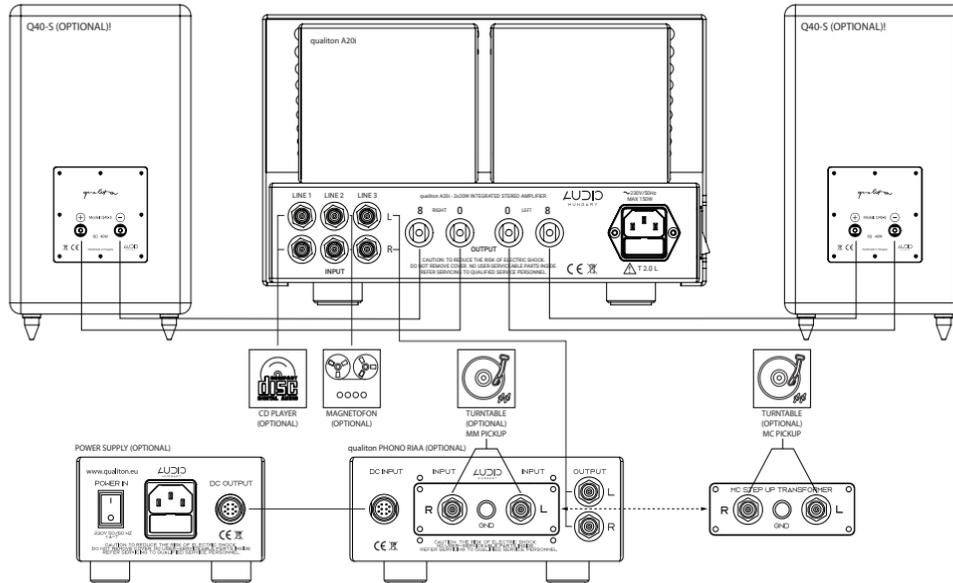
- Be careful with appliance cables! Do not lead them across sharp surfaces, do not clam them together and do not leave them in a hanging position!
- You must not operate the appliance with damaged cables!
- In case of fire, you must not use water to extinguish the fire, even if the amplifier is powered 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 (8  $\Omega$ , marked on the amplifier) are connected to the output ports!

## FIRST INSTALLATION

- 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 "I" and wait for for the LED under the volume control to turn from red to white!



## CONNECTING



## **STATUS INDICATION**

- The status indication led is placed at the front panel, under the volume control. The led can indicate the followings:
- No illumination  
Appliance powered down.
- Turning from red into white coloured light Current flows through the vacuum tubes, according to the anode current value set by the manufacturer.
- Continuous red light:  
Appliance is muted.
- Vibrating white light  
Radio communication (receiving signals coming from remote control).

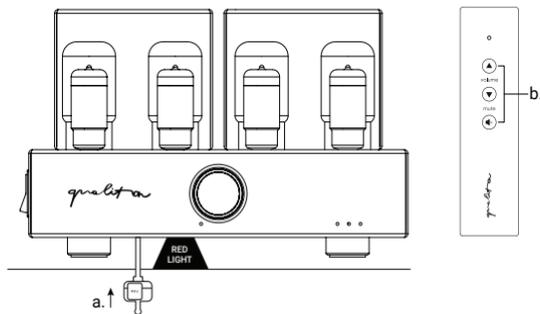
## **STATUS INDICATION**

- Vibrating red light  
Radio communication (while the amplifier is muted).

## **REMOTE CONTROL STATUS INDICATION**

- During adjusting volume, the LED indicating communication is illuminated white.
- After pushing the button "mute", the LED indicating communication is illuminated red.

## REGISTERING REMOTE CONTROL



1 Press button „a.” for one second with the attached torx wrench. A red light will appear under the device.

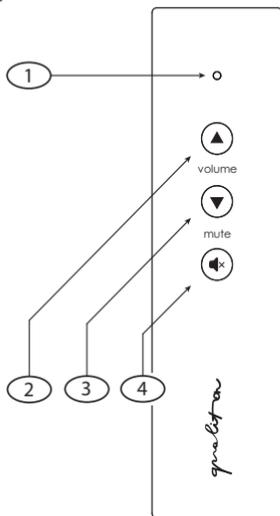
2 When the light is blinking press any button on the remote controller. If the red light turns off, the controller is ready to use.

3 If you push the button „a.” for 10 seconds, the controller setup will reset, and you have to reconnect the controller.

## REMOTE CONTROL

- ① LED indicating communication
- ② Volume up
- ③ Volume down
- ④ Mute

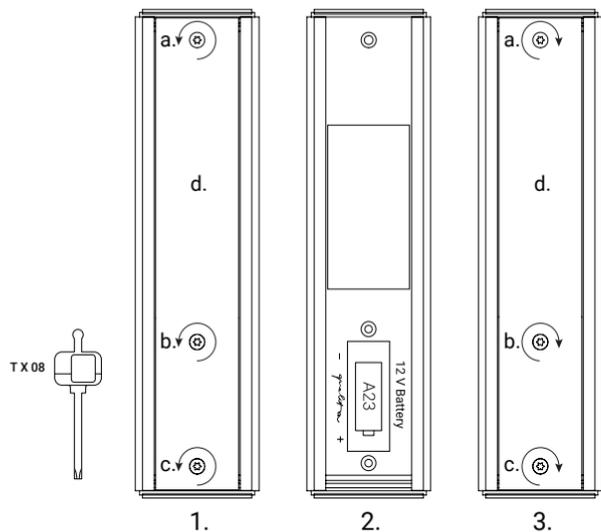
Should your remote control not operate, remove its back with the torx wrench, included in the package, and replace the one A23 battery!



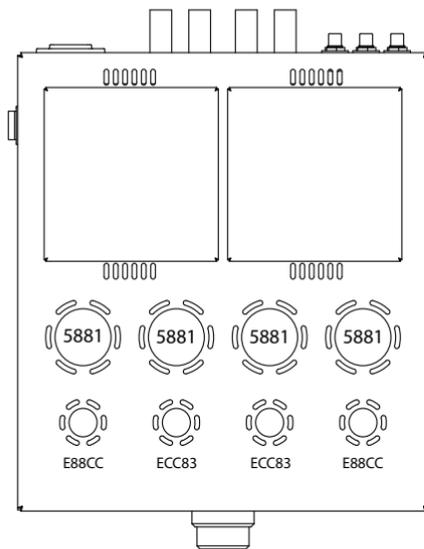
## REPLACEMENT OF BATTERY

1. Unscrew the screws on the back (a.b.c.) with the torx wrench, included in the package, then remove the cover! (d.)
2. Insert one A23 battery, as shown in the diagram!
3. Put back the cover and fasten it tightening the screws!

## REPLACEMENT OF BATTERY



## VACUUM TUBES

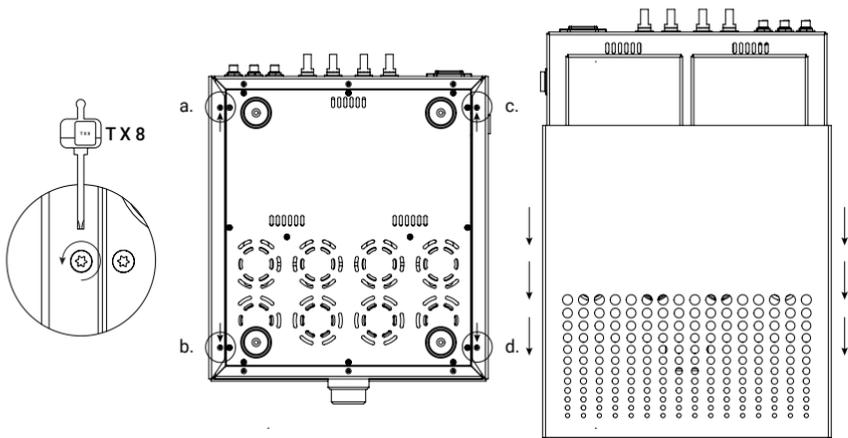


## REPLACEMENT OF VACUUM TUBES

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

1. Unscrew the marked screws with a torx 08 wrench!

2. Remove the protective cover in the indicated direction!



1

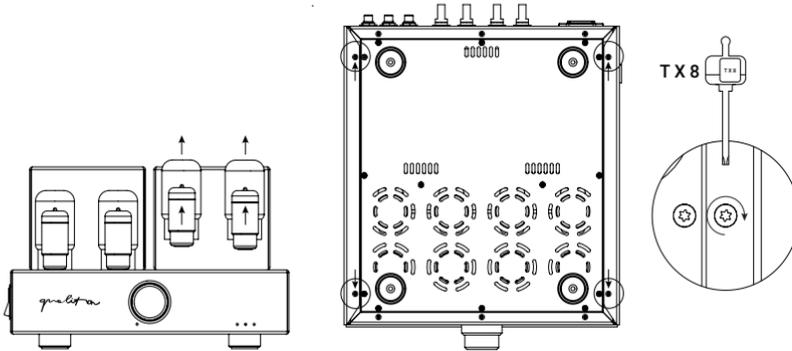
2

## REPLACEMENT OF VACUUM TUBES

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

4. After putting back the protective cover, fasten it with the screws!

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



3

4

## 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 left panel is in 'I' 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 status indicator), please contact our company!

### **Malfunction 2: The illumination of the status indicator LED does not turn white.**

**2.a** Should the indicator illumination not turn into white after 60-90 seconds, please contact our company!

## TROUBLESHOOTING

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

- 3.a Check the operation of the amplifier according to section 1 and 2!
- 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 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!

4.b Change your audio source. Make sure you are listening to a stereo record!

## TROUBLESHOOTING

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

### Malfunction 5: Noisy and/or distorted sound.

5.a Check the operation of the amplifier according to sections 1, 2 and 3! Should the fault persist, please contact our company!

### Malfunction 6: The top of the amplifier is hot.

6.a Due to the inner circuitry of the amplifier, this is a normal phenomenon. For further information check section 'INSTALLATION'.

## MARKINGS

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

 - Supplied with alternating current.

230 V - Nominal supply voltage.

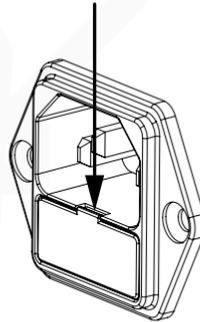
50 Hz - Nominal supply frequency.

 - Product requiring waste separation.

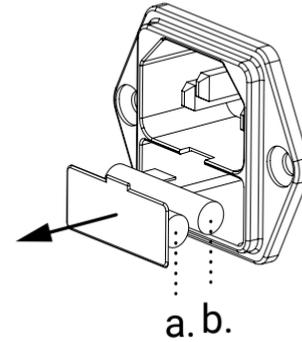
 - Warning! This component can only be replaced by components specified in this user manual!

## 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!

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Set of tubes used:

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## DECLARATION OF CONFORMITY

We, Audio-Hungary Ltd., declare, taking this declaration under our total responsibility, that tube power amplifier model Qualiton A20i 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:** 2016/01.

**Manufacturer:**

Audio-Hungary Ltd.  
Nádor Street 28.  
4400 Nyíregyháza Hungary

We declare that the designated product(s): Qualiton A20i 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

**Place, date:** Hungary, 27.06.2016

Legally binding signature:

**AUDIO HUNGARY Kft.**  
4400 Nyíregyháza  
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Andras Imre Fabian

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