

qualiton A20i ● User's manual



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## **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.

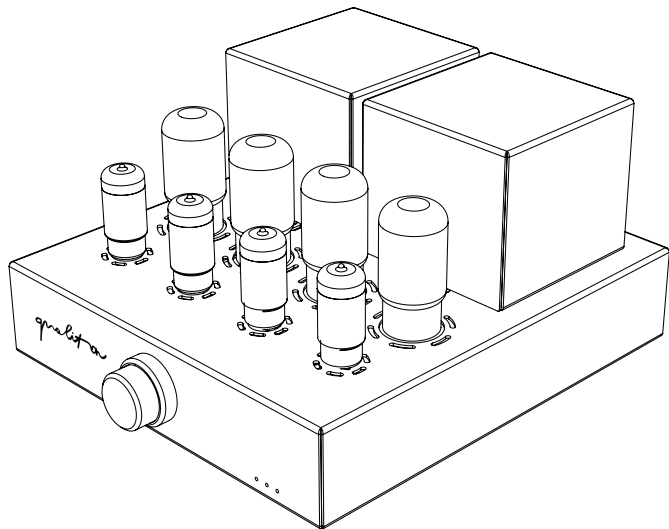
**50 Hz / 60 Hz** Nominal supply frequency.

## PREFACE

Before installing the 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.

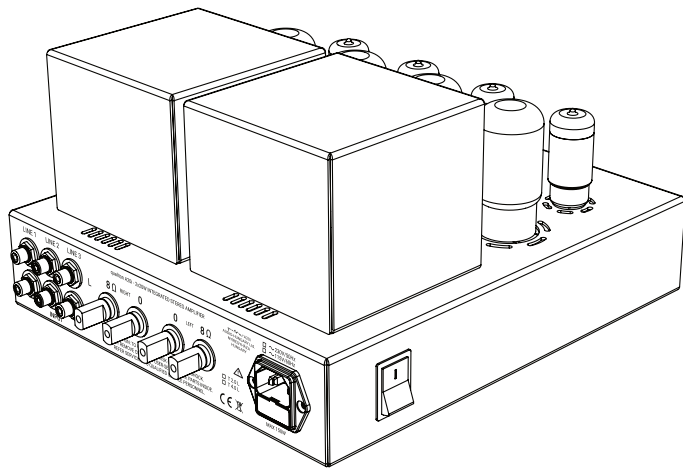
If you have any questions on our products or services, please do not hesitate to contact us on our website [www.audiohungary.com](http://www.audiohungary.com)





## CONTENTS OF PACKAGE

- 1 pc Qualiton A20i stereo amplifier
- 1 pc User's Manual
- 1 pc standard mains cable
- 1 pc remote control
- 1 pc torx wrench (TX10)



## TECHNICAL SPECIFICATION

### RATED OUTPUT POWER

2 x 20 W, stereo

### TOTAL HARMONIC DISTORTION

< 0.3% (f = 1 kHz, rated output power)

### FREQUENCY RESPONSE

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

### INPUT SENSITIVITY

230 mV, unbalanced input

### NUMBER OF INPUT PORTS

3 unbalanced inputs per channel

### NUMBER OF OUTPUT PORTS

1 output terminal pair per channel

### GAIN

+34.8 dB

### INPUT IMPEDANCE

10 k $\Omega$

### NOMINAL LOAD IMPEDANCE

8  $\Omega$

### OUTPUT POLARITY

non-inverting

### SIGNAL-TO-NOISE RATIO

> 90 dB; output noise less, than 1 mV

### VACUUM TUBES REQUIRED

4 x 5881; 2 x E88CC/6922; 2 x ECC83

## **TECHNICAL SPECIFICATION**

### **POWER REQUIREMENTS**

The Qualiton A20i is factory configured for one of the following AC Voltages:

~ 115 V/60 Hz at 4.0 Amps

~ 230 V/50 Hz at 2.0 Amps

Maximum 150 Watts

### **PROTECTION CLASS**

The unit is of Class 1 construction and must be connected to a mains socket outlet with a protective earthing connection.

### **WEIGHT**

16 kg

### **DIMENSIONS**

27 x 18 x 30 cm

## FRONT PANEL

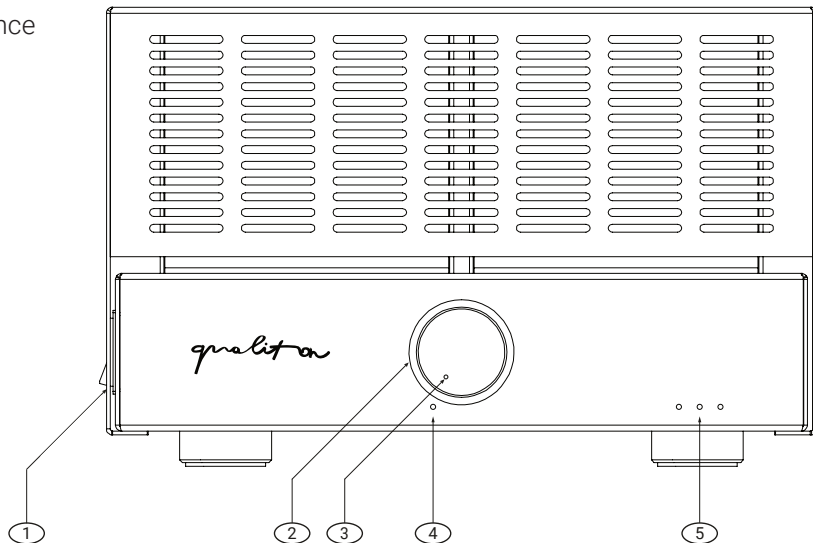
① Main switch on the side of appliance

② Input selector rotary switch

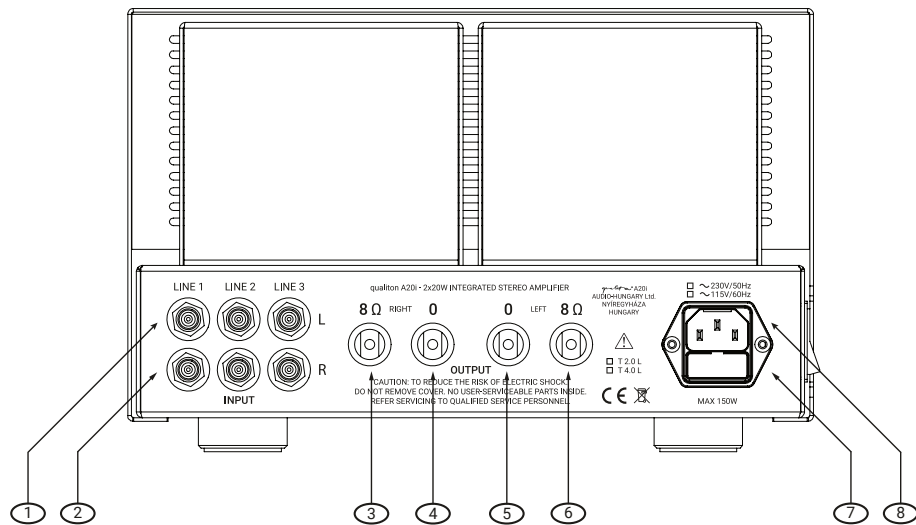
③ Volume control

④ Status indicator LED

⑤ LEDs indicating active input



## REAR PANEL



- ① Inputs (3 RCAs placed horizontally) Left side (L)
- ② Input (3 RCAs placed horizontally) Right side (R)
- ③ Output - Right side (8 Ω)
- ④ Output - Right side (0 Ω)
- ⑤ Output - Left side (0 Ω)
- ⑥ Output - Left side (8 Ω)
- ⑦ Built-in fuse holder
- ⑧ AC inlet

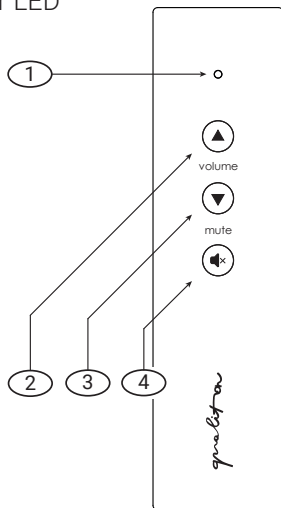
## REMOTE CONTROL

① Communication indicator LED

② Volume UP

③ Volume DOWN

④ MUTE



## INSERTING / REPLACING BATTERY

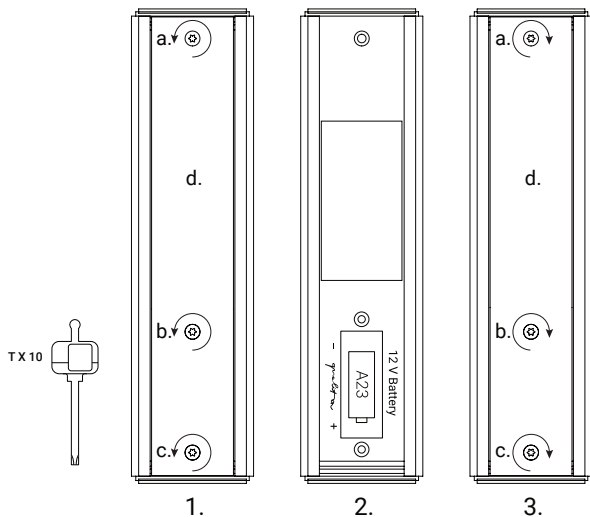
PLEASE NOTE: A20i's remote control comes without battery. The remote control operates with type A23 battery. Battery should be installed by the user before first use:

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 an A23 battery, as shown in the diagram!

3. Put back the cover and fasten it tightening the screws!

## INSERTING / REPLACING BATTERY



## BEFORE FIRST USE

Qualiton A20i amplifier is shipped with the vacuum tubes packed in foam blocks. These must be unpacked and installed before you attempt to operate the amplifier.

Follow these instructions for removal of the packing foam before connecting the AC power supply cord to the Qualiton A20i.

Failure to do so has the potential of a Fire Hazard, resulting in damage to the Qualiton A20i and the surrounding environment.

Included tubes are: 4 x 5881 (matched quad);  
2 x E88CC/6922; 2 x ECC83.

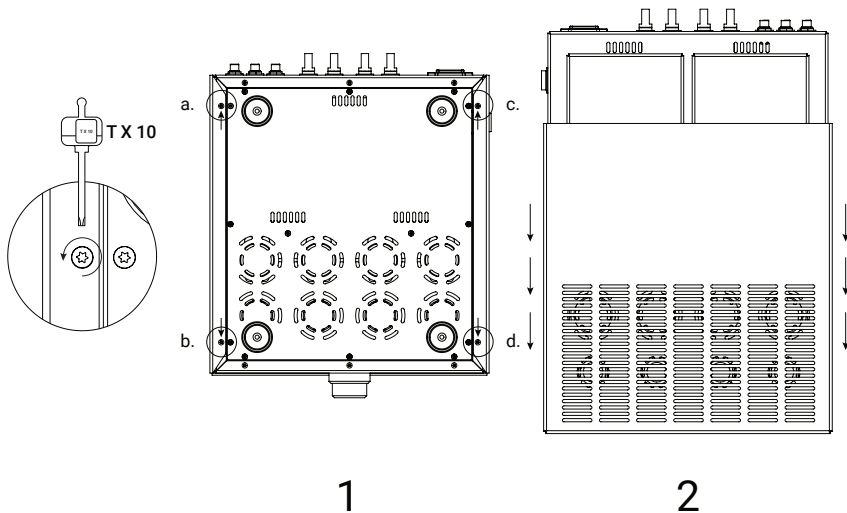
## BEFORE FIRST USE

1. Unscrew the marked screws with a TX10 wrench.

2. Remove the protective cover in the indicated direction!

3. Remove packing foam under protective cover and store with other packing materials.

4. Carefully remove each vacuum tube from its protective foam.

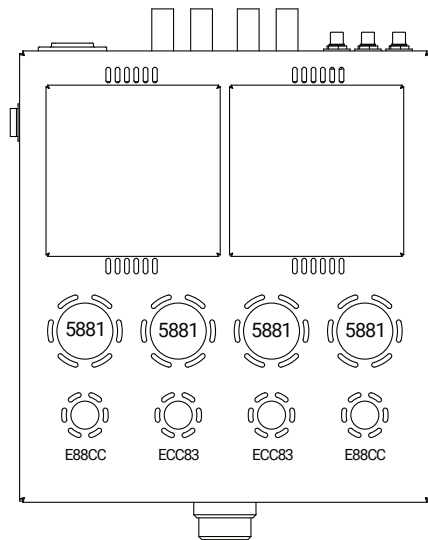




## BEFORE FIRST USE

5. Follow the layout shown in the figure below to place the tubes correctly.
6. Firmly seat each tube in its matching socket, taking care to 'key' the tube pins to the socket holes. Retain the foam blocks with other packing materials for possible future use.
7. After placing the protective cover back, fasten it with the screws.

## VACUUM TUBES LAYOUT



## PLACEMENT

IMPORTANT! Due to the vacuum tube construction of the amplifier, it may heat up during use. Thus, choose a location for installation where the appliance can be well ventilated!

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 stack multiple units on top of each other.

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 amp-

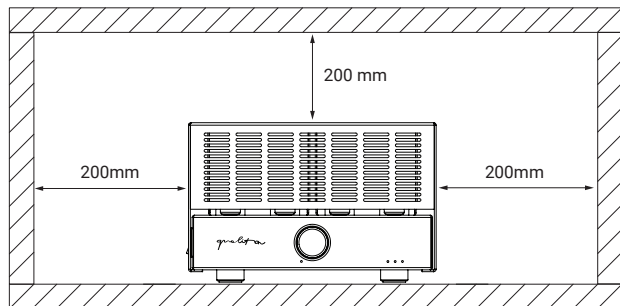
lifier into operation!

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!

## PLACEMENT

Do not store any electrical device or object in a perimeter of 200 millimetres around your amplifier!  
Do not use the appliance next to heating sources and radiators! Keep it away from hot or dusty environment and flame!



## INSTALLATION / CONNECTIONS

Appliance can operate at 60 Hz with 115 V AC line voltage, or at 50 Hz with 230 V AC line voltage. The standard IEC power inlet with fuse holder are placed on the rear panel.

The amplifier must be connected to a mains socket outlet with a protective earthing connection.

The appliance can be operated safely only with the supplied mains cable.

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!

The amplifier can be connected to an audio system through RCA ports placed at the rear panel.

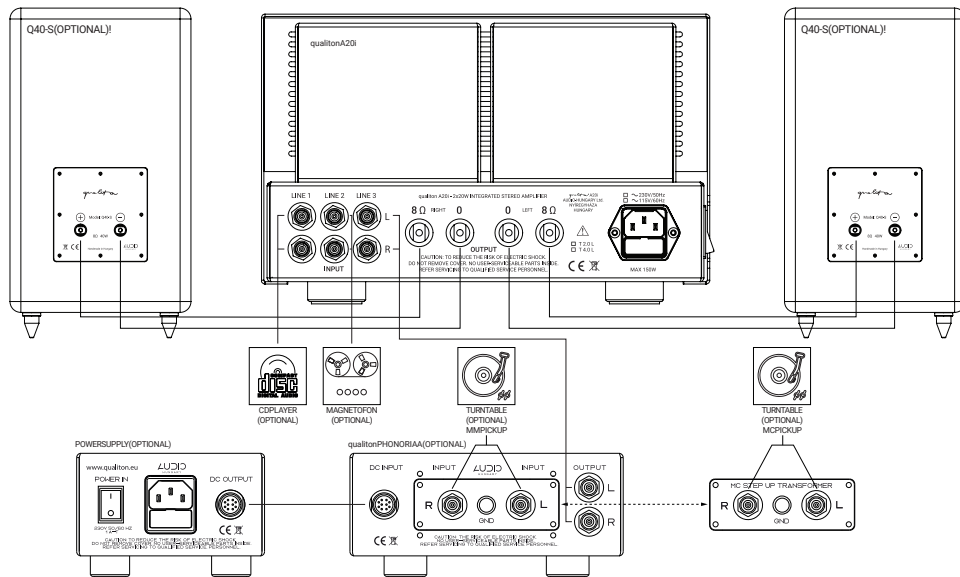
According to the nominal impedance of the speakers used, the amplifier outputs are speaker terminals marked 0  $\Omega$  and 8  $\Omega$ .

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 terminals.

## CONNECTION DIAGRAM



## **OPERATION - SAFETY RECOMMENDATIONS**

**CAUTION!** Improper installation may cause malfunction!

Before powering up your amplifier, make sure protective 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 protective cover must not be opened or removed!

In case of emergency, unplug your amplifier immediately!

In case of faulty operation, contact your local dealer!

Improper repair may lead to 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!

If you do not use your amplifier for a long time, unplug the appliance carefully!

## OPERATION - SAFETY RECOMMENDATIONS

Do not block the openings of your amplifier since this may lead to fire!

The IEC power inlet features a built-in fuse holder. The specification of replacement fuses are: T 2.0 L for 230 V AC mains and T 4.0 L for 115 V AC mains.

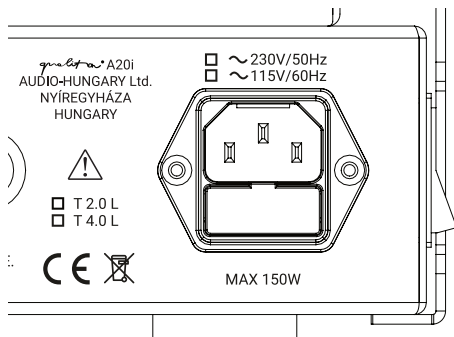
Be careful with appliance cables! Do not lead them across sharp surfaces, do not clam them together and do not leave them in a hanging position!

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 switched off!

Never touch the appliance or its mains cable with wet hands!

Clean the appliance with a dry cloth while it is unplugged!



## STATUS INDICATION

The status indicator LED is placed at the front panel, under the volume control. This LED can indicate the followings:

- No illumination: the appliance is off.
- Turning from red into white coloured light: anode voltage present.
- Continuous red light: appliance is muted.
- Vibrating white light: radio communication (receiving signals).
- Vibrating red light: radio communication while the amplifier is muted.

## REMOTE CONTROL STATUS INDICATION

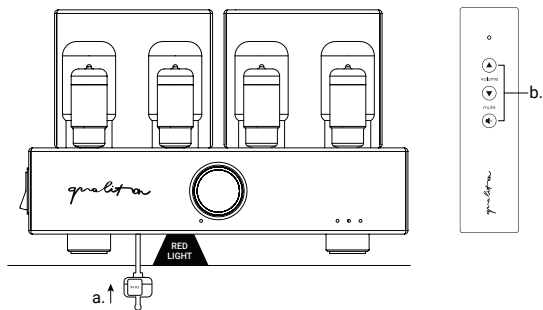
During volume control, communication indicator LED illuminates white.

After pushing the button "MUTE", communication indicator LED illuminates red.



## INSTALLING A NEW REMOTE CONTROL

(FOR YOUR EXISTING Qualiton A20i)



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.

## **TROUBLESHOOTING**

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

- 1.a** Make sure the amplifier is plugged in!
- 1.b** Be sure the main switch 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 home!
- 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 'Operation - Safety Recommendations'!

- 1.f** If the preceding points are all checked and the amplifier still does not power up (incl. the status indicator), please contact your local dealer!

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

- 2.a** Should the indicator illumination not turn into white after 120 seconds, please contact your local dealer.

## **TROUBLESHOOTING**

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

- 3.a** Check the operation of the amplifier according to Malfunction 1 and 2!
- 3.b** Be sure that a audio source is connected to the input 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 output terminals!

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

**3.g** If the preceding points are all checked and the fault persists, please contact your local dealer!

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

- 4.a** Check the operation of the amplifier according to Malfunction 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 your local dealer!

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

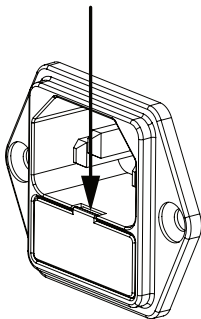
- 5.a** Check the operation of the amplifier according to Malfunction 1, 2 and 3! Should the fault persist, please contact your local dealer!

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

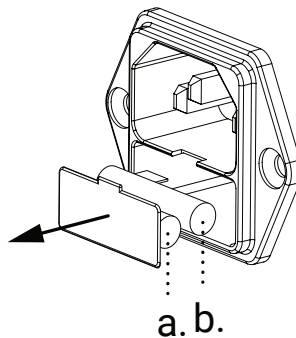
- 6.a** Due to the inner circuitry of the amplifier, this is a normal phenomenon. For further information check section 'INSTALLATION'.

## 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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