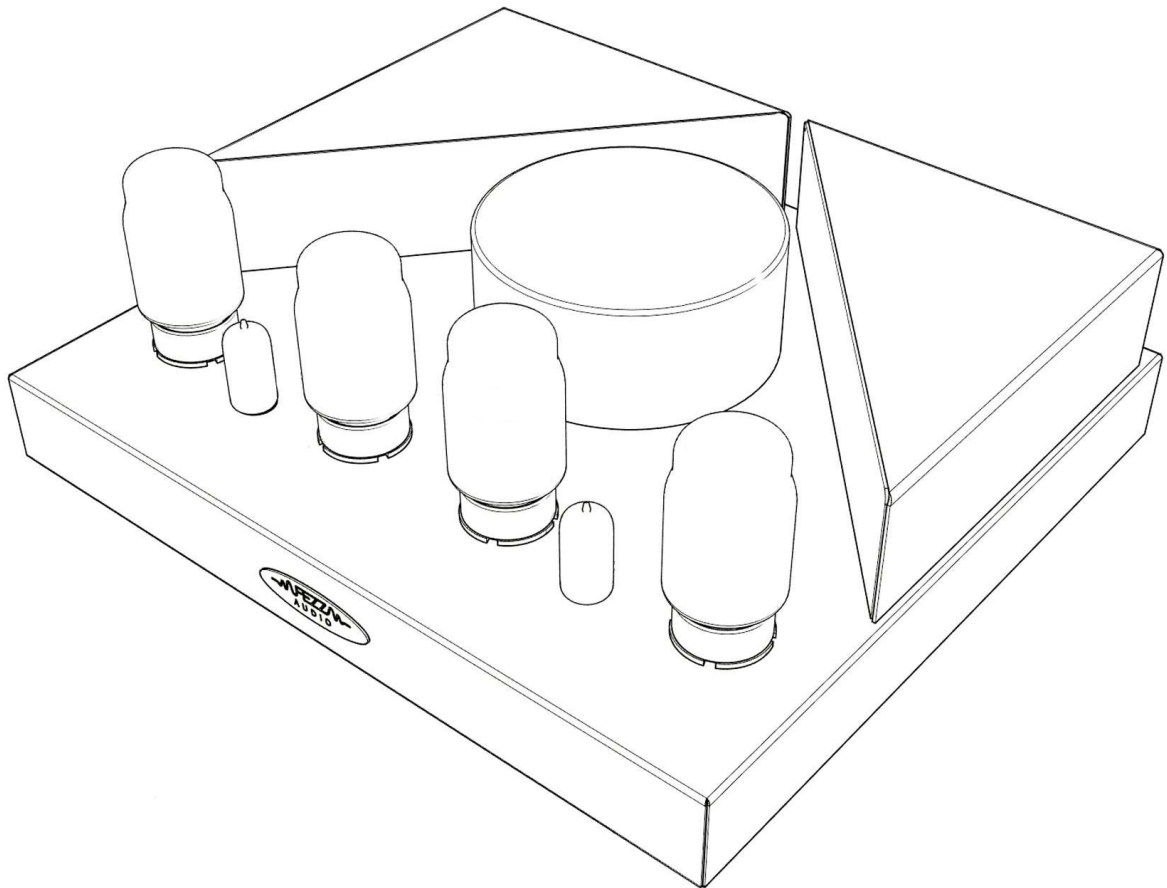


**FEZZA**  
AUDIO



*Titania Power Amplifier*

**USER'S MANUAL**

## SAFETY TIPS

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- Never place the Fezz Audio Titania power amplifier near heat sources, such as radiators, heaters or direct sunlight. Ensure adequate ventilation and airflow
- We also warn against exposure of the power amplifier to conditions such as very low temperatures and/or high humidity.
- During normal operation, the vacuum tubes radiate significant amounts of heat - there is a risk of burns.
- The power amplifier should be plugged directly into a wall socket. If you must use an extension cord, please make sure that it has load parameters sufficient to ensure proper handling of current delivery to the device.
- When cleaning, always disconnect the Titania power amplifier from the power source. Use a dry, soft cloth. Do not use water or cleaning agents.
- If your power amplifier starts to misbehave or to work incorrectly, if it's temperature gets too high or you start feeling smoke - immediately disconnect the device from the mains.
- Due to the risk of exposure to high voltages – please do not open the lid of the power amplifier. ATTENTION: This warning remains in force also in a situation where the device is already disconnected from the wall outlet.
- Always replace fuses in accordance with the original, intended specification.
- Do not make repairs on your own, or adjustments beyond those as described in this manual. Execution of any unauthorized repairs or modifications of the device result in a loss of warranty.

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## INTRODUCTION

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Thank you for your trust and for choosing the Fezz Audio Titania power amplifier.

At times when the audio world becomes increasingly digital, Fezz Audio does not forget about analog lovers. Titania power amplifier is the Polish, series produced vacuum tube power amplifier, which is designed for all music listeners. The Fezz brand is a team of people who are fascinated since multiple years with the world of sound in its pure, analog form, a team which adapts proven technologies so as to meet the expectations of a contemporary audience.

We invite you to familiarize yourself with a clear sound, characterized by excellent separation, imaging and dynamics. Let the wide sound scene take on a new, multiple depths dimension.

### VACUUM TUBE POWER AMPLIFIER

Many of us, when looking upon audio amplifiers of decades ago, keep repeating a slogan, like a mantra: "Such things are not manufactured anymore". When we finally manage to acquire such an amplifier, we treat it in a very unique way. We look for the best possible location to present it, we adore the moment that we switch it on and we shall certainly not fail to mention in passing about this new "treasure" of ours to any of our visiting guests. Whatever we do is all underlined by a great feeling of fondness to those times long past. Why is this happening? The most likely reason is that it is a vacuum tube amplifier. An amplifier with a specific warmth to its sound, with a natural ambience, timber. We also do know that the 'Big Names' have created their memorable music albums using vacuum tubes. When one explores this topic in depth, it turns out that many a prominent musician, till this present day, plays back music and creates music using solely analog amplifiers, and they justify their decision with just a few words: "The vacuum tube simply sounds better, it has a soul and an ambience".

Once that we purchase such an amplifier, set it up, hook it up, a kind of hesitance kicks in ... "Gee, this equipment is 40 years old". Will it continue to be reliable? We are aware that there is contemporary production of vacuum tube amplifiers out there, but these amplifiers are very expensive. Thus, in practice, they are exclusively destined for the audiophile circles.

And it is at this very point where the unique offering of Fezz Audio comes into play. A unique vacuum tube sound, made available at a price point similar to a new, "transistor" based device as sourced from a market.

## INSTALLATION OF THE DEVICE \_\_\_\_\_

### UNPACKING

Please kindly check if the packaging of the Titania power amplifier has not been damaged during transit. If you find any damages, please immediately contact your dealer. Remove the power amplifier and accessories from the packaging. Make sure that the content is not damaged.



Please do not dispose the original packaging, so as to facilitate possible shipment of the device in the future.

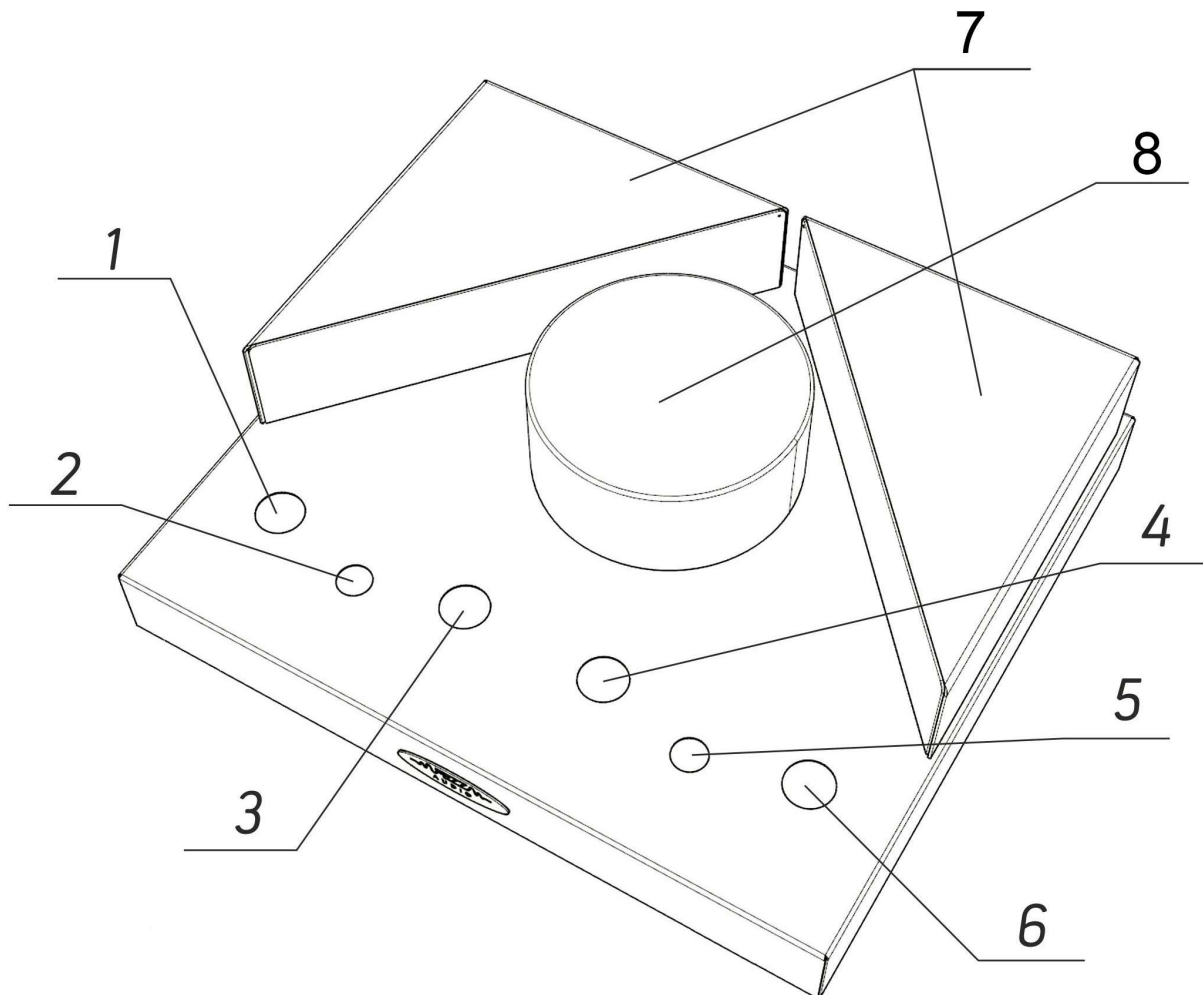
### CONTENTS OF THE PACKAGE

The package should contain:

- Fezz Audio Titania vacuum tube power amplifier
- vacuum tube of type KT88 Electro Harmonix - 4 pcs.
- vacuum tube of type 12AX7 Electro Harmonix - 2 pcs.
- power cord
- 2x terminal jumper
- user's manual
- cotton gloves
- optional: vacuum tube protective cage

**If any of the above items are missing in Your package, contact your dealer immediately.**

## DESCRIPTION OF ELEMENTS OF THE POWER AMPLIFIER



1,3) EL34 power tubes socket for a left channel

2) 12AX7 driver tube socket for a left channel

4,6) EL34 power tubes socket for a right channel

5) 12AX7 driver tube socket for a right channel

7) housing for the output transformers

8) housing for the power supply transformer

## **INSTALLATION OF THE VACUUM TUBES**

Place the Titania power amplifier on a stable surface. Carefully remove the vacuum tubes from their packaging and install them in the appropriate sockets, as show below, and adhering to the numbering scheme as identified on the packaging. Please pay attention to the diameter of the socket and to the appropriate orientation of the vacuum tube pins.

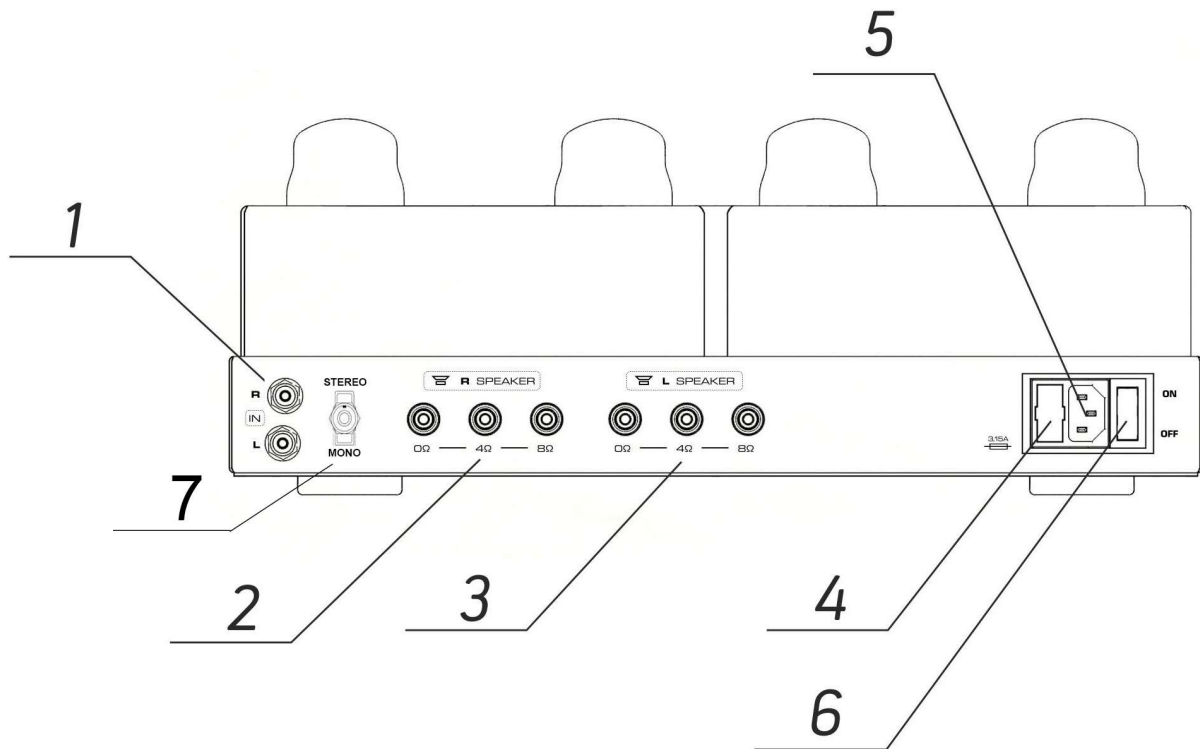
The pins in the base of each of the vacuum tubes are “coded”, and this has the result that the insertion of the vacuum tube into the socket is possible only in one correct and appropriate orientation. If, whilst inserting the vacuum tube you sense resistance, and you can not push the tube into the socket, please check the orientation of its pins, rotate the tube to the correct position and try again.

## **WHERE TO PLACE YOUR POWER AMPLIFIER**

Due to the presence of high temperatures during normal operation of the vacuum tubes, the location that you pick to place your amplifier should ensure ample ventilation, a free flow of air. Please maintain at least 10 cm clearance between the housing of the amplifier, together with the vacuum tubes, and other devices or elements of the interior. The sound quality may be degraded as a result of vibrations. Therefore we recommended to place the amplifier on a flat and stable surface.

## INTERCONNECTIONS

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- 1) signal input
- 2) speakers outputs for the right channel
- 3) speakers outputs for the left channel
- 4) socket for the main fuse
- 5) IEC power supply cord socket
- 6) mains switch
- 7) Stereo / Mono mode switch

The figure above shows the rear panel view of the Fezz Audio Titania power amplifier, together with a description of the inputs and outputs allowing for connection of the other elements of your audio system.



Follow the instructions below to connect Your sound system correctly.

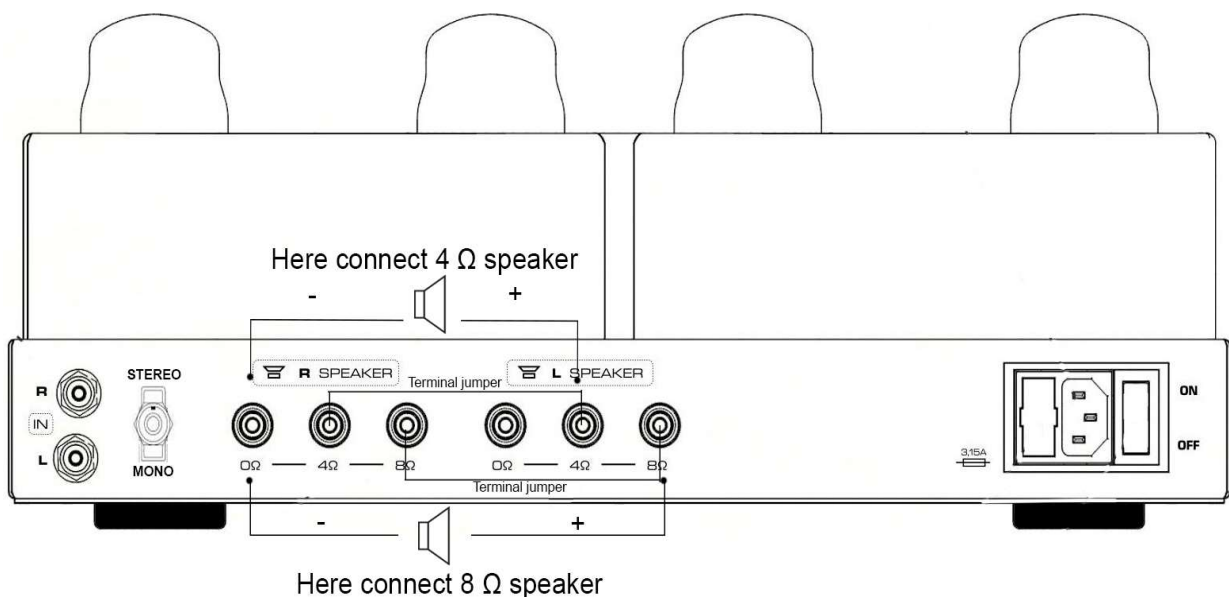
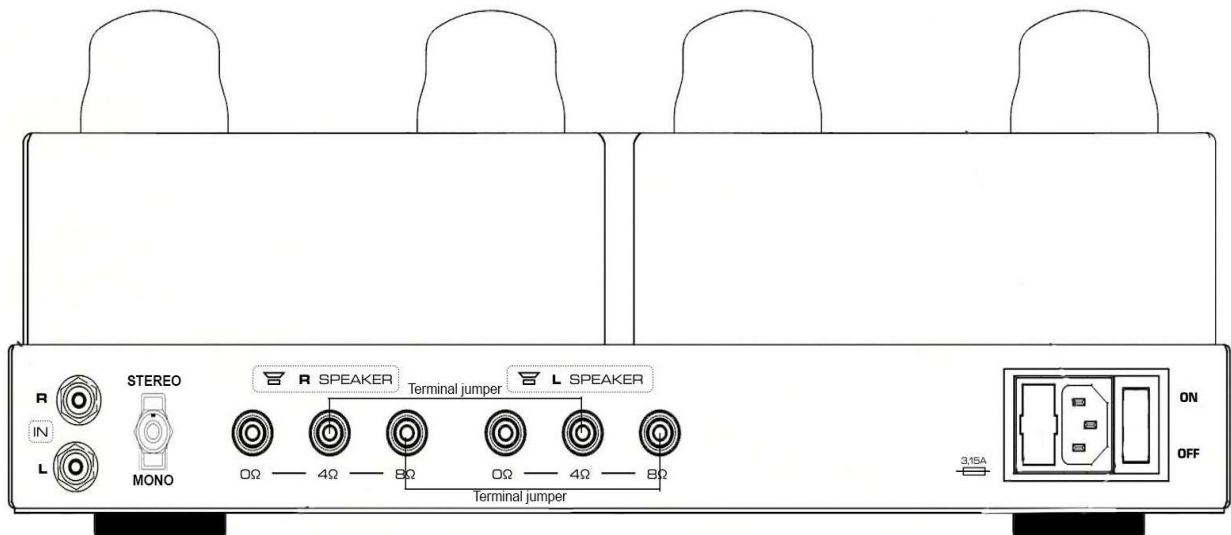
## STEP 1 / HOOK-UP OF THE SPEAKERS

### Stereo mode:

Check the impedance of the speaker set that you own. Connect the speaker cable to the appropriate terminals on the rear panel of the amplifier. Depending on the impedance of the speakers that you own, connect it to the terminal marked either 4  $\Omega$  or 8  $\Omega$ . If your speaker impedance is 6  $\Omega$  - connect the speaker wire to the terminal 8  $\Omega$ .

### Mono mode:

Bridge mono mode combines two amp channels into one mono, it gives much more powerful amplifier channel. Be sure your power amplifier is turned off. Set the MONO MODE switch to the "MONO" position and connect the speaker terminal using **terminal jumper** to the terminals marked 'L+' 4  $\Omega$  and 'R+' 4  $\Omega$  and second **terminal jumper** 'L+' 8  $\Omega$  and 'R+' 8  $\Omega$  ensuring that the 'L+' is connected to the '+' terminal on your loudspeaker and the 'R+' is connected to the loudspeaker's '-' terminal. See picture below.





## **ALWAYS DISCONNECT THE TERMINAL JUMPERS WHEN THE POWER AMPLIFIER IS SET IN STEREO MODE**

### **STEP 2 / HOOK-UP OF THE SIGNAL SOURCE**

Connect the preamplifier output to the signal source in the Titania power amplifier input (IN) In order to achieve the highest sound quality, use only high-quality RCA cables. Pay attention to the proper connection and distinction of the right (R) and the left (L) channels. For the best sound quality, we suggest using the Fezz FAC 01 interconnect cable dedicated for Fezz Audio vacuum tube amplifiers.

### **STEP 3 / HOOK-UP OF THE POWER SUPPLY CORD**

Make sure that the power amplifier is switched off. Connect the power cord to the IEC socket on the rear panel of the power amplifier.

The power amplifier is designed to operate at a rated voltage of 230V / 50Hz. Connecting the device to a mains network with incorrect parameters can lead to damage that is not covered by manufacturers warranty.

### **FIRST POWER-UP AND GETTING STARTED**

Make sure that all of your wiring is connected in accordance with the information as provided above on page 9 of this manual.

Turn on the mains power of the Titania power amplifier – the vacuum tubes shall begin to glow. Make sure that the sound source is turned on, playing, and then gradually increase the volume level in your preamplifier.

### **"BURNING-IN" THE POWER AMPLIFIER**

Any tube amplifier/power amplifier requires an initial pre-heating (or "burn-in") period, in order so that it achieves its full sonic potential. This is due to the presence of residual polarization of dielectric elements and due to a necessary stabilization of working parameters of the vacuum tubes. The stabilization of the electrical parameters of the system occurs in a natural process whilst playing music through your audio system.

A preliminary degree of pre-heating of the amplifier is reached after about 10 hours of quiet music playback.

The full sonic capabilities shall stabilize and unfold within a time-span ranging from 40 to 60 hours of music reproduction at a moderate volume levels. In the initial period of operation of the amplifier it is advisable to avoid short-term operation periods of the amplifier. Once activated, it should remain operational for a period of about 4-6 hours.

## REPLACEMENT OF THE VACUUM TUBES

Your amplifier is equipped with automatic bias module. It's necessary to use vacuum tubes that have previously been pre-selected and paired up in quads or pairs.

## OPTIONAL EQUIPMENT

### VACUUM TUBE PROTECTIVE CAGE

The following picture show the correct positioning of the optional protective cage for the tubes.

## TROUBLE-SHOOTING GUIDE

If your amplifier does not work as it is supposed to, it is fairly easy to diagnose and remedy some of the common malfunctions, by following procedures as outlined in this following.

THE PROBLEM	PROBABLE REASON	THE SOLUTION
After turning the power switch to the ON position, the amplifier does not switch on.	A blown fuse	Please exchange to faulty fuse to a new one (3,15A T), within the fuse holder as depicted with index 4 on page 8 of this user's manual.
	An improper connection of the mains cable	Please check if the plugs of the mains cable are properly inserted into the electrical mains socket and to the socket as depicted with index 5 on page 8 of this user's manual.
The sound produced by the amplifier is distorted. A hum or pops have appeared and are coming from one of the channels.	An improper placement of the vacuum tubes in the sockets	Switch off the amplifier. Wait until the vacuum tubes cool down. Check for proper placement of vacuum tubes in their sockets. If necessary – correct their orientation.
	One of the driver tubes (12ax7) has lost its nominal working parameters	Switch off the amplifier. Wait until the vacuum tubes cool down. Exchange the positions of the driver tubes between channels. Turn on the amplifier. If the disturbing sounds have moved to the other channel, inform Your local Fezz Audio dealer about tube which need to be replaced.
	One of the Power tubes (KT88) has lost its nominal working parameters	Switch off the amplifier. Wait until the vacuum tubes cool down. Exchange the positions of the power tubes between channels. Turn on the amplifier. If the disturbing sounds have moved to the other channel, inform Your local Fezz Audio dealer about tube which need to be replaced..

If You have verified the aforementioned situations, and your problem still persists, please contact Your local Fezz Audio dealer.

## TECHNICAL DATA

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Type:	Stereo/Mono power amplifier
Model:	Titania power amplifier
Output power:	2x45W (stereo) / 1x90W (mono)
Circuit architecture:	push-pull, AB1 class
Output impedance:	4Ω/8Ω
Inputs :	1xRCA
Harmonic distortion THD:	<0,2%
Frequency response:	18Hz-103kHz (-3dB)
Power consumption:	225W
AC fuse:	3,15T
Net Weight:	17,5kg
Dimensions (width x depth x height):	420x410x175mm
Tubes:	4x KT88 / 2x 12AX7



## Declaration of Conformity

Manufacturer: **Toroidy.pl Transformatory L. Lachowski Sp.k.** (owner of Fezz Audio brand)

Address: **ul. Mazowiecka 20**  
**16-001 Książyno**  
**POLAND**

I declare that the product:

Brand: **Fezz Audio**

Model: **Titania Power amplifier**

complies with the following European Union Council Directives and Standards relating to electromagnetic compatibility (**EMC Directive 2014/30/EU**) and the low voltage Directive (**2014/35/EU**).

This declaration of conformity is the result of an examination carried out in accordance with European Standards for **EN 60065:2002+A2:2010+A12:2011+A11:2008** for low voltage, as laid down in article 10 of the EMC Directive.



Książyno 17.08.2020

Lech Lachowski