

*Mira Ceti*

USER'S MANUAL

## SAFETY TIPS

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- Never place the Fezz Audio Mira Ceti amplifier near heat sources, such as radiators, heaters or direct sunlight. Ensure adequate ventilation and airflow
- We also warn against exposure of the 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 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 Mira Ceti from the power source. Use a dry, soft cloth. Do not use water or cleaning agents.
- If your 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 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.

## TABLE OF CONTENTS

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|   |           |
|---|-----------|
| <b>SAFETY TIPS</b>                        | <b>2</b>  |
| <b>INTRODUCTION</b>                       | <b>4</b>  |
| Vacuum tube amplifier                     | 4         |
| <b>INSTALLATION OF THE DEVICE</b>         | <b>5</b>  |
| Unpacking                                 | 5         |
| Contents of the package                   | 5         |
| Description of elements of the amplifier  | 6         |
| Installation of the vacuum tubes          | 7         |
| Where to place Your amplifier             | 7         |
| <b>INTERCONNECTIONS</b>                   | <b>8</b>  |
| Hook-up of the speakers                   | 9         |
| Hook-up of the signal sources             | 9         |
| Hook-up of the supply cord                | 9         |
| <b>FIRST POWER-UP AND GETTING STARTED</b> | <b>9</b>  |
| „Burning-in” the amplifier                | 10        |
| Replacement of the vacuum tubes           | 10        |
| <b>OPTIONAL EQUIPMENT</b>                 | <b>11</b> |
| HT (pre-in) input                         | 11        |
| Remote control                            | 11        |
| Bluetooth module                          | 11        |
| <b>TROUBLE-SHOOTING GUIDE</b>             | <b>12</b> |
| <b>TECHNICAL DATA</b>                     | <b>12</b> |
| <b>DECLARATION OF CE CONFORMITY</b>       | <b>13</b> |

## INTRODUCTION

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Thank you for Your trust and for choosing the Fezz Audio Mira Ceti amplifier.

Mira Ceti – the world's only single-ended tube amplifier, the construction of which is based on toroidal speakers output transformers. Mira Ceti is characterized by an outstanding, full saturated midtone, by Dynamics and a solid bass. Tonal character is covered with a sensual tube mist which provides excellent reproduction of blues, jazz and classical music.

### VACUUM TUBE 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

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### UNPACKING

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



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

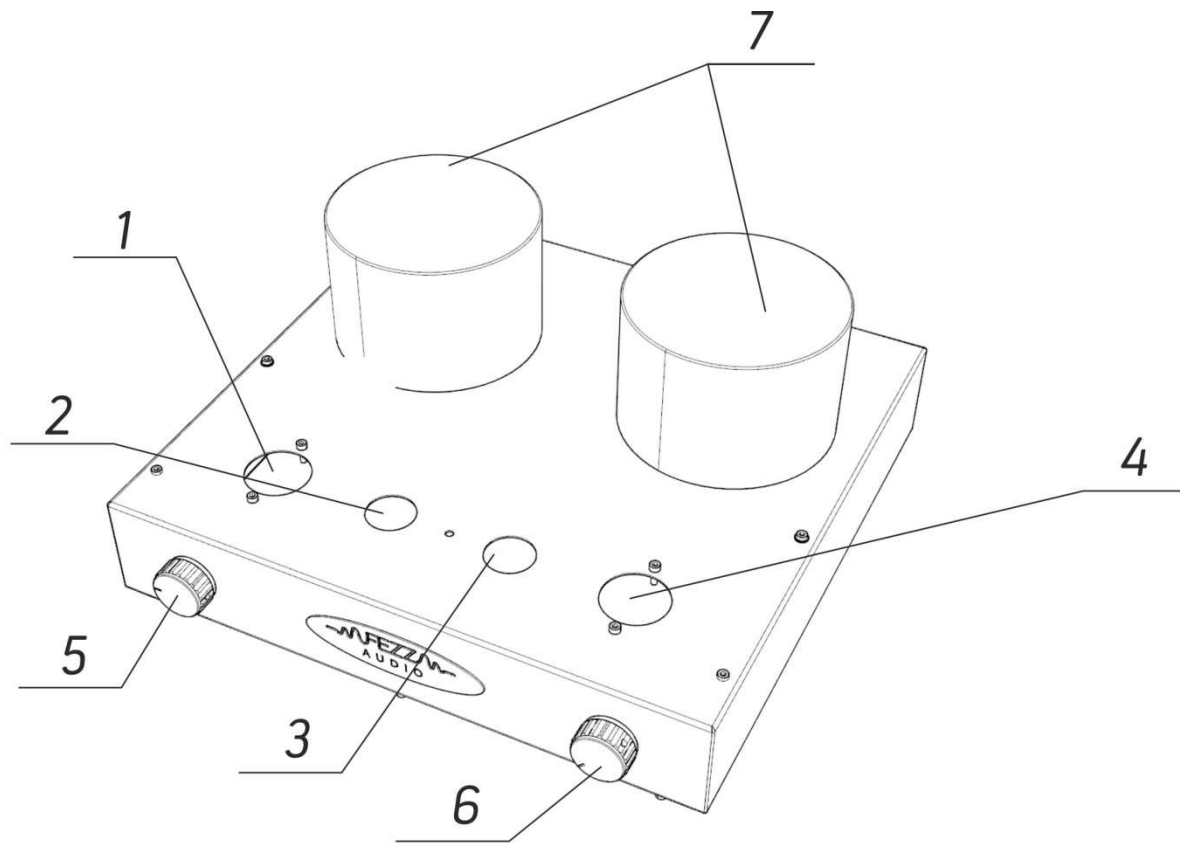
### CONTENTS OF THE PACKAGE

The package should contain:

- Fezz Audio Mira Ceti vacuum tube amplifier
- vacuum tube of type 300b EHG (gold) by Electro Harmonix -2 pcs.
- vacuum tube of type 6sn7 by Electro Harmonix -2 pcs.
- power cord
- user's manual
- cotton gloves
- optional: remote control, vacuum tube protective cage

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

## DISCRIPTION OF ELEMENTS OF THE AMPLIFIER



1,4) 300b tubes sockets

2,3) 6sn7 tube sockets

5) volume level potentiometer

6) input source selector

7) housings for the output transformers

## **INSTALLATION OF THE VACUUM TUBES**

Place the Mira Ceti amplifier on a stable surface. Carefully remove the vacuum tubes from their packaging and install them in the appropriate sockets, according to the stickers on tube boxes starts from a left side.

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.



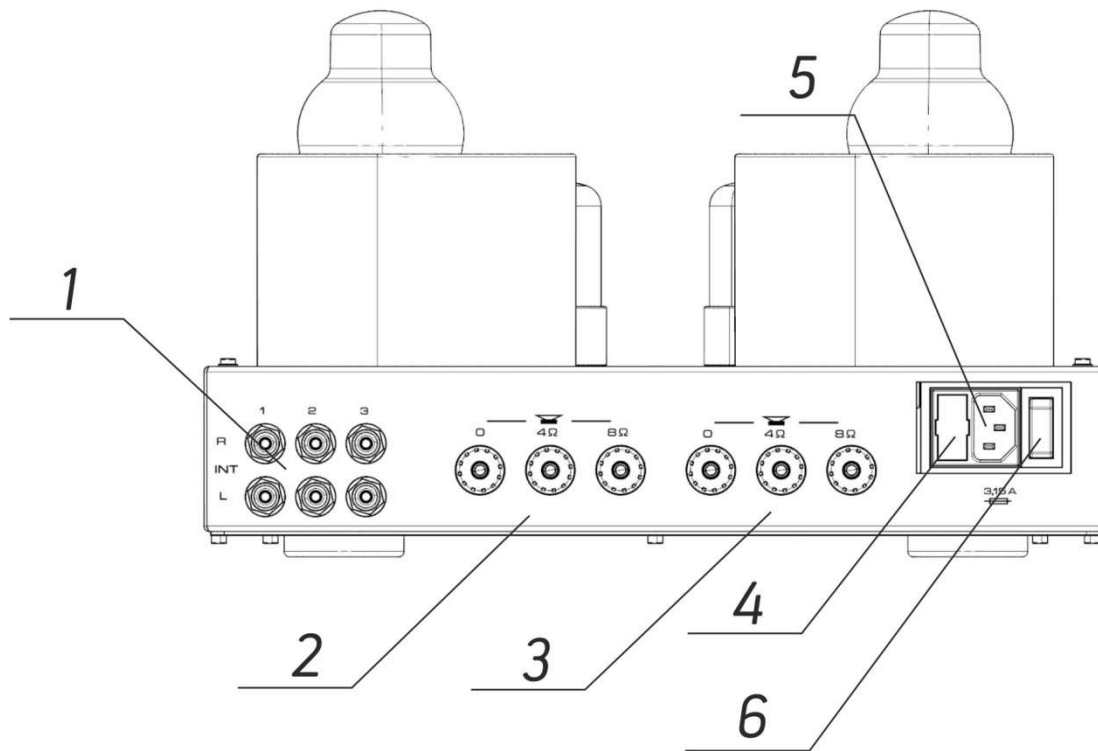
## **WHERE TO PLACE YOUR AMPLIFIER**

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) source signal inputs
- 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

The figure above shows the rear panel view of the Fezz Audio Mira Ceti 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**

Check the impedance of the speaker set that you possess. Connect the speaker cable to the appropriate terminals on the rear panel of the amplifier. Depending on the impedance of the speakers that you possess, 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  $\Omega$ .

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

Connect the signal source to the amplifier inputs IN1, IN2 or IN3. Select the source of input signal by rotating the input selector located on the front panel of the amplifier. 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 amplifier is switched off. Connect the power cord to the IEC socket on the rear panel of the amplifier.

The amplifier is designed to operate at a rated voltage of 110V / 50/60Hz. Connecting the device to a mains network with incorrect parameters can lead to damage that is not covered by manufacturer's warranty.

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

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

Select the source of signal using the rotary selector switch located on the front panel. Set the volume control to minimum. Turn on the mains power of the Mira Ceti 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 by turning the potentiometer.

The operation of the amplifier narrows down to adjusting the volume via VOLUME potentiometer and selecting an audio signal source via rotation of the SOURCE switch.

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

Any tube 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.

## OPTIONAL EQUIPMENT

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### HT (pre-in) input

The additional HT (Pre-in) signal input makes it possible to use this amplifier as a stereo power amplifier. In order to make this possible, it is necessary that you have a separate preamplifier with its own volume control, or a receiver with 'Pre-out' output.



### REMOTE CONTROL

The remote control enables remote adjustment of the volume level.



### BLUETOOTH MODULE

1. Select the source of input signal to "3"
2. Turn the Bluetooth mode ON (on your device) and scan for Bluetooth devices. You will see "Fezz Audio" on the device list. Select, connect and pair both devices.
3. To pair the amplifier with another Bluetooth signal source, please follow the instructions below:
  - Turn the Bluetooth mode OFF on the previously used device
  - Turn the Mira Ceti amplifier OFF for approx. one minute
  - Turn the Mira Ceti amplifier ON
  - Turn the Bluetooth mode ON (on your device) and scan for Bluetooth devices. You will see "Fezz Audio" on the device list. Select, connect and pair both devices.

## TROUBLE-SHOOTING GUIDE

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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 (8,0A 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 (6sn7) 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 (300b) 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 power amplifier |
| Model:                               | Mira Ceti              |
| Output power:                        | 2x8W                   |
| Circuit architecture:                | single-ended , class A |
| Output impedance:                    | 4Ω/8Ω                  |
| Inputs :                             | 3xRCA                  |
| Harmonic distortion THD:             | <0,4%                  |
| Frequency response:                  | 20Hz-45kHz (-3dB)      |
| Power consumption:                   | 115W                   |
| AC fuse:                             | 8,0A T                 |
| Net Weight:                          | 14kg                   |
| Dimensions (width x depth x height): | 340x360x215mm          |
| Tubes:                               | 2x 300b, 2x 6sn7       |



## 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 Vacuum tube amplifier**

Model: **Mira Ceti**

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 17.05.2017

Lech Lachowski