

*fezz*  
MADE OF MUSIC.



USER`S MANUAL  
MIRA CETI MK2

[WWW.FEZZAUDIO.COM](http://WWW.FEZZAUDIO.COM)

## TABLE OF CONTENTS

- 1 Technical data — 2
- 2 Safety tips — 3
- 3 Introduction — 3
- 4 Installation of the device — 3
  - Unpacking — 3
  - Content of package — 3
  - Vacuum tubes installation — 4
  - Where to place the amplifier — 4
  - Description of the amplifier — 4
- 5 Interconnections — 5
  - Speaker connections — 5
  - Source connections — 5
  - Power cord connections — 6
- 6 First power-up and getting started — 6
  - Buring-in process — 6
  - Vacuum tubes replacement — 6
- 7 Power tubes protection circuit — 6
- 8 Extension boards — 6
  - Extension board installation — 6
- 9 Remote control — 7
- 10 Trouble-shooting guide - 7

## 1 TECHNICAL DATA

---

Type: Stereo vacuum tube integrated amplifier

---

Model: Mira Ceti MK2

---

Nominal output power: 2x8 W

---

Circuit type: Single Ended, class A

---

Output impedance: 4  $\Omega$  / 8  $\Omega$

---

Inputs: 3x RCA + 1x RCA (direct)

---

THD (1 kHz at full power): <3%

---

Signal bandwitch (-3 dB): 12 Hz - 48 kHz

---

Damping factor: >10

Input impedance: 50 k  $\Omega$

Power consumption: 150 W

---

S/N ratio: 78 dB

Equipment card slot extension: 2

Sensitivity: 0,6 V

Vacuum tubes: 2x 300B + 3x 6SN7

Options included: sub-out, IR remote, tube cage

---


Weight: 20,5 kg

---

Dimensions: 420x380x226 mm

---

## 2 SAFETY TIPS

 In order to obtain the highest possible sound reproduction quality and for your own safety, please kindly refer to the following.

- Never turn on the amplifier without installed tubes and without hooked-up speakers.
  - Never place the Fezz Audio Mira Ceti MK2 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 amplifier 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.

## 3 INTRODUCTION

Mira Ceti MK2 is a renewed take on our classic Single Ended amplifier built around the legendary 300B triodes and custom toroidal output transformers. The redesigned circuit, upgraded signal path and refined component selection elevate the amplifier's clarity, coherence and emotional impact. Despite its modest output power, Mira Ceti MK2 delivers a remarkably vivid and intimate presentation. Its sound blooms with a rich, textured midrange, a smooth and delicate top end and a surprisingly confident bass foundation for a SE design. It shines with vocal, acoustic, classical and jazz recordings, music that rewards tonal beauty and natural expression. The new model incorporates an advanced electronic tube protection system that replaces traditional fuses and significantly enhances operational safety. It also features a delayed anode voltage activation system, protecting the tubes during startup and extending their lifespan. Automatic bias control continually maintains optimal tube parameters, eliminating the need for manual adjustments. Mira Ceti MK2 blends the timeless charm of directly heated triodes with contemporary engineering. Purity, color, nuance and the kind of musical honesty only a true 300B design can offer.

## 4 INSTALLATION

### UNPACKING


Please kindly check if the packaging of the 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.

 Do not connect the device to the power supply if it has visible signs of damage.

### PACKAGE CONTENT

The package should contain:

- Fezz Mira Ceti MK2 vacuum tube amplifier
- vacuum tube of type 300B - 2 pcs.
- vacuum tube of type 6SN7 - 3 pcs.
- power cord
- user's manual
- cotton gloves

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

## VACUUM TUBES INSTALLATION

Place the 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.

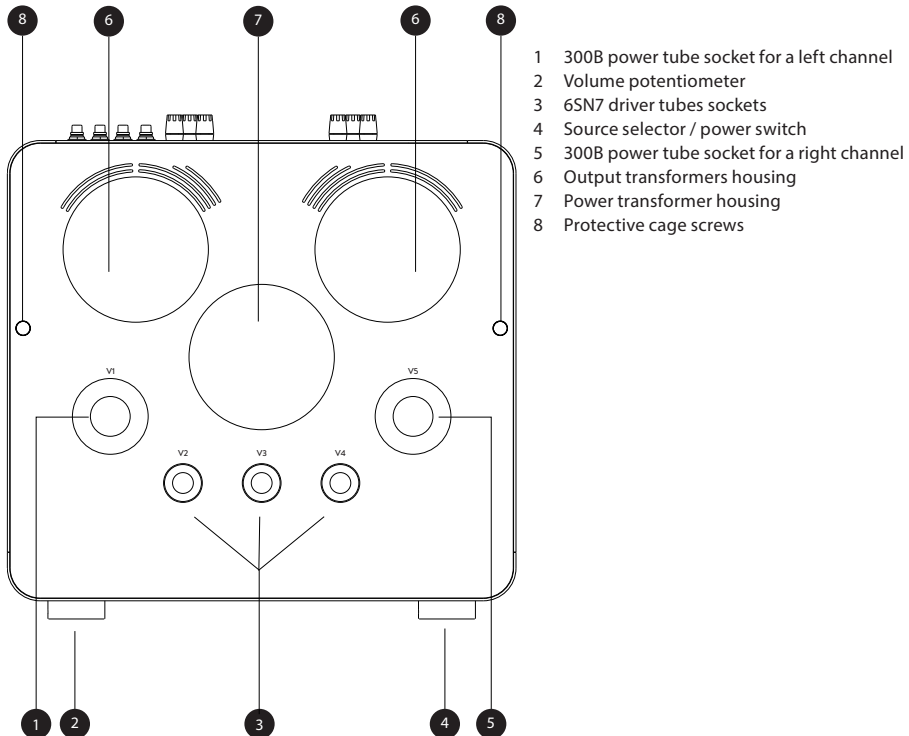
⚠ The pins in the base of each of the vacuum tubes are “coded”, and this has the result that the insertion of the vacuum tube into the socket is possible only in one correct and appropriate orientation. If, whilst inserting the vacuum tube you will sense resistance, and you can not push the tube into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

## WHERE TO PLACE YOUR AMPLIFIER

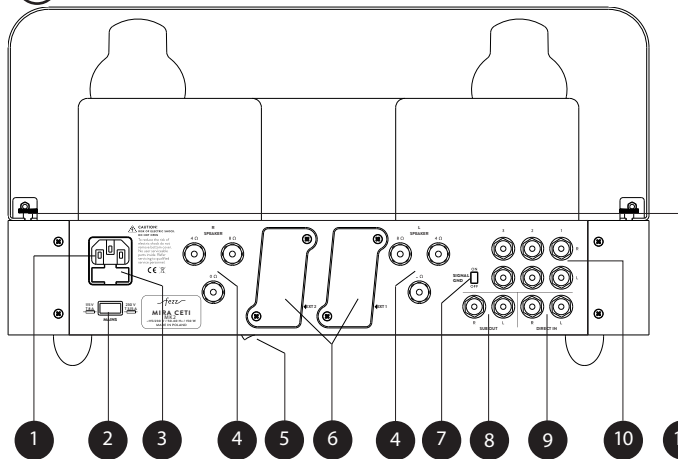
Due to the presence of high temperatures during normal operation of the vacuum tubes, the location that you pick to place your amplifier should ensure ample ventilation, a free flow of air. Please maintain at least 10 cm clearance between the housing of the amplifier, together with the vacuum tubes, 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.

⚠ Never place the amplifier near the source of heat.

## DESCRIPTION OF THE AMPLIFIER



## 5 INTERCONNECTIONS

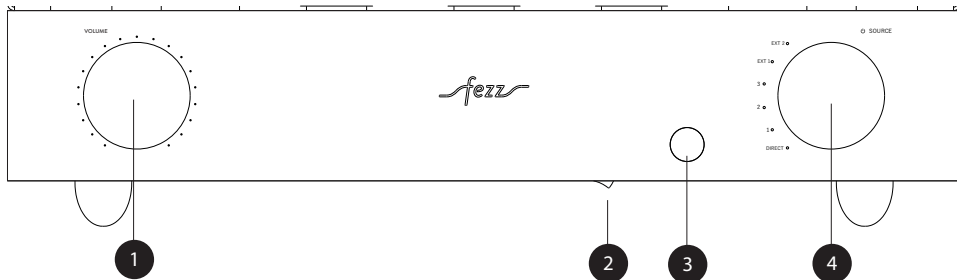


- 1 IEC power supply socket
- 2 Voltage selector
- 3 Main fuse compartment
- 4 Speakers terminals
- 5 Main power switch
- 6 Expansion module card slots
- 7 Signal ground on/off switch
- 8 Subwoofer output
- 9 Direct input
- 10 RCA line signal input
- 11 Protective tube cage mounting screws

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

**!** To avoid electrostatic shock to the components of the amplifier, please touch a grounded conductive surface before making any connections. Any and all connections must be made whilst the device is disconnected from the mains power supply. Before making any such connections, make sure that the amplifier is switched off.

Follow the instructions below to connect your sound system correctly.



- 1 Volume potentiometer
- 2 Mains power switch
- 3 IR remote receiver
- 4 Source selector / power switch

**!** NEVER TURN ON THE AMPLIFIER WITHOUT CONNECTED SPEAKERS

### STEP 1 SPEAKERS CONNECTIONS

Check the impedance of the speakers 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  $\Omega$ .

### STEP 2 POWER CORD CONNECTION

Make sure that the unit 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 rated voltage of ~230 V 50-60 Hz. Switchable to 115 V. Please check parameters of your mains network, if needed switch to right voltage using switch at the back. Connecting the device to a mains network with incorrect parameters can lead to damage that is not covered by manufacturers warranty.

## STEP 3 AUDIO SIGNAL SOURCES CONNECTIONS

Connect the signal source to the amplifier inputs IN1, IN2 or IN3. EXT 1 or 2 when extension board is installed. When power is ON 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.

## 6 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 5 of this manual. Turn on the mains power of the source and amplifier (mains switch is located at the front bottom side (index 2 pg. 5), turn the volume down to minimum, then turn on the Mira Ceti MK2 integrated amplifier by pressing right sided knob. We recommend to turn the amplifier ON last in the „audio chain“.

Mira Ceti MK2 is equipped in a 2-minute pre-heating cycle, which ensure optimal operating conditions and extended tube lifespan. After this time Fezz logo will turn white from red colour. Make sure that the sound source is turned on, playing, and then gradually increase the volume level in your amplifier.

### BURING-IN PROCESS

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 music playback.

The full sonic capabilities shall stabilize and unfold within a time-span ranging from 40 to 60 hours of music reproduction. 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 minimum 1 hour.

### VACUUM TUBES REPLACEMENT

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.

- 1) Disconnect the amplifier from the mains socket, the power supply network. Wait few minutes to cool down the tubes.
- 2) Remove the currently installed tubes from their respective sockets. Plug in the new replacement vacuum tubes in these sockets. Please pay attention to correct installation inside the sockets.

## 7 EXTENSION BOARD

This amplifier is equipped with a two dedicated slots for optional extension boards (sell separately, allowing you to expand its functionality). The following boards are available as additional accessories:

MM Phono – for connecting a turntable with a moving magnet cartridge.

Bluetooth – for wireless music streaming from compatible devices.

DAC – for high-quality playback of digital audio sources.

XLR / RCA - for HQ sources.

By installing an extension board, you can tailor the amplifier to your individual needs and preferred way of listening.

## 8 EXTENSION BOARD INSTALLATION

Switch off the amplifier using the mains switch located at the bottom of the unit. Disconnect the power cable from the mains. Using a screwdriver, unscrew the screws, gently remove the extension board cover (index 6, page 5) on the back of the amplifier. Locate the ribbon cable inside the slot, it is attached to the lid. Connect it to the male socket of the extension board. Insert the extension board into the slot.

Secure the board to the amplifier enclosure with the screws using a screwdriver. Turn on the amplifier.

**WARNING!** Due to the presence of high voltage, disconnect the amplifier from the power supply before

## 9 REMOTE CONTROL

The amplifier is equipped with an IR (infrared) remote control. It allows convenient operation of the basic functions of the device, such as input source selection, volume adjustment, and switching the amplifier to Standby mode.

The remote control should be pointed towards the front panel of the amplifier, in the direction of the IR receiver.

## 10 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	SOLUTION
After turning the power switch to the ON position, the amplifier does not switch on.	A blown mains fuse	Please exchange to faulty fuse to a new one (3,15A T), within the fuse holder as depicted with index 3 on page 5 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 1 on page 5 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 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.



fezz

Manufacturer information:  
Toroidy.pl Transformatory L.Lachowski Sp.k.  
Kolonia Koplany 1E  
16-061 Juchnowiec Kościelny  
owner of Fezz brand  
[www.fezzaudio.com](http://www.fezzaudio.com)  
MADE IN POLAND

- For indoor use only.
- Keep away from water and extreme heat.
- Allow sufficient ventilation to prevent overheating.
- Handle vacuum tubes with care; they become extremely hot during operation.

