



# USER`S MANUAL

# EQUINOX

VACUUM TUBE D/A CONVERTER

EMPOWERED BY LAMPIZATOR

### TABLE OF CONTENTS

- 1 Technical data 2
- 2 Safety tips
- 3 Introduction 3
- 4 Installation 3

Unpacking — 3 Package content — 3

5 Interconnections — 4

Interconnection — 4 Hook up the signal source— 4 Power cord hook up — 4

- 6 Getting started 5
- 7 TROUBLE-SHOOTING GUIDE 5



Type: Vacuum tube D/A converter

Model: Equinox EVO D/A converter empowered by Lampizator

Tube type: ECC82/12AU7

Inputs: USB type B, 2x S/PDIF, Coaxial

Outputs: 2x RCA

Opamp: Burr Brown PCM 1794

S/PDIF Receiver: AKM4118

PCM sampling rates: 32 kHz to 192 kHz, 16 to 24 bit, USB connection: up to 384 kHz and 32 bit

USB compatibillity: Windows 7, 8, 8.1, 10, 11, Mac OS X 10.6 or later, Android 12 or later.

Oversampling: no

Harmonic distortions THD: < 0,05%

Power consumption: 10W

Net weight: 9 kg, Dimensions: 355x380x100mm

# 2 SAFETY TIPS



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

- Never place the unit near heat sources, such as radiators, heaters or direct sunlight. Ensure adequate ventilation and airflow

- We also warn against exposure of the DAC to conditions such as very low temperatures and/or high humidity.

- The unit 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 unit from the power source. Use a dry, soft cloth. Do not use water or cleaning agents. - If your unit 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 unit. 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

Equinox is the world's only Lampizator licensed vacuum tube D/A converter designed by Łukasz Fikus. It is also the cheapest on a market D/A converter with the Lampizator logo. The unit is based on PCM1794 chipsets and 12au7 vacuum tube. Fezz/ Toroidy engineers designed a dedicated, highest quality Supreme class toroidal power transformer for Equinox's power supply. Device is equipped with 2 Toslink, 1 coaxial and 1 USB digital signal inputs. Thanks to the easily accessible tube, located under the sliding glass on the top panel, units offers the opportunity to create and adjust sound tone according to your own preferences by replacing the tube without any hustle.



### UNPACKING

Please kindly check if the packaging of the Equinox D/A converter has not been damaged during transit. If you find any damages, please immediately contact your dealer. Remove the device 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 on it. Please do not dispose the original packaging, so as to facilitate possible shipment of the device in the future.

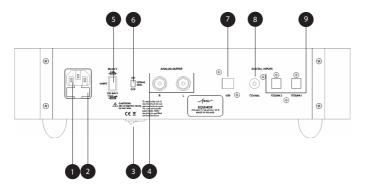
### CONTENTS OF THE PACKAGE

Package contains:

- Equinox D/A converter
- Power cord
- User`s manual

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

### 5 INTERCONNECTIONS



- 1 IEC power socket
- 2 Main fuse
- 3 Power ON/OFF switch
- 4 Analog RCA output
- 5 Voltage selector
- 6 Ground loop switch
- 7 USB input
- 8 Coaxial input
- 9 S/PDIF inputs

The figures above shows the rear panel view of the Fezz Equinox DAC.

To avoid electrostatic shock to the components of the device, 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 system components are switched off.

Follow the instructions below to connect your sound system correctly.

#### STEP 1 INTERCONNECTIONS

Connect the signal sources to the DAC digital inputs (7-9) Select the source of input signal by rotating the input selector located on the front panel of the device. In order to achieve the highest sound quality, use only high-quality signal cables. Pay attention to the proper connection and distinction of the right (R) and the left (L) channels.

Digital input connection:

Connect your digital source to one of the digital inputs:

- Coax (use a good quality 75 Ohm cable with RCA connectors)
- Optical (use a good quality optical Toslink cable)
- USB (use high-quality USB cable of your choice)

Analog output connection:

Connect RCA cables between the stereo analog RCA output connectors from your DAC to the input from your integrated amplifier or preamplifier.

#### STEP 2 / POWER CORD CONNECTION

Make sure that the device is switched off. Connect the power cord to the IEC socket on the rear panel of the device. The Equinox DAC is designed to operate at rated switchable voltage of ~115-120 V or ~230-240 V 50-60Hz. Please check parameters of your mains network, if needed switch to right voltage using switch at the back . Please ensure that you have installed suitable fuse for desired voltage. Connecting the device to a mains network with incorrect parameters can lead to damage that is not covered by manufacturers warranty.

## 6 GETTING STARTED

Make sure all cables are connected as described above. Set the amplifier volume knob to minimum. Power on (fig. 3) the Equinox DAC. Select the signal source using the selector located on the front panel of the device. Make sure the digital source is on and gradually increase the volume with the volume knob at your amplifier. The vacuum tube take about 1 minute to warm up to desirable working conditions.

### ) VACUUM TUBE REPLACEMENT

Power down the equipment and unplug it from the electrical outlet. This step is crucial to prevent electric shock or damage to the device. Vacuum tubes can become very hot during operation. Allow sufficient time for the tubes to cool down before attempting to handle them.

Fezz Equnox DAC is equipped with one 12AU7/ECC82 vacuum tube. You can easily change the tube by gently pushing and moving sideway plexiglass window at the top of the device. You can move it to the left side only. Carefully remove the vacuum tube from its socket. Take the replacement tube and align the pins with the socket. Gently push the tube into the socket, ensuring that each pin goes into its corresponding hole. Carefully double-check all connections to ensure that the new tube is properly seated in the socket, and none of the pins are bent or misaligned. Once you've replaced the tube and confirmed all connections, close the plexiglass window, power up the equipment and check for proper operation. If there are any issues, double-check the tube placement and connections.

### 8 TROUBLE-SHOOTING GUIDE

If your preamplifier 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 device does not switch on.	A blown fuse	Please exchange to faulty fuse to a new one (T500mA for 230-240V / T1A for115V-120V), within the fuse holder as depicted with index 2 on page 4 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 4 of this user's manual.
Sound distortion via USB	Outdated USB Windows driver	For playback via USB, from a connected Windows PC, specific driver software is required. The required driver is available for download: https://www.amanero.com/drivers/setup1068.zip

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