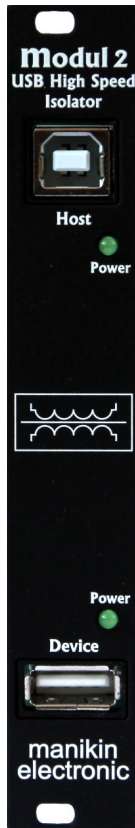# Modul 2
USB High Speed
Isolator

User Manual

Preface

Thank you for purchasing the **modul 2**. The **modul 2** is a highly efficient USB isolator that isolates the data lines and power supply between a USB host and a USB device. This is achieved by using a high-performance USB isolation chip in combination with a DC/DC converter. This design prevents noise such as crackling or dropouts in the audio signal. At the same time, the **modul 2** is completely transparent.

To be able to use the **modul 2** as quickly and effectively as possible, you should take the time to read this manual thoroughly.

The Manikin team hopes you enjoy reading it

Note

Manikin Electronic accepts no responsibility for errors that may occur in this operating manual. The contents of this manual are subject to change without notice. Every care has been taken in the preparation of this manual to avoid errors and inconsistencies. Manikin Electronic makes no warranties for this manual other than those required by commercial law.

No part of this manual may be reproduced without the permission of the manufacturer.

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Inhaltsverzeichnis

1. Introduction

1.1 General safety instructions

Please read the following safety instructions carefully! They contain some basic rules for handling electrical appliances. Please read all the instructions before using the appliance.

1.2 Suitable installation location

- Only operate the appliance in closed rooms.
- Never operate the appliance in damp environments such as bathrooms, laundry rooms or swimming pools.
- Do not operate the device in extremely dusty or dirty environments.
- Ensure an unobstructed air supply on all sides of the appliance. Do not place the appliance in the immediate vicinity of heat sources, such as radiators.
- Do not expose the appliance to direct sunlight.
- Do not expose the appliance to strong vibrations.

1.3 Power connection

The **module 2** is a passive module that does not require a power supply from the Eurorack. It is supplied exclusively from the USB port of the USB 2.0 host.

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1.4 Operation

- When operating the **modul 2**, ensure that it is installed correctly in your Eurorack.
- Make sure that no objects get into the module. If this does happen, switch off the device, pull out the mains plug and then contact a qualified specialist dealer.

1.5 Care

- Do not disassemble the module. Repairs and maintenance may only be carried out by qualified specialist personnel. There are no user-serviceable parts in the module. Disassembling the module will also invalidate your warranty.
- Only use a dry, soft cloth or brush to clean the front panel. Do not use alcohol, solvents or similar chemicals that could damage the surfaces.

Intended use

The modul 2 is intended exclusively for the use of digital audio, MIDI and control signals that are transmitted via USB. Any other use, e.g. in the medical or industrial sector or in combination with USB data storage devices, is not permitted and excludes any warranty claims against Manikin Electronic.

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2. Initial operation

2.1 Scope of delivery

When unpacking, please check that all parts are present. If anything is missing, please contact your Manikin Electronic specialist dealer immediately.

The scope of delivery of the **modul 2** includes:
- the **modul 2**
- a USB A to USB B cable
- this user manual
- 2 mounting screws for mounting the modul 2 in the Eurorack

2.2 Installation in the Eurorack

The **modul 2** has been developed for use in a Eurorack. All cables and screws required for installation and operation are included in the scope of delivery.

How to install the **modul 2** in your Eurorack:

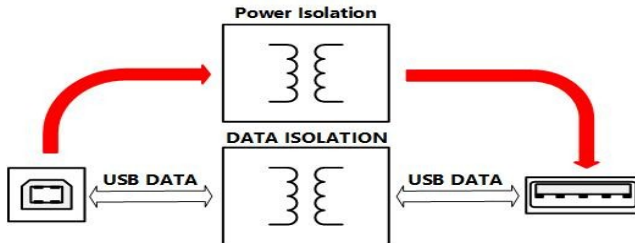**Make sure that your Eurorack is disconnected from the power supply.**

Now install the **modul 2** in your Eurorack at a suitable location using the screws supplied.

Now switch the power supply to your Eurorack back on.

3. Mode of operation

The **modul 2** is a highly efficient USB isolator for isolating a USB host (PC / laptop) and a USB device, e.g. the **modul 1**. Both the data connection and the power supply are galvanically isolated.

The block diagram illustrates the signal flow:

4. Controls & Connectors

1 : USB-B socket (Host)

2 : Host Power Indikator

3 : Device Power Indikator

4 : USB-A socket (Device)
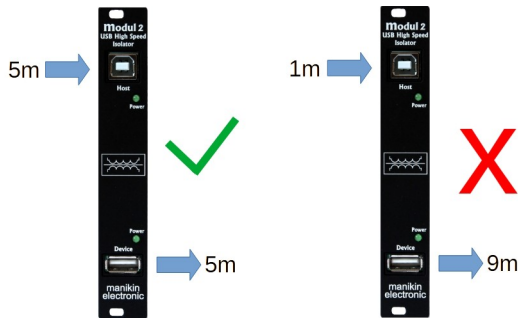
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5. Basic operation

5.1 Establishing all necessary connections

Connect your USB host, e.g. laptop or PC, to the USB host socket (1) of the **modul 2** using a USB A-to-USB-B cable. As soon as this connection is established and the USB host device is switched on, the two power indicator LEDs (2 and 3) signal that the **modul 2** is ready for operation. Now connect your USB device to the USB device socket (4) of the **modul 2**. This establishes the connection between your USB host and device.

The **modul 2** behaves completely transparently and is therefore not displayed as a USB device in the system settings of the USB host!

6. Additional application examples

According to the USB 2 specification, a USB connection cable must not exceed the maximum length of 5m. By processing the USB signal (refresh) in **module 2**, the maximum cable length can be exceeded by using the **module 2**, the maximum cable length can be extended by a further 5m.
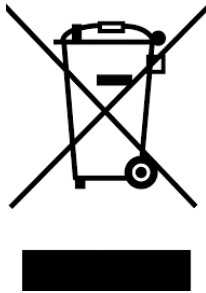
modul 2 User Manual
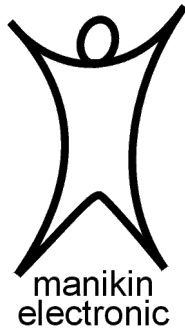
7. Technical Data

Technology	**: USB 2 Isolator**
Inputs	**: 1x USB-B socket**
Outputs	**: 1x USB-A Buchse**
Indicators	**: 2x LED**
Power Supplx	**: USB-Host (5V / 100mA)**
Output Voltage **USB Device Port**	**: 5V / 400mA max.**
Dimensions (W/H/D)	**: 4HP / 3U / 28mm**
weight	**: 60g**

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8. Disposal

Think of our environment - dispose of defective devices at a suitable collection point in accordance with legal regulations. The sticker with the crossed-out dustbin on this product indicates that this product must not be disposed of with normal household waste.

To prevent possible harm to the environment or human health and to ensure that it is recycled in an environmentally sound manner, this product must not be disposed of with household waste. For information on disposal facilities, please contact your local authority or the store where you purchased this product.

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