

OLYMPUS

INSTRUCTIONS

AD-USB-ODB

USB ADAPTOR FOR ODB DEVICE BUS

This instruction manual describes the Olympus USB adaptor for the ODB device bus. To ensure safety, obtain optimum performance and familiarize yourself fully with the use of this product, we recommend that you study this manual thoroughly before operation. Together with this manual, please also read the manuals of the connected devices and the instruction manual of the microscope and the laser in order to understand overall operation methods. Retain this manual in an easily accessible place near a system for future reference.

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Imaging Excellence

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AD-USB-ODB Adaptor

Thank you very much for purchasing Olympus Soft Imaging Solution's USB adaptor for the ODB device bus and for your confidence in our products and service. It is Olympus Soft Imaging Solution's main objective to provide you with solutions able to meet your experimental demands and thus pave the way to your scientific success.

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The USB adaptor for the ODB device bus, AD-USB-ODB; front and back

1 General Remarks

The USB adaptor for the ODB device bus is designed to connect the imaging PC via any of its USB ports with any of the fast microscopy devices by Olympus Soft Imaging Solution: filter wheels, shutters, motorized TIRF illuminator and lasers.

You will find a detailed description of the adaptor and instructions for the connection with the devices on the following pages. Opening the housing is strongly discouraged. Any damages to the system due to such mishandling will not be covered by the warranty.

If you find any information missing in this manual or you need additional support, please contact your local Olympus representative.

2 Handling Instructions and Recommendations

- a** The adaptor AD-USB-ODB is a precision instrument. Handle it with great care and avoid subjecting it to sudden or severe impact.
- b** The adaptor AD-USB-ODB may only be opened by authorized service personnel. Otherwise warranty is lost.
- c** Before using the adaptor AD-USB-ODB for the first time check that all cables are connected correctly.
- d** Only use the included power supply HW-ODB-PWS.

3 Connecting the AD-USB-ODB Adaptor

i The Olympus Soft Imaging Solutions devices communicate with the imaging system controller through the so-called ODB device bus. If the MSWindows imaging PC is used as system controller the AD-USB-ODB adaptor is used as interface to the ODB device bus. The devices are all connected in series, i.e., one device is connected directly to the adaptor, the second one is connected to the first one and so on. The order of devices is without importance.

1. Connect the **USB** Type B plug at the back panel of the AD-USB-ODB adaptor with any USB Type A plug of the imaging PC using the USB-A-to-USB-B cable.

2. Connect any of the available ODB devices with the 4-pin female Lemo **ODB** plugs on the AD-USB-ODB adaptor back panel using the ODB communication cable.

3. Use the ODB device bus terminator plug to close the unused **ODB** plug of the last of the daisy-chained ODB devices of the system to comply with electromagnetic compatibility regulations.

4. Connect the HW-ODB-PWS 24 V, 3.0 A, power supply with the **24 V** plug at the back panel of the AD-USB-ODB adaptor.

5. Plug the power supply into a power outlet.

4 Specifications

Operating environmental conditions: indoor use only.

- Altitude: up to 2000 m
- Ambient temperature: 5 to 40°C
- Maximum relative humidity: 80% up to 31°C, 70% at 34°C, 60% at 37°C, 50% at 40°C
- Pollution degree 2 (in accordance with IEC664)

Dimensions and Weight: H 36 x W 105 x D 112 mm, 0.4 kg

Power supply rating: HW-ODB-PWS 24 V, 3.0 A

Enclosure rating: IP20

Connectors, ODB: two female 4-pin Lemo connectors

Connector, USB: USB Type B

Connector, 24V: female coaxial DC power connector, \varnothing 5.5 mm / 2.1 mm, to connect with HW-ODB-PWS 24 V, 3.0 A, DC power supply

The adaptor AD-USB-ODB is in conformity with the requirements of the directive

- 2004/108/EC relating to electromagnetic compatibility checked according to EN 61326-1:2006.
- 2006/95/EC relating to low voltage equipment checked according to EN 61010-1:2001.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interferences that may cause undesired operation.



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