



O2k-Manual

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Oxygraph-2k Series C-D, DatLab 4.3.2

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O2k-Manual User Information



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O2k-Manual USER INFORMATION

PLEASE READ THIS MANUAL CAREFULLY BEFORE ATTEMPTING TO USE THIS INSTRUMENT. The OROBOROS Oxygraph-2k, O2k-MultiSensor Modules, Titration-Injection microPump (TIP2k) and OROBOROS DatLab software constitute a modular integrated scientific equipment, collectively abbreviated as the O2k-System or O2k.

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1. Scope of Application

The O2k-System is not intended for *in vivo* applications, except for considering living cells as *in vivo* models. In particular, the TIP2k is not to be used for infusion on humans and live animals.

The O2k-System is tested in a wide range of measurements *in vitro*, with particular emphasis on high-resolution detection of changes of oxygen concentration in closed chambers. The TIP2k is intended for automatic titrations and injections into the Oxygraph-2k. For applications beyond this scope of applications and without following the necessary instructions and safety precautions, no

warranty is granted and no responsibility is assumed by OROBOROS INSTRUMENTS GmbH (Corp).

2. Warranty

The company OROBOROS INSTRUMENTS warrants the appropriate function of the O2k-System within the limits of specifications, if no manipulations are effected on the instrument (mechanics, electronics and DatLab software), if the specified types of PC, voltage, and syringes are used, and all instructions of the operation manual (O2k-Manual) are observed. These include instructions and warnings, adherence to which is essential for proper function and secure conditions of the O2k-System.

While every reasonable effort has been made in the preparation of this manual, OROBOROS INSTRUMENTS cannot assume any responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained in this document.

3. Operation

To guarantee safe operation of the O2k-System, it is absolutely necessary to follow the instructions of the O2k-Manual.

Prior to start of operation, take notice of the instructions for installation and operating instructions.

The O2k may be operated by trained personnel who are familiar with the safety precautions. The accessories used in conjunction with the O2k-System must be those specified or delivered by OROBOROS INSTRUMENTS, in particular the syringes for the TIP2k and injection needles which have to be maintained clean. For the control with a computer, a registered version of the OROBOROS software DatLab must be used, else no warranty will be given for the specified quality of performance.

During application of the O2k-System it must be established that any condition of the instrument is avoided which may lead to damage of materials or to the irritation of people.

4. Maintenance

Maintenance and repairs may be carried out only by qualified personnel. Repairs beyond the maintenance described in the O2k-Manual may be carried out only by the producer or service authorized by OROBOROS INSTRUMENTS. The stainless steel instrument housing must not be opened, otherwise any warranty claims will be rejected.

5. Limited Warranty

If you report, in writing, a significant defect in the DatLab software which cannot be corrected within 90 days of the date of the report, you may return the program and be refunded the purchase price of the program. Defective CDs will be replaced at no charge within 90 days of the date of purchase.

6. Disclaimer

The O2k-System is a tool intended to be used by trained professionals only. The DatLab software is not a substitute for your

personal professional judgement. This software has been carefully designed. In a computer program of this elaboration defects cannot be completely ruled out. Under no circumstances may this software be used in tasks involving human safety. Persons using this software are responsible for the supervision, management, and control of this software. This responsibility includes, but is not limited to, the establishment of independent procedures for testing the reliability and accuracy of any program output.

7. Limitation of Liability

The manufacturer and distributor of this software will not be held liable for damages including loss of data, lost profits, or other special, incidental or consequential or indirect damages arising from the use or inability to use the O2k-System.

8. Copyright and Software License

All rights reserved. Neither this manual nor any part of the OROBOROS DatLab CD may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, microfilming and recording, or by any information storage and retrieval system, without written permission from the publisher OROBOROS INSTRUMENTS.

All rights to the OROBOROS DatLab program, including the rights to copy, distribute, and translate this software remain with OROBOROS[®] INSTRUMENTS GmbH, Innsbruck, Austria. You may make copies of DatLab for Acquisition and Analysis of data related to your O2k-System. You may not make copies of the program or of any file of the OROBOROS DatLab CD or from the OROBOROS website for the distribution, lease or sale to another party.

9. International Oxygraph-2k Courses

Although the O2k-Manual provides necessary and sufficient information on application of the O2k-System, it is highly recommended to register for introductory or advanced International Oxygraph-2k Courses organized by OROBOROS INSTRUMENTS.

10. Cooperation and Feedback in Science

Since product development and improvement is a continuous process, OROBOROS INSTRUMENTS reserves the right to make changes in the specification without notice.

O2k Reference Laboratories build up a World-Wide Mitochondrial Physiology Network (MiPNet). MiPNet Reference Laboratories may be contacted for local technical advice on applications of the OROBOROS Oxygraph-2k and high-resolution respirometry. MiPNet is an initiative for combining the expertise of various laboratories to a joint development for expansion of the Oxygraph-2k into the O2k-MultiSensor System, from prototypes to series production.

MiPNet Application Notes and publications in scientific journals provide information about current developments complementary to this O2k-Manual.

If you have any comments on the O2k-System and the O2k-Manual, we will be pleased to receive them at:

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For news and current updates, please visit us at
<http://www.orooboros.at>

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OROBOROS Oxygraph-2k: Development – Production - Distribution

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Development of O2k high-resolution respirometry in collaboration with:

- Philipp Gradl, WGT Elektronik, A-6114 Kolsass/Tirol, Austria.
Electromechanics development and production of the OROBOROS Oxygraph-2k, TIP2k, ISS, and polarographic oxygen sensor (OROBOPoS).
- Lukas Gradl, software security networks, A-6020 Innsbruck, Austria.
Software development: DatLab 4.



O2k-WorldWide - User innovation – the Mitochondrial Physiology Network – www.orooboros.at.

