R-Biopharm AG

RIDA qLine® Scan

User manual – version 2017-11-04

R-Biopharm – for reliable diagnostics.

CE

User manual
RIDA qLine® Scan
2017-11-04

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Warning:

Please read the following instructions carefully. Follow the indications before you use this device.

Every effort has been made to avoid errors in the text and diagrams. However, R-Biopharm AG assumes no responsibility for any errors which may appear in this publication.

About this manual

- General information
- Installation of the device
- Working with the device
- Maintenance

Warnings, Cautions and Notes

In these operating instructions, special information is highlighted by the use of symbols:

Caution:
Indicates a possibility of instrument damage or loss of data if instructions are not followed!

Note: Provides help and assistance

Warning:

Indicates the possibility of severe personal injury, dead or equipment damage if the instructions are not followed

Contents: General information and explanations

1 Safety instructions

- Please be careful with this equipment at all times.
- Follow basic safety precautions to reduce the risk of injuries, fire and electrical shock.
- Read and understand all the information in this document. Failures in understanding and following the instructions may result in damage to the product, injury to operating personnel and poor instrument performance.
- Pay attention to all WARNING, CAUTION and STOP statements in this publication.
- Never open the electrical compartment while the equipment is plugged into a power source.
- Always work under laboratory regulations. Use a lab coat and pay attention to the safety standard procedures in you laboratory.
- Please be careful while working with infectious material and pay attention to the safety instructions thoroughly. Always wear gloves for your own safety. Proceed according to the safety instructions of your laboratory when infectious substances get in contact with your skin

Warning:

If the RIDA qLine® Scan, the software or corresponding pieces are damaged, the system cannot work correctly and therefore the warranty will no longer be valid!

Warning:

Always pay attention to the safety instructions while working with infectious material

2 General information

2.1 Intended use

The reading system RIDA qLine® Scan generates scanned pictures of the RIDA qLine® Allergy test membranes for the diagnosis of allergic disease in combination with the software RIDA qLine® Soft.

2.2 Functions

- Generates pictures within a few seconds
- Picture handover in form of Bitmaps
- Control through Imaging-Software with Twain-Interface
- Easy to use

Caution:

If the directions given in this manual are not followed, the system may not work correctly and it can be damaged!

2.3 Validation

Every RIDA qLine® Scan passes a test phase of 100 scans. The reader is calibrated using a calibration card and the corresponding software.

Warning:
If you alter the equipment in any way, you put the warranty in danger and this will no longer be valid.

2.4 Device and specification

Fig. 1: Open Drawer

Parameter	Specifications
General:	weight 2.9 kg
Plastic contents:	2 parts of body housing
Drawer:	mechanical drawer
Power Supply:	1 x external power supply, CE certified Mod. 3A-183WP24
Input:	100V – 240V 50-60 Hz, 0.6 A
Output:	24V – 0.75 A

3 Start-up

3.1 Introduction

In this chapter is described how to install and start this device.
This includes unpacking, accessories, the software installation and PC connections.

Note:
Make sure you do not drop the scanner, this could injure someone or damage the device.

3.2 Device and accessories

- RIDA qLine® Scan
- Power supply (100-240V Input and 24V, 0.75A Output)
- USB cable, ca. 1.2 - 2 m
- Instruction manual

3.3 Unpacking and positioning of the device

Place the instrument on a flat, horizontal surface. Remove all indicated safeguarding and adhesive tape. Put no heavy objects onto the reader

Warning:
Instruments sent with shipping companies will have transportation safeguarding

Warning:
Please, pay attention to the temperature. During winter season, the instrument can be delivered very cold because of shipment. After positioning, wait until the instrument has reached the environmental temperature. Not until then, start running the instrument.

Check all parts supplied according to the above-mentioned list. Compare the serial number of the instrument with the enclosed shipping documents. Please, store all packaging material. It should be used for a return transport in case of damage or complaint. The instrument can only be shipped in the original packing

3.4 Environmental conditions

Place the instrument on a flat, horizontal surface with sufficient amount of space around it. Avoid a positioning at places where it can fall down.

Warning:
Please, pay attention that the pulled out drawer doesn't reach out over the working place. This might lead to injuries of the employees and can damage the instrument.

Avoid vibrations, strong electromagnetic waves (not computer) and the exposure to direct sunlight. Keep the workplace surrounding the instrument free of any aggressive liquids.

3.5 Environmental parameters

Operation temperature:	15 °C to 35 °C
Non-Operation temperature:	4 °C to 14 °C and 36 °C to 40 °C
Working height:	0 to 2.000 m above sea level
Relative humidity:	20 % - 80 %, no condensing
Operational contamination class:	Class 2

Caution:
Before turning the instrument on, acclimatize the instrument at room temperature to let all condensed water evaporate from the inside.

3.6 Transport and storage conditions

Transport

Environmental temperature:	-40 °C to 65 °C
Relative humidity:	0 % to 95 %

Storage

Environmental temperature:	-20 °C to 30 °C
Relative humidity:	20 % to 30 %

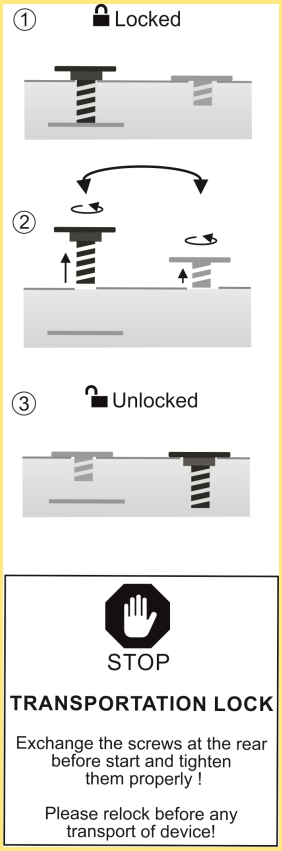
It is recommended to choose the transport and storage conditions in the medium range of the conditions specified above. Before moving or transporting the device unplug it and use exclusively the original packaging for transport.

4 Installation and connection of RIDA qLine® Scan

4.1 Transportation lock

The device is locked for transportation. Please read the note attached to the device attentively. Turn the device upside down and proceed upon instruction.

Caution:
Before turning the instrument on, please remove transportation lock. Using the device in a locked state might cause irreversible damage.



The device is delivered in a locked state.

The dark screw locks the scanning unit whereas the light colored screw seals a second opening.

In order to unlock the device, please unscrew both screws completely, remove the note slip and exchange the positions of the screws. Please tighten both screws properly to keep the device free of dust.

After exchanging the screws, the device is unlocked and ready to use.

Fig. 2.: How to remove the transportation lock

The device can be placed in an upright position and the drawer can be inserted completely now.

Caution:
Please tighten both screws properly to prevent any contaminations with dust.

4.2 Preparation

Please plug the supplied cables into the respective sockets at the rear of the scanner.

4.2.1 Connection

The RIDA qLine® Scan features two sockets at the rear.
1. Power Plug
2. USB Port

First connect the black power plug with socket at the rear of the scanner. Please use the provided external power supply unit named MOD 3A-183WP24 only.

Caution:
Only use the original power adapter of the RIDA qLine® Scan.

The plugs cannot be mixed up due to their different fit. The device has a power switch at the rear to turn it on. If the RIDA qLine® Scan is not in use it will automatically enter the standby mode after 15 minutes. An input signal of the software can reactivate the scanner

4.3 Installation

The operating systems Microsoft Windows XP, Windows Vista, Windows 7, Windows 8 & Windows 10 are compatible. The device is appropriated to the connection of a computer that is certified according to DIN EN 60950.

Note:
Please install the RIDA qLine® Soft software first in order to install the driver of the RIDA qLine® Scan.

After the driver installation completed successfully please connect the RIDA qLine® Scan to the PC using the provided USB cable. The plugs fit into the dedicated sockets only and you cannot mix them up. The device is ready to use as soon as the PC has identified the reader.

Note:
Please keep the manual of the RIDA qLine® Soft software at hand to support you working correctly with the reader. In this manual you can find all functions to control the reader described elaborately.

Please start the RIDA qLine® Soft software connected PC now. During the first measurement the reader begins to warm up. After the reader warmed up completely, the first scan starts. The warm-up phase takes about 2,5 minutes. Never quit the warm-up phase. The results of the subsequent scan could be wrong.

Note:
Perform a minimum of 10 test scans before starting the first analysis. The warmer the lamp of the device, the better the scan results. After a longer break between scans, perform a few empty scans as well.

Never quit the warm-up phase. The results of the subsequent scan could be wrong.

5 First evaluation of pictures

Pull the drawer out to the front until you can see the complete pad, where you can put the strips on.

Fig. 3: RIDA qLine® Scan with an opened drawer

5.1 Placing the tests

Pull out the drawer at the front side of the RIDA qLine® Scan. Position the strip holder with the strips (RIDA qLine® Incubation Set) into the cavity of the pad.

Fig. 4: RIDA qLine® Scan with placed strip holder

Pay attention that the Tests are positioned facing up.

Close the drawer as far as it will go. You can start the scan-process now.
Open the drawer after scanning and remove the strips

6 Erroneous image acquisition

If any image does not reflect the visual perception, please check the correct proceeding upon the instructions and restart the image acquisition. If you are not able to recieve a correct image please contact the manufacturer.

Warning:
After scanning please check, if the membranes were evaluated with good quality. Repeat the scan, if necessary. It may be, that strips will not be measurable in case of heavy colour reactions after incubation.

7 Turn off the reader

At the rear of the device you can find a switch to turn the device on and off.

Warning:
If you turn off the device it is not disconnected from the power grid.

The device is only disconnected from the power network completely if it is unplugged.

Please position the scanner in such a way that you can easily access the rear to disconnect the device from the power grid.

8 Cleaning and maintanance

Optimal results will be obtained when the device is operated virtually dust-free. Clean the drawer and the insert from time to time, depending on the level of contamination

8.1 Outside

Clean the device only with water and a mild detergent. For external cleaning, use a moist cloth and wipe the device evenly.

8.2 Inside

The cleaning of the interior is limited to the drawer area.

Warning:
Wear rubber gloves when cleaning the scanner.

Slight contaminations

Pull out the drawer completely and then wipe the drawer with a damp cloth carefully.

Fig. 5: Opened drawer

Heavy contaminations

In case of heavy contaminations of the drawer, pull it out completely. Use rubber gloves for your own safety. Use only pure water to clean the pad.

Caution:
Never use acetone or concentrated alcohol to clean the plastic components in the device.

8.3 Cleaning of the glass sheet

Warning:
Only qualified personnel are allowed to clean the glass plate. Before cleaning, take out the pad and the drawer completely.

Warning:
Always ensure the disconnection of the device from the power grid by unplugging the reader.

To clean the RIDA qLine® Scan intensively, please unplug the device and pull the drawer out. Position the device upside-down and wipe the glass plate with a lint-free cloth carefully. If it is necessary repeat this procedure until the glass sheet is clean (see picture).
Put the device back to its initial position carefully. Please place the drawer back into its guideways and close it completely. Finally reconnect the scanner to the power supply.

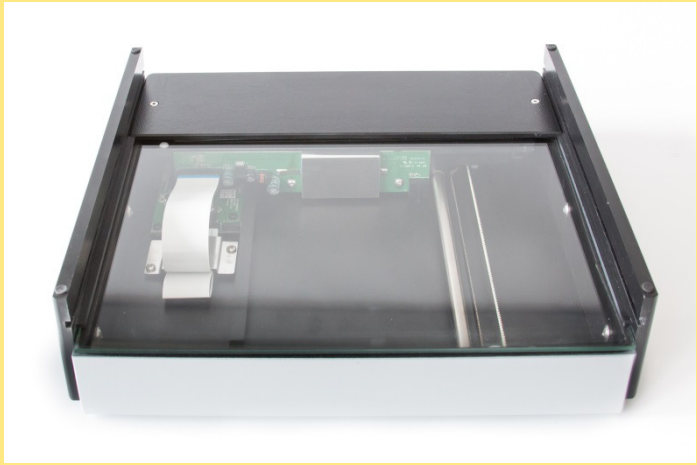


Fig. 6: Glass sheet

8.4 Maintenance

No further duties are required for the maintenance of the device and its accessories.

8.5 Return and repair

Relock the device for transportation (please also refer to 4.1) and use the original packaging. Only in doing so, transportation damages can be prevented.

The instrument can only be shipped in a locked state using the original packing.

9 Disposal

Please pay attention to the respective laws and provisions concerning the disposal of the device and its accessories. Electrical components need to be disposed separately. Please decontaminate the device properly before disposing or returning it.

Warning:
Always pay attention to your laboratory safety standards when working with infectious substances before disposing the device and its accessories.

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