

# **RIDA<sup>®</sup>QUICK SCAN II** User manual



https://r-b.io/15



# User manual RIDA<sup>®</sup>QUICK SCAN II

Item no. ZRQS2-KD: IVD Version Version 2.1 (2022-01-21) Valid for firmware version 44.04 and higher ° Copyright 2022 by R-Biopharm AG

All rights reserved.

It may not be reproduced in whole or in part or be translated into another language without our express, prior written consent. Subject to technical changes.

Technical changes, deviations in the illustrations, and errors reserved. © 2022 R-Biopharm AG, Darmstadt

R-Biopharm AG
 An der neuen Bergstrasse 17
 64297 Darmstadt, Germany
 +49 (0) 61 51 - 8102-0
 +49 (0) 61 51 - 8102-40
 info@r-biopharm.de
 www.r-biopharm.com

# CE

# Contents

Gen	eral information	5		
Important information 5				
Expl	anation of symbols used	6		
Inte	nded use	6		
1	Selection of installation site	7		
2	Unpacking and			
	installation	7		
3	RIDA <sup>®</sup> QUICK SCAN II:			
	Overview	9		
4	Operating the			
	RIDA <sup>®</sup> QUICK SCAN II	11		
4.1	Switching on	11		
4.2	Switching off			
4.3	Main menu 1			
4.4	Charge indicator	13		
4.5	Submenu "Setup"	14		
4.6	Submenu "Management"	16		
4.7	Submenu "Measurement"	17		
4.8	Submenu "Results"	20		
4.9	Submenu "Standby"	22		
5	<b>Connecting external</b>			
	components	23		
6	Performing firmware			
	updates	24		
7	LAN access to			
	RIDA <sup>®</sup> QUICK SCAN II	25		
8	Performing a measurement	26		
8.1	Creating/selecting a user 2			

8.2 Reading in lots and methods	26			
8.3 Preparing and initiating a				
measurement	27			
9 Cleaning and care	29			
Notes and annex	30			
Technical data, ambient				
conditions	30			
Safety information				
EC Declaration of conformity/				
CE mark	31			
Disposal Information 3				
Annex 1: Error messages				
and warnings 3				
Annex 2: Version history				



# **General information**

Please carefully compare the contents of this delivery with the enclosed delivery note, the package leaflet or the invoice. We recommend that you keep a copy of this document together with the instructions, so that you can quickly access information about the date and scope of delivery in case of future queries, re-orders or service work.

Please be sure to remove all small parts from the packaging material. We like to inform you that our devices are adjusted at the factory and can be used immediately after installation.

Before using the RIDA<sup>®</sup>QUICK SCAN II for the first time, please read the operating instruction carefully. We recommend that it always be kept with the RIDA<sup>®</sup>QUICK SCAN II.

# Important information

The RIDA<sup>®</sup>QUICK SCAN II (item no. ZRQS2-KD) is an *in vitro* diagnostic medical device in compliance with the German Medical Devices Act (§ 3 Paragraph 4 MPG) when operated according to the manufacturer's intended use for examining samples taken from the human body.

According to the Regulations for Operators of Medical Devices (§2 Paragraph 5 MPBetreibV), users of medical products must ensure that these are functional and in good condition. In addition, the user must observe the operating instructions as well as other safety-related information and maintenance information.

The manufacturer of the *in vitro* diagnostic device is not responsible or liable for information, evaluations, diagnoses, etc. that are obtained through the use of the *in vitro* diagnostic device.

# Explanation of symbols used

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



Warning: Follow the instructions to prevent the risk of injury.



Warning: Follow the instructions to prevent damaging the device.



Attention: Possible electric shock!



**General safety information:** Follow the instructions to ensure optimum performance of the device.

# Intended use

For *in vitro* diagnostic use. The RIDA®QUICK SCAN II is a lateral flow reader for automatic reading of quantitative lateral flow tests. Use the RIDA®QUICK SCAN II only in combination with lateral flow tests for which the use of the RIDA®QUICK SCAN II is indicated.

The product is intended for professional use.



# 1 Selection of installation site

The RIDA<sup>®</sup>QUICK SCAN II is a high-quality optoelectronic device that can deliver its full performance only under very clean conditions. To avoid excessive contamination, the RIDA<sup>®</sup>QUICK SCAN II should be used in a room that is as free of dust as possible. For dusty environments, an optional dust protection case is available, in which the device can also be operated.

If you transport the RIDA<sup>®</sup>QUICK SCAN II between environments with drastically different temperatures, please note that measurements should not be made until the device has adjusted to the new ambient temperature.

# 2 Unpacking and installation

The RIDA<sup>®</sup>QUICK SCAN II is securely packed at the factory for transportation. After opening the packaging, check to see whether any damage has occurred during transport and make sure the delivery is complete as stated in the delivery documents.

If there is any cause for complaint about the delivery, please immediately contact R-Biopharm, Darmstadt, or the supplier from which you obtained the RIDA<sup>®</sup>QUICK SCAN II.



Warning:Only professional users may operate theRIDA®QUICKSCANII. The guidelines for working in medicallaboratoriesmust be followed. Follow the user manualfor the RIDA®QUICKSCANII closely.

For installation, first remove the device from the packaging and place it on an even, firm and vibration-free surface.

The RIDA<sup>®</sup>QUICK SCAN II comes with a 6-V DC power supply, which was specially selected for operating the device. The polarity of the plug on the device side was correctly pre-set at the factory and cannot be changed without forced removal and incorrect insertion of the plug connector.



Warning: Only use the power supply provided or an identical type approved by R-Biopharm to operate the RIDA®QUICK SCAN II.

R-Biopharm **cannot accept liability** for damage to the device or its accessories or other material damage or personal injury resulting from the use of a power supply other than the one provided or a type that has not been approved by R-Biopharm.

In these cases, any **warranty claims** against the manufacturer **are null and void**. The same applies to **modifications** to the power supply that are not authorized by R-Biopharm.

Insert the plug connector of the power supply on the device side into the rear socket of the RIDA<sup>®</sup>QUICK SCAN II marked "6VDC" and plug the power supply into a wall outlet.



**General safety information:** Before using the device for the first time, fully charge the battery of the device using the power supply provided. The device can be used during the charging process.

**Note:** This does not apply to charging via the USB port of a connected PC. The port does not provide sufficient charging current to enable continuous operation during the charging process.



# 3 RIDA®QUICK SCAN II: Overview



Fig. 1: RIDA®QUICK SCAN II general overview



Fig. 2: Connections at the rear of the device



# 1 Control strips (ZRQS2-KS-KD)

#### **2** Power supply (ZRQS2-NETZTEIL)

Fig. 3: Scope of delivery



# 4 Operating the RIDA®QUICK SCAN II

This section describes the essential operating steps, as well as the menus and submenus. Refer to section 8 for step-by-step instructions on performing measurements.

General safety information: Some users may find it more convenient to operate the RIDA®QUICK SCAN II touchscreen using a stylus ("touch pen"). Please use this option if the device cannot be reliably operated manually.

# 4.1 Switching on

The drawer of the RIDA<sup>®</sup>QUICK SCAN II must be closed during startup. Switch on the RIDA<sup>®</sup>QUICK SCAN II by pressing the power switch. Note that when connected to readers, the RIDA<sup>®</sup>QUICK SCAN II may be operated only when powered from a wall outlet. Otherwise the RIDA<sup>®</sup>QUICK SCAN II will not start up properly or will switch off automatically.

During startup, the status LED illuminates orange and a progress bar appears on the starting screen. After this, a check of the internal calibration is performed and a request to select the user is displayed. This selection can be skipped by selecting "No User". Skip this section when using the device for the first time and if a user has not been created yet (see 4.5 and 8.1). Immediately after this, the main menu is displayed.



General safety information:The color of the status LED indicates the currentoperating state of the RIDA®QUICK SCAN II:Orange:Device startingGreen:Readiness for operation

Flashing green: Standby mode Off: Battery operation

Flashing red: Charging circuit fault



#### Warning: If the status LED illuminates red, the charging circuit is defective. Please contact your local distributor or R-Biopharm, Darmstadt!

General safety information: If the internal calibration fails, the procedure is aborted with an error message. The device starts up and displays the main menu, but activating a measurement causes a failed calibration message to appear.
 A measurement can no longer be made. Open and close the drawer and restart the device to try recalibrating.

If the error message persists, switch off the device and contact your local distributor or R-Biopharm, Darmstadt.

# 4.2 Switching off

To switch off the RIDA<sup>®</sup>QUICK SCAN II, always select the "Power off" button from the main menu and select "Yes" to the following prompt.



**General safety information:** The RIDA®QUICK SCAN II can also be switched off by pressing and holding the power button. However, this method may cause loss of data, so the device should be switched off in this way ONLY if the firmware has crashed or the device no longer responds to input.



#### 4.3 Main menu

Once the RIDA<sup>®</sup>QUICK SCAN II has started, the start screen with the main menu is displayed.



Fig. 4: Overview main menu

The header of the main menu shows the date and time, the number of measurements that have been saved and the number of measurements that are still possible. The date and time can be changed under "Setup" (see Section 4.5).

# 4.4 Charge indicator

The charge indicator in the top left corner of the start screen shows the charge status of the built-in battery.

The status LED on the housing flashes red if the charge is too low (see section 4.1). In this case, connect the mains unit immediately.

When the mains unit is connected, a jagged line is also displayed in the battery symbol.

# 4.5 Submenu "Setup"



#### **Control measurement**

This function performs a control measurement with a control strip. Therefore, please scan the QR code on the certificate (if existing). The method to be used is loaded automatically. The RIDA<sup>®</sup>QUICK SCAN II locks if the control measurement fails or the measurement is invalid. In this case, please contact your local distributor or R-Biopharm, Darmstadt.

Q,	Control measurement	5/4/20 12:12 PM
	Control strip already inserted	1
	Read certificate	
	Setpoint: 118 Tolerance: +/-5	
_	Expire date: 12-2021	
	Back	

Each control strip has an individual serial number to which a corresponding certificate is assigned. The traceability of the target value is ensured through the manufacturing process.





**General safety information:** Every RIDA®QUICK SCAN II comes with a control strip and certificate that contains a reference value. If the control measurement does not correspond to this reference value (including the specified tolerances), repeat the process.

# If another deviation occurs, please contact your local distributor or R-Biopharm, Darmstadt, directly.



**General safety information:** The control strip must be treated with great care. In particular, ensure that the surface with the printed reference lines does not become dirty. Always keep the control strip in a dark place (for example, in a lightproof drawer) when not in use.

#### Self test

This function starts an internal test routine to test the camera, illumination, free memory space and the installed software packages ("Files").

The RIDA<sup>®</sup>QUICK SCAN II will be locked if at least one item of the self-test fails. In this case, please contact your local distributor or R-Biopharm, Darmstadt.

#### **Device setup**

This function allows the setup of the date and time, user management, screen setup and language. The language versions German, English, French, Spanish, Italian, and Portuguese are available.

Users can be created and selected under the menu item "User management". If at least one user has been created, the RIDA<sup>®</sup>QUICK SCAN II starts with the prompt to select a user or to continue without a user.

#### **Device information**

Displays the manufacturer, serial number, current user, free memory, model, and firmware version.

# 4.6 Submenu "Management"





#### Backup

For backup methods and lots, measurements and users can be selected independently of each other. All of the files in the RIDA<sup>®</sup>QUICK SCAN II directory "measurements" are backed up in a directory with the same name and device serial number on a connected USB flash drive.

The files are saved in the format [(Method)(Lot No.) – (Date)(Time)].XXX whereby for a file name the following endings (XXX) are possible:

PGM: Gray-scale image of the test strip XML: Complete test as XML file TXT: Complete test result as text file PDF: Complete test as PDF file

In addition, another XML file is created, which has the character combination "-RES-" (for "result") instead of the hyphen in the file name. Only the pure result data are saved in this file.



E	Backup settings	5/4/20 12:01 PM			
<b>Ø</b>	Lots				
	Methods				
$\odot$	Measurements				
$\odot$	Users				
			Fig. 8: Overview menu item		
	Back Import	Export	"Backup"		

#### Lot/Method

Selection of the import method: from barcode (with connected reader, see Section 5) or via USB (with USB stick plugged in).

In the "Delete Lot / Method" subitem, individual lots or methods can be selected and deleted. The RIDA<sup>®</sup>QUICK SCAN II stores only one lot at a time.

#### 4.7 Submenu "Measurement"

To perform a measurement, select a method saved on the RIDA<sup>®</sup>QUICK SCAN II from the selection list displayed. The sample ID can then either be entered manually or read in via the barcode.



**General safety information:** Follow the processing steps for the respective RIDA®QUICK test and comply with the time window for evaluation according to the instructions for use for the respective RIDA®QUICK test. If the method to be used in the RIDA®QUICK test does not appear in the selection field, it has to be scanned via "Read Lot/Method" (Section 4.6).

The RIDA<sup>®</sup>QUICK SCAN II then prompts you to insert a test cassette or to confirm that a test cassette has been inserted. Proceed as follows to insert a test cassette:

- Lightly press in the ribbed surface on the front plate of the drawer until you hear the drawer unlock.
- Then pull out the drawer as far as the stop.
- Slots are built into the drawer to securely hold the test cassette. Place a prepared test cassette with test strip facing up into the appropriate slot, and press the cassette down firmly to ensure it is held securely in place.



**Fig. 9:** Slightly press the front plate of the drawer to open it

Warning: Make sure that no excess fluid runs out of the test cassette into the drawer. If this does happen, clean any residual fluid from the drawer before closing it.



**General safety information:** If the drawer is open or will be opened for inserting a test cassette, an image appears on the screen showing the correct orientation of an inserted test cassette.





- **Fig. 10:** Correct orientation of the test cassette
- Press the drawer closed until it engages with the housing.





**General safety information:** If the test cassette is inserted incorrectly, the measurement process will be aborted with an error message. If a measurement is started without a test cassette in the device, error message "Test cassette not inserted" or "Camera out of focus" will appear (see Annex 1 on troubleshooting).



**General safety information:** To close the drawer again immediately after opening, you must first pull the drawer a little way out of the housing. **Otherwise it cannot engage!** 

The measurement now starts automatically. When the measurement is successful, the result is displayed directly on the screen. The display format corresponds to the illustration shown in Section 4.8 "Samples."

#### 4.8 Submenu "Results"

C Samples		5/4/20 12:02 PM
Sample ID	Method	Date 🔺
0000	Test_v44	2020.05.04 12:02
0123	Test_v44	2020.05.06 13:23
1234 Test_v44		2020.05.06 10:16
2345	Test_v44	2020.05.06 10:00 💌
Back	Options	Filter

Fig. 12: Overview submenu "Results"

It is possible to sort saved measurements by sample ID, method or date by clicking on the column header.



**Fig. 13:** Filter function for the results



Moreover, it is possible to filter saved measurements for ID, date, method or lot (Fig. 13).

Afterwards, these filtered measurements can be completely or by selection deleted or exported as a report and an overview report to a USB drive via "Options". Selecting "PDF/ CSV reports" allows you to delete the reports—without deleting the results—from the RIDA<sup>®</sup>QUICK SCAN II.

C Samples - Options	5/4/20 12:05 PM	
All samples		
○ Choose samples		
O PDF/CSV reports		
Back Delete	Create and export report	<b>Fig. 14: "</b> Samples – Optior submenu

A measurement saved on the RIDA<sup>®</sup>QUICK SCAN II can be selected from the selection list by tapping on the measurement. The results screen then displays the sample ID, the date and time of the measurement, the method, the value and the validity of the measurement.

Q. Sample	5/4/20 12:04 PM
Sample ID:	1234
Date & Time:	2020.05.06 10:16
Method name:	Test_v44
Measure value:	116.70 µg/ml
Validity:	Ø
Back	Create report Delete

Fig. 15: Result output

By tapping "create report" a printable result PDF is created and exported to a connected USB flash drive.

The displayed "Validity" of the measurement is positive if no error message occurred during the measurement. In particular, it is also negative if the lot information shows that the expiry date of the test has been exceeded.

# 4.9 Submenu "Standby"

After you tap "Standby," the RIDA®QUICK SCAN II switches to standby mode. The screen is switched off and the status LED flashes green.

Operation can be resumed by tapping any point on the screen.



# **5** Connecting external components

The USB port on the back of the RIDA<sup>®</sup>QUICK SCAN II is used to connect the barcode scanner for importing lot and method information and for exporting data via a USB stick.

General safety information: Only readers specially approved for the RIDA®QUICK SCAN II can be used (see "Technical data"). The barcode scanner must be configured to "USB Serial" on first connection according to the manufacturer's Quick Start Guide. To do this, use the barcode scanner connected in the main menu to scan the "USB Serial" barcode printed in the guide.

When USB devices are connected, the RIDA<sup>®</sup>QUICK SCAN II may be operated only when connected to the power supply.

In order to be recognized correctly, readers must either already be connected on system startup or the RIDA<sup>®</sup>QUICK SCAN II must be listed in the main menu. Connection in a submenu is not possible.



Fig. 16: Honeywell Xenon 1900 barcode scanner (item number: ZBS)

The RIDA<sup>®</sup>QUICK SCAN II supports operation with the Honeywell Xenon 1900 barcode scanner.

The barcode scanner is connected to the device through the USB ports. The Honeywell Xenon 1900 barcode scanner supports a number of 1D and 2D barcodes and is sold separately.

# 6 Performing firmware updates

Firmware updates must be performed if, for example, new software functions are available, or possible software faults are to be corrected. In this case use an USB flash drive containing all of the files necessary for the update.



Warning: Do not switch off the RIDA<sup>®</sup>QUICK SCAN II during the update.

Therefore, <u>always</u> power the device using the power supply provided when performing an update. Do not perform an update if the power supply is not connected.

- Connect the RIDA<sup>®</sup>QUICK SCAN II to a wall outlet.
- Switch off the RIDA®QUICK SCAN II.
- Plug the USB stick with the files for the update into the USB port on the back of the RIDA<sup>®</sup>QUICK SCAN II.
- Switch on the RIDA®QUICK SCAN II.
- To start the update, press the recessed "OPT" firmware button on the back of the device several times while the company logo is shown on the display. The update is performed then automatically.



# 7 LAN access to RIDA®QUICK SCAN II

To have access via LAN to all measurements, methods, and lots, it is possible to use an FTP program to access the RIDA<sup>®</sup>QUICK SCAN II. The RIDA<sup>®</sup>QUICK SCAN II and the PC must have a valid network connection, and they both must be in the same network. For reasons of data security, LAN access should be allowed only for the duration of data transmission, and the device should be disconnected from the network directly afterward.

For example, communication via FileZilla® *https://filezilla-project.org* (FileZilla Client) is recommended. This allows data to be downloaded from the RIDA®QUICK SCAN II and provides access to the "measurements," "lots," "methods," and CSV (PDF) report directories.

#### Login details:

Server:	LFTXXXXXXX (serial number of the device)
User name:	ftp
Password:	(leave it blank)
Port:	22

Image: And a	E shtp://htp@LFT1000	405 - FileZilla	84									- 0	×
Image: Section of Sectio	Datei Bearbeiten A	insicht Über	tragung Server	Lesezeichen Hilfe									
	坐• ▶ 11 T	12 0	🖹 🖸 📜 💆	. IF Q 0 0	*								
The second se	Server sftp://LFT1000	A05 Benut	tername: ftp	Passim	ert Port 23 We	arbinden -							
	Statur: Verbindu	DA TURN Secure	Contrastort.										
mining	Status: Verbinde	mit LFT 10004	05										
	Statusi Connecte	ed to LFT 1000	105										
Auge	Statusi Listing di	rectory /home											
Agi (Shering Hendensether Beschering Hendensether Besc	Status: Anzeigen	des Verzeichn	isinhalts für "/horr	ne" abgeschlossen									~
	Lokal: C/\Users\Frank	Streckenback	\Desktop\service\	~	Server: /home								v
Image: State Stat		service		^	B-2 /								
Normality         Normality <t< td=""><td>(8-</td><td>Document</td><td>5</td><td></td><td>la home</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	(8-	Document	5		la home								
Image: State		Downloads											
Image: State		Einena Dat	elen										
Image: State Stat	80-5	Favorites											
Image:		IntelGraphi	csProfiles										
Automatical         Automatical           Automatical		Links											
Ability         Ability <t< td=""><td></td><td>Lokale End</td><td>tellungen</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		Lokale End	tellungen										
Image: Second	œ-	Microsofte	dgesackups										
Answer         Deskysite         D		P maar	1.0	•		1 0 0 00		1	100 00	1000 00 000 1			_
NUMPURUM       Numumurum       Numumurum       <	Dateiname	Dateigroße	Dateityp	Zuletzt geändert	Dateiname	Dateigntille	Datetyp	Zuletzt geändert	Berechtigu.	Besitzen/Gr			^
1000000000000000000000000000000000000			-						00000				
2000000000000000000000000000000000000	19700101_01010.	10.584	Textdokument	11.06.2018 13:16:	control		Datesordner	08.06.2018 16:18:00	drwowe	Battp			- 1
Diversion	19700101_01013	0.955	Textdokument	11.06.2018 13:10	control_measurements		Dateioriner	28.06.2017 18:34/08	awaws	No fee			- 1
20100000000000000000000000000000000000	20170703 06543	2.005	Textilization	11.06/2018 13:16	lats		Dateiordaer	03.07.2017 08.49.49	downwy	Kafto			- 1
201700.00.00.00.00.00.00.00.00.00.00.00.00.	20170703_08581	27.248	Textdokument	11.06.2018 13:16:	measurements		Dateiordner	03.07.2017 08:36:53	drawarare	Ha ftp			- 1
2000000000000000000000000000000000000	20170703_09204	4.987	Textdokument	11.06.2018 13:16:	methods		Dateiordher	03.07.2017 08:49:37	drawnax	lfa ftp			- 1
200000         1000000         1000000         1000000         1000000         1000000         1000000         1000000         1000000         1000000         1000000         1000000         1000000         1000000         1000000         1000000         1000000         10000000         1000000000000000000	20180608_15273	35.722	Teitdokument	11.06.2018 13:16:	Settings		Dateiordner	13.04.2017 13:31:53	drwarwy	root root			- 1
3000000000000000000000000000000000000	20180608_17351	2.365	Testdokument	11.06.2018 13:16:	application ini	58	Konfigurati.	03.07.2017 08:49:15	·PW0WX····	root root			- 1
20001         110         140 </td <td>20180608_17405</td> <td>1.352</td> <td>Teitdokument</td> <td>11.06-2018 13:16:</td> <td>ameraparameter.bd</td> <td>58</td> <td>Textdoloum.</td> <td>03.07.2017 08:39:30</td> <td>-0400444</td> <td>Ha ftp</td> <td></td> <td></td> <td>- 1</td>	20180608_17405	1.352	Teitdokument	11.06-2018 13:16:	ameraparameter.bd	58	Textdoloum.	03.07.2017 08:39:30	-0400444	Ha ftp			- 1
Comparison         State Description	20180611_11101	1.058	Textdokument	11.06.2018 13:16:	checkFiles.sh	115	SH-Datei	13.04.2017 13:31:53	-UNDMX	Ha ftp			
Bill Strangender         111 Strangender         102 Stran	20180611_12312	1.046	Teitdokument	11.06.2018 13:16	checkForOldCameraControl.sh	296	SH-Datei	13.04.2017 13:31:53	-0400444	Ha ftp			
Indigendantia         100 Entroplantia         100 Entroplantia <td>-Boginage.pgm</td> <td>13/50.017</td> <td>Koofiguration</td> <td>11.06.2018 13:16:</td> <td>Configuration (CDI M (co)</td> <td>145</td> <td>Konfigurati</td> <td>13.04.2017 13:31:33</td> <td>-PWOWE</td> <td>FOOT ITA</td> <td></td> <td></td> <td></td>	-Boginage.pgm	13/50.017	Koofiguration	11.06.2018 13:16:	Configuration (CDI M (co)	145	Konfigurati	13.04.2017 13:31:33	-PWOWE	FOOT ITA			
Security 1311         MA Source 11 (302) 1315         Security 2011 1315         Securit	a configurationSe.	140	Kenfigurations.	11.06.2018 13:15:	createNewTexttat.sh	236	SH-Datei	13.04.2017 13:31:53	-000000	Mafte			
Jungsogen         20151         Földe förder ogenskallander ogenskalla	device.aml	3,538	XML-Dekument	11.06.2018 13:15:	deletelmagePGMJog	56	Textdokum.	01.01.1970 01:31:40	-0000003	Kafto			
betweed         133         304.004.0         68.20319.8187         wwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwww	Timage.pgm	376.016	PGM-Datei	11.06.2018 13:15:	deletelmagePGM.sh	176	SH-Datei	13.04.2017 13:31:53		Ha ftp			
Control from Second galaxy and the second seco					a device.xml	3.538	XML-Doku.	08.05.2018 16:18:37	·rwww.···	root ifa			
Defends Campbelle 2018 Myris  Zhoneou wol Transchinko Generality Campbelle 2018 Ryris  Andreagende Defend (1)  Tablend Generality Campbelle 2018 Ryris  Camberly Campbelle 2018 Ryris  Campbelle 2018 Ryris Ryris Campbelle 2018 Ryris  Campbelle 2018 R	<			>	getShading_Labormuster.sh	1.179	SH-Datei	13.04.2017 13:31:53	-0430442	Ha ftp			~
processes bank Rohmy Dan af Store Galle Frontie Bala	16 Dateien. Gesamtgröß	Bei 2,424,195 B	lytes		22 Dateien und 7 Verzeichnisse. Gesamtgrößer 1.	891.912 Bytes							
Jagungagaran 2008 Colleenfords Sectored	Server/Lokale Datei	R	chtung Datei auf	Server	Größe Priorität Status								
Charlender Bandenkan, er- Annenderge (20100), (2012), 2013 Bannal In altertagende Banles (1), Faligenalingen: Bestrynagen, Belaynakis Bantergargen, Belaynakis Bantergargen	stre//tto@iFT1000	1399											
a skortogonde Datoin (1) Talogon Skortogonga - Efelipsche Ukortogonga -	C:\Users\Frank Str	eckenba.	< /home/k	ogs/20180605_08381	2 925 Normal								
a skortagonde Dotoin (1)   feligneskigene Übestragengen   Deligneske Übestragengen   Deligneske Übestragengen   Deligneske Übestragengen   Deligneske Übestragengen   Deligneske Destagengen													
a allertragende Dateim (1) Fabiguchägens Ükertragende Ükertragende Ükertragende Ükertragende Dateim (2)													
A the Hanner USS .	Zu übertragende Da	teien (1) Fi	ihigeschlagene Übe	ertragungen Erf	olgreiche Übertragungen								
C ( manual and a set of a set											🔒 😗 Wateschlan	ge: 925 B	

Fig. 17: LAN access via FileZilla®

# 8 Performing a measurement

This section describes the typical procedure for performing a measurement. The procedure can roughly be divided into three steps

# 8.1 Creating/selecting a user

If the RIDA<sup>®</sup>QUICK SCAN II is switched on in its brand-new state, a user can be created first. As with creating additional users, a new user is created from the main menu, by selecting "Setup," "Device setup," "User management," and then "Add user." It is also possible to continue operation without creating a user by tapping the button "Back".

If users have already been created on the RIDA®QUICK SCAN II, a corresponding selection list is displayed after the system has started. Here too, operation can be continued without selecting a user by tapping the "No user" button.

# 8.2 Reading in lots and methods

Every test is associated with a particular method and lot specific parameters ("Lot"). Method and lot are printed on the analysis certificate in form of barcodes. Barcodes can be read in from submenu "Management" – "Lot / Method" via menu item "Read from Barcode". Alternatively, methods and lots can be read in via USB flash drive.

Barcodes have to be scanned for each new kit lot from the certificates.





Fig. 18: Overview menu item "Lot / Method"



**General safety information:** If the reading procedure is initiated **without** the appropriate **reader being connected** to the RIDA<sup>®</sup>QUICK SCAN II or the **wrong option was selected**, the process will be stopped after a few seconds, and the message **"No reader available"** will appear.

You can then use "Back" to return to the previous menu.

#### 8.3 Preparing and initiating a measurement

Always follow the procedure described in Section 4.7.

Before every measurement, the RIDA®QUICK SCAN II checks for the correct illumination of the test cassette and reports "Checking calibration" when performing the check. This illumination check has the following results:

• The calibration is correct.

Consequence: The measurement processes as normal.

The calibration failed.

Consequence: The measurement will be canceled and an error message will appear stating that no more measurements can be made. Restart the RIDA<sup>®</sup>QUICK SCAN II and try running a measurement again. If this measurement fails and the same error message appears, try restarting the device again.

# If the error message persists, switch off the RIDA<sup>®</sup>QUICK SCAN II and contact your local distributor or R-Biopharm, Darmstadt.

Error messages may also occur during the measurement procedure. The possible error codes are listed in Annex 1.



**General safety information:** If there is a test cassette in the drawer, check to make sure the cassette has the correct **orientation**.

Users do not have the option of performing service work themselves on RIDA<sup>®</sup>QUICK SCAN II parts.

If the error message appears again after the measurement is repeated, note the error message displayed and contact your local distributor or R-Biopharm, Darmstadt.

# 8.4 Printing and exporting the measurement result

After a backup, as described in section 4.8, the PDF result files generated are located in the "measurements" directory of the connected USB flash drive. Or, the result files can also be retrieved in the "/home/measurements" directory on the reader using the FTP program via LAN. The exact procedure is described in Section 7 "LAN access to the RIDA®QUICK SCAN II."



# 9 Cleaning and care

You can use a soft cloth moistened with water or alcohol to clean the housing of the RIDA<sup>®</sup>QUICK SCAN II and the interior of the drawer. Normal agents for wipe disinfection, e.g. 70 % isopropyl alcohol or ethanol, can also be used on all accessible surfaces.

Performing the self-test and control measurement allows for a routine function test of the RIDA<sup>®</sup>QUICK SCAN II. The RIDA<sup>®</sup>QUICK SCAN II does not contain any wear parts that require regular replacement or inspection.



General safety information: If the RIDA<sup>®</sup>QUICK SCAN II needs to be returned for repair or maintenance, please clean and, if necessary, disinfect the device before returning it.

# Notes and annex

#### Technical data, ambient conditions

Mains voltage:	100 240 V AC, 50 60 Hz
Mains unit output voltage/current	6 V DC/3.6 A (max.)
Polarity of housing plug connector:	$\oplus \odot \odot$
Battery:	Nominal voltage 3.6 V
	Nominal capacity 8700 mAh
Device safety:	IEC 1010-1/EN61010-1/VDE 0411, protection class 3
Temperature range:	5 °C 40 °C
Relative humidity:	max. 80 % to 31 °C, linearly decreasing,
	max. 50 % at 40 °C
Supply voltage fluctuations:	max. ± 10 %
Dimensions (L x W x H):	approx. 229 x 192 x 95 mm
Weight (kg):	approx. 1470 g
Protection class:	IP 21
Barcode scanner:	Honeywell Xenon 1900,
	Item No. 1900GSR-2 (USB scanner)

# Safety information

The RIDA<sup>®</sup>QUICK SCAN II complies with the safety regulations for electrical measurement and control technology and electrical laboratory equipment and has left the factory in a technically faultless state.

The information in these User manual must be observed in order to ensure the correct function and safety of the RIDA®QUICK SCAN II.

Use the RIDA<sup>®</sup>QUICK SCAN II only for its intended use, as specified in these instructions. Servicing and repairs must only be carried out by authorized technicians or the manufacturer's Customer Service.



Only replacement parts and accessory components that are authorized by the manufacturer may be used.

Always check the power supply for damage before using the RIDA®QUICK SCAN II. The mains unit must be replaced immediately in case of defects such as damaged insulation, crushing or obvious kinks.

If you are unsure, please contact your local distributor or R-Biopharm, Darmstadt, directly.



**Warning:** The **proper function** of the RIDA<sup>®</sup>QUICK SCAN II and the **safety of the device** cannot be guaranteed in the event of **nonobservance** of the safety information.

R-Biopharm shall **not assume any liability** for damage to the device or accessories or other property damage or personal injury resulting from failure to observe the safety information. In such cases, all **warranty claims** against R-Biopharm are null and void.

# EC Declaration of conformity/CE mark

The CE Mark of the RIDA<sup>®</sup>QUICK SCAN II confirms that the RIDA<sup>®</sup>QUICK SCAN II is in compliance with Regulation (EU) 2017/746 ("*In Vitro* Diagnostic Medical Devices").

In addition, the RIDA<sup>®</sup>QUICK SCAN II is compliant with the current RoHS Directive and conforms to standards DIN EN 55011 and DIN EN 61326-2-6 on radio-frequency disturbance characteristics of industrial, scientific, and medical equipment and to the directive. The RIDA<sup>®</sup>QUICK SCAN II was developed and tested in accordance with CISPR 11 Class A. It may cause radio interference in a domestic environment. In this case it may be necessary to take measures to eliminate the interference.

We also recommend having the electromagnetic environment assessed before the RIDA<sup>®</sup>QUICK SCAN II is put into operation. When these measures are observed, the device does not pose any risk.



Warning: Do not use the RIDA<sup>®</sup>QUICK SCAN II in the vicinity of sources of strong electromagnetic radiation as they can interfere with proper functioning.

This declaration becomes void in case of any unauthorized modifications to the product.

# **Disposal Information**



European Union (EU) Directive on Waste Electrical and Electronic Equipment (WEEE).

Products sold in EU countries must be labeled with a crossed-out wheeled waste bin (or, in individual cases, this must be marked on the packaging).

Users are responsible for the proper disposal of the RIDA<sup>®</sup>QUICK SCAN II at the end of its life cycle. For disposal, please adhere to the applicable national regulations.

The WEEE Directive defines that customers and end users in EU countries (EU) must not dispose of electrical or electronic devices and electrical or electronic accessories in the household waste. Within the EU, please contact your local representative or your supplier's customer service representative who can provide you with information about the disposal or collection of old devices.



# Annex 1: Error messages and warnings

Possible erro	or messages are listed below:
(#03.00.1)	Calibration error <sup>1)</sup>
(#03.01.0)	Re-calibration error
(#03.02.1)	Device not calibrated, wrong camera parameter or control measurement failed <sup>2)</sup>
(#03.03.0)	Reference area error <sup>1)</sup>
(#04.00.1)	Corrupt image
(#17.08.1)	Corrupt image
(#04.01.0)	Camera out of focus <sup>1)</sup>
(#04.02.0)	Unable to open configuration file
(#17.00.1)	An analysis error occurred
(#17.07.2)	Expiration date exceeded
(#17.01.1)	Syntax error
(#17.02.1)	Missing argument
(#17.04.1)	Image analysis failed
(#17.05.1)	Incorrect light intensity
(#17.09.2)	No sample
(#17.06.2)	Wrong orientation
(#17.10.1)	Measurement not evaluable
(#07.05.1)	Failed to read data
(#07.04.1)	Failed to save file
(#16.00.1)	Failed to load file
(#16.01.1)	Wrong XML format
(#11.00.1)	Creating result PDF failed
(#11.01.1)	Creating result CSV failed

(#12.00.1)	No valid date
(#13.02.2)	No control measurement was performed on this device today or the measurement was not successful! Please be careful. The measurement may be invalid.
(#17.03.1)	File I/O error

#### Notes:

- 1) If this error occurs, restart the RIDA®QUICK SCAN II.
- 2) This error occurs if a measurement is performed after calibration fails.

If any of these errors occur, a restart and a repeat measurement can be attempted. If the error recurs, please contact your local distributor or R-Biopharm, Darmstadt.

Report all serious adverse events associated with the RIDA®QUICK SCAN II to R-Biopharm AG and the appropriate national authorities.



Possible warnings are as follows:		
(#07.00.1)	Could not find directory	
(#07.02.1)	Could not create directory	
(#07.01.1)	No storage device found	
(#07.06.1)	Failed to copy data	
(#07.07.1)	Failed to copy data. No source folder	
(#07.08.1)	Failed to copy data. Source folder is empty	
(#07.09.1)	Failed to delete data	
(#09.00.1)	Battery state unavailable	
(#09.01.2)	Low battery power	
(#09.03.2)	Insufficient battery power	
(#09.04.2)	Device will shut down	
(#09.02.2)	Please connect device to mains voltage	
(#10.00.1)	No reader available	
(#10.01.2)	Timed out waiting for barcode	
(#10.02.2)	Less than 20 measurements possible! Please backup and delete measurements!	
(#10.03.2)	Enter at least one letter!	
(#07.03.2)	Could not delete sample	
(#13.00.2)	Current user cannot be deleted	
(#13.01.2)	User already registered	
(#07.10.1)	Device is locked. Remote operation is active.	
(#14.00.1)	No content selected for copying	

# Annex 2: Version history

Version number	Section and designation
Version 2.0 (2020-05-25)	Previous version
Version 2.1 (2022-01-21)	Explanation of symbols used: Attention. Potential electrical shock
	Intended use
	2 Unpacking and installation: operating instructions
	3 RIDA <sup>®</sup> QUICK SCAN II: Overview: Components in the delivery without accessories
	4.5 Submenu "Setup": Traceability
	5 Connecting external components: Added description of the Honeywell Xenon 1900 barcode scanner
	7 LAN access to the RIDA <sup>®</sup> QUICK SCAN II: Data security
	Additional information and annex: Technical data,
	ambient conditions: Dimensions and weight
	EC Declaration of Conformity/CE Mark:
	Disposal information: Information on disposal
	Annex 1: Error messages and warnings:
	Annex 2: Version history



**R-Biopharm** • An der neuen Bergstrasse 17, 64297 Darmstadt, Germany E-mail: orders@r-biopharm.de • clinical.r-biopharm.com