Quantum Blue® Reader

QBSsoft User Manual
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1.1 Preface

The instruction manual is intended for people who will be using the software described here. Errors in the application can be avoided and trouble-free operation can be ensured only in knowledge of these operating instructions. It is therefore necessary that the present operating instruction is known to the responsible persons. For any damage or malfunction resulting from non-observance of the QBSoft Software Manual, we assume no liability.

Please note the importance of the following symbol, classified according to ISO 3864-2:

Note symbol: Indicates general notes, useful operator tips and operating recommendations which however do not affect the safety and health of the personnel.

1.2 General product description

Easy to use, comprehensive software for the user of the BÜHLMANN Quantum Blue® Reader, offering:

• Control of the Quantum Blue® Reader via PC
• Multi-language user interface
• Status display of important Quantum Blue® Reader functions
• Archiving of test data stored in the Quantum Blue® Reader or the QBSoft Software
• Management of test data stored in the Quantum Blue® Reader or the QBSoft Software
• Printing of all measured (and stored) test data
• Administration of Test Methods and Users in the Quantum Blue® Reader.

The QBSoft Software is designed for a typical workflow in a diagnostic laboratory, including maintenance, administration, archiving and printing of test data of the Quantum Blue® Reader. The installation of the QBSoft Software should be performed by qualified persons with knowledge of software installations.

Manufacturer:

BÜHLMANN Laboratories AG
Baselstrasse 55
CH-4124 Schönenbuch
www.buhlmannlabs.ch

1.3 System requirements

The installation of the software is very simple, straightforward and can be carried out on:

• Windows® 7, 8, 10
• Installed current .NET Framework of your Windows® version
• Intel compatible PC with 1 GHz processor and a minimum of 512 MB RAM
• 100 MB available memory on the hard disc
• CD-ROM drive (optional)
• Monitor with a minimum resolution of 1024 x 768
2.1 Installation of the QBSoft Software

Insert the CD-ROM.
Open the CD-ROM in the File Explorer.
Start “Software Installer.exe” from the “Software\QBSoft” directory.
Execute installation process.

The software offers the possibility to install QBSoft and drivers simultaneously or independently.

- Remote control of the Quantum Blue® Reader by your computer requires the installation of QBSoft and its driver. Select “Install Driver & QBSoft” to install both Driver and QBSoft Software (recommended).
- Manually select “Install Driver”, if QBSoft Software is already installed.
- Manually select “Install QBSoft”, if Driver is already installed.
- To cancel the installation process select “Exit”.

![Remote control interface](image.png)
2.2 Installation process in two steps

If choosing “Install Driver and QBSoft” (recommended), a Setup Wizard will appear, guiding through the installation process:

Note: When installation of Driver and QBSoft is chosen, the installation process is divided into two steps:
- Step 1: Installation of Lateral Flow Reader (driver)
- Step 2: Installation of QBSoft Software

Step 1: Installation of Lateral Flow Reader

- Select “Next” to proceed the installation of the first installation step: The installation of the Lateral Flow Reader.
- Select “Cancel” to stop the installation.

- Select “Next” to start the installation of the Lateral Flow Reader.
- Select “Back” to return to the previous step.
- Select “Cancel” to stop the installation.

- To change the location, where to install the Lateral Flow Reader, click “Browse” to select a folder.
- If Lateral Flow Reader should be installed for everyone using the computer, select “Everyone”, otherwise leave the pre-selected field “Just me”.
- After choosing the folder of installation, select “Next” to proceed with the installation of the Lateral Flow Reader.
- Select “Back” to return to the previous step.
- Select “Cancel” to stop the installation.
2.2 Installation process in two steps

- By selecting “Next” Lateral Flow Reader is being installed. Wait until the installation is completed and confirm installation.
- Select “Back” to return to the previous step.
- Select “Cancel” to stop the installation.

- After successful installation, the window on the left appears.
- Select “Close” to finish the first step of the installation process and proceed with the second step of the installation: The installation of the QBSoft Software.

Step 2: Installation of the QBSoft Software

The installation of QBSoft Software is necessary for measurement.
- Select “Next” to start the second installation step. Installation of QBSoft Software will start automatically. Repeat the same installation steps also with the QBSoft Software Setup Wizard to complete the installation process.
- Select “Close” to stop the installation of the QBSoft Software.
CHAPTER 3: RUNNING QUANTUM BLUE® READER WITH QB SOFT

3.1 Connecting the Quantum Blue® Reader

Connect the Quantum Blue® Reader to the PC via USB cable.

3.2 Starting Quantum Blue® Reader

- Press the ENTER (on Fig. 1, No. 5) button of Quantum Blue® Reader for three seconds to start the reader. Wait for completion of automatic self-test and self-calibration.
- Start QBSoft Software by double-clicking the QBSoft icon.

Fig. 1: Quantum Blue® Reader
CHAPTER 3: RUNNING QUANTUM BLUE® READER WITH QBSOFT

3.3 Menu Bar

The menu bar contains three menu groups, “File”, “Tools” and “Info”.

File

- Choose “Connect” to establish connection with the Quantum Blue® Reader.
- Choose “Select Port” if the QBSoft does not automatically choose the correct port.
- Choose “Disconnect” to close the connection between QBSoft and the Quantum Blue® Reader.

Tools

- Choose “Language” to select the language setting for the entire user interface of the QBSoft. After having chosen the required language, the QBSoft Software must be closed by clicking on the [x] symbol and re-started again.

Info

- Choose “System Info” to display informations about the QBSoft Software and the Quantum Blue® Reader. Note that clicking on “Copy” copies the information to the Windows® Clipboard.
- Choose “About” to display information about the QBSoft Software ID, software version and manufacturer.
### 3.4 Measurement

Click on “Measurement” (Fig. 2, No. 1) to perform a test run using the QBSoft Software. This function allows the user to select a Test Method stored on the Quantum Blue® Reader and to scan a test cassette.

The system is ready for measurement, if the status bar at the bottom of the screen shows “Connected” (Fig. 2, No. 2), “Drawer Closed” (Fig. 2, No. 3) and “Ready” (Fig. 2, No. 4). Also displayed in the status bar is the memory status of the Quantum Blue® Reader. This example shows that 79 test results are currently stored in the memory of the reader (Fig.2, No.5).

![Measurement screen](image-url)
3.4 Measurement

This section describes the use of Quantum Blue® Reader in combination with QBSoft Software. If Quantum Blue® Reader is operated without a computer, please refer to the Quantum Blue® Reader User Manual.

In order to start measuring, make sure the connection is established, indicated by the green square in the lower left corner of the window (Fig. 4, No. 1).

Place the RFID card on top of the reader (Fig. 3) until the device has read the information on the RFID card. The “Info” display will confirm the successful reading of the RFID card (Fig. 4, No. 2). The Test Method (Fig. 4, No. 3) will be automatically selected based on the information on the RFID card.
3.4 Measurement

The user has to enter a Patient ID and select a User ID before scanning of the Test Cassette can be started. Additionally, the user can enter Expiry Date information of the test (cassette) and add some comments.

The user-accessible and / or –editable functions are:

The drop-down list box “Method” displays the Test Methods which are stored on the Quantum Blue® Reader. Select the Test Method to be run.

Reading of RFID card automatically selects the respective test method (see respective instruction for use of the tests).

The user-editable text box “Patient ID” is used to add a Patient ID to the results.

The drop-down list box “User” displays the Users who are registered on the Quantum Blue® Reader. Select the corresponding User ID. Manage User IDs under section 3.9.

The user-editable text box “Exp. Date” allows to add the Expiration Date of the Test Cassette to the results.

The user-editable text box “Comment” is used to add comments to the results.

Start the test measurement (scanning process) on Quantum Blue® Reader with the QBSoft Software. During the measurement the function of the “Start’ button changes to a “Stop” function, so that the scanning (and incubation) process can be interrupted at any time. Note that the “Start” button is enabled only when all of the user entry items (at least the Method, Patient ID and User ID) are selected.

The grey “Info” box describes the current status of the Quantum Blue® Reader while a test run (measurement) is performed.
3.5 Result Display

After completion of the measurement detailed results, the instrument settings including the test lot, the operator (user), etc are displayed in a printable test report as shown in Fig. 5:

1) Clicking the “Print” button allows the printing of the detailed results on the default Windows® printer.
2) If you would like to continue with the measurement repeat steps according to the chapter 3.4.
3) The detailed test results are listed in result tables as shown in Fig. 6 and 7. These result tables are used to view, store, up/download, print and manage test results saved either on the Quantum Blue® Reader or in the PC Backup (see chapters 3.6 and 3.7).
4) Manage User IDs and Test Methods (see chapters 3.8 and 3.9).
3.6 Results on device (Quantum Blue® Reader)

The table in Fig. 6 displays the results which are stored on the Quantum Blue® Reader. By choosing the item “On Device” (Fig. 6) and clicking the button “Load Results from Device” (Fig. 6, No. 1) the results are displayed in the table (Fig. 6):

1) Load all results from the Quantum Blue® Reader
2) Unselect all results in the table / Select all results in the table
3) Delete selected results from the Quantum Blue® Reader
4) Save selected results in the PC Backup* / Save selected results into a folder of choice
5) Print selected results with the default Windows® printer
6) Save selected results as a CSV file

* Selected results will be saved into “C:\Dokuments and Settings\All Users\Application Data\LFSuite\ Backup” or “C:\ProgramData\LFSuite\Backup” or into “C:\...\LFSuite\ Backup” (the exact location depends on the Windows® operating system version and your personal computer settings).

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Fig. 6: Result screen
3.7 Results in the PC Backup

The table shown in Fig. 7 displays the results which are stored in the PC Backup folder. By choosing the item “In PC Backup” the results stored in the backup folder are automatically displayed. As long as the result files are not deleted from the PC Backup, they remain stored and will be displayed each time the item “In PC Backup” is selected:

1) Load results from PC Backup
2) Unselect all results in the table / Select all results in the table
3) Delete selected results in the PC Backup folder*
4) Save selected results into a folder of choice
5) Print selected results with the default Windows® printer
6) Save selected results as a CSV file

* Selected results will be saved into "C:\Dokuments and Settings\All Users\Application Data\LFSuite\Backup" or "C:\ProgramData\LFSuite\Backup" or into “C:\...\LFSuite\Backup” (the exact location depends on the Windows® operating system version and your personal computer settings).

Fig. 7: Result screen
3.8 Manage Test Methods

The function "Manage Test Methods" is used for the administration of the Test Methods stored on the Quantum Blue® Reader. These methods can be transferred to and uploaded from the Quantum Blue® Reader.

See Fig. 8:

1) Move the selected method upwards / downwards in the list
2) Delete the selected method from the list
3) Add a method file to the list from a PC folder
4) Save a method from the list as a file in a folder on the PC
5) Save methods to device / Load methods from device

Note: All currently stored methods will be overwritten while saving a fresh list of methods! If you want to add just ONE new method to the existing methods on the Quantum Blue® Reader, first load all methods from the device then add the new method to a free space (line) in the method list, and finally save the method list containing all methods to the device again.

Fig. 8: Manage Test Methods
3.9 Manage User IDs

The User IDs can be transferred to and uploaded from the Quantum Blue® Reader.

See Fig. 9:

1) Editable User ID table. Each User ID can hold up to 10 characters.
2) Move the selected User ID up / downwards in the list
3) Delete the selected User ID from the list
4) Save the entire list of all User IDs to the device
5) Load the entire list of all User IDs from the device

Note: All currently stored User IDs will be overwritten while saving a fresh list of User IDs! If you want to add just ONE new User ID to the existing Users on the Quantum Blue® Reader, first load all User IDs from the device then add the new User ID to a free space (line) in the users list, and finally save the users list containing all User IDs to the device again.

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Fig. 9: Manage User IDs
4.1 Uninstall QBSoft Software

The uninstallation of the QBSoft Software is very simple. The software can be uninstalled in a usual manner via the system control of the Windows®.

These procedure depends on your Windows® version. Please refer to the respective instructions.
BÜHLMANN products are subject to the quality standards within the quality management system according to ISO 9001 and ISO 13485.
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