GeneXpert Software
4.4 version
Start the Windows Operating System (Windows XP - 1st generation)

1. Switch on the GeneXpert®: a small blue light will appear at the front panel of the system

2. Switch on the Computer

3. Open the Windows XP session: Username: **Cepheid**  
   Password: **cphd**
Start the Windows Operating System (Windows 7 - 2nd generation)

1. Switch on the GeneXpert®: a small blue light will appear at the front panel of the system
2. Switch on the Computer
3. Open the Windows 7 session:
   Select the Username **Cepheid** and Type the password: **cphd**
4. Please wait a little until the GeneXpert DX software starts automatically. When you will start the program, the question “Do you want to perform database management task” will appear. Click on NO when you begin your working day.

5. In the Check Status screen, verify that all modules are available. (If modules are not available, please refer to chapter 11 of the Operator Manual and contact Cepheid technical support.)
Prepare your system for the routine use

In case the software was closed (computer still opened), to reopen it, double-click on the «GeneXpert DX» on the desktop and follow steps 4 and 5 (page 3)
Create an Administrator Account (“Admin”)
Create an Administrator Account ("Admin")

1. Select Setup → User administration

2. Click on ("Add")
Create an Administrator Access ("Admin")

1. Enter your Username and Password

2. Choose the User type: "Admin"

3. Click on "OK"
Create a Basic Account
Create a Basic Account

Define the persons in the lab that will have limited access to the software. Can be more than one Basic account per system.

1. Select Setup → User administration

2. Click on (“Add”)
Create an Basic Account ("Basic")

1. Enter your Username and Password

2. Choose the User type: "Basic"

3. Click on "OK"

Remarks: The basic access will only be able to see the results without the graphics.
Create a test
Create a test

1. Click on CREATE TEST

2. A dialogue box will appear: Please scan cartridge barcode

3. Press the yellow button of the barcode scanner and scan the cartridge
Create a test

Once done, the below screen will appear

4. Fill in the Patient ID if available

5. Fill in the Sample ID

6. The module will be automatically selected DO NOT CHANGE IT

7. Click on Start Test

8. A green light will blink from a given module: Open the door and place the cartridge

9. Fully close the module door, the test starts immediately
Wait 2 hour to see your result
Routine use

Manual Entry of the cartridge barcode
Manual Entry of the cartridge barcode

If the barcode scanner is not working at that moment you can enter the cartridge barcode manually

1. Click on «Create Test»

2. A dialogue box will appear: Please scan cartridge barcode: Click on MANUAL ENTRY

3. Type manually the 2 line numbers of the cartridges – see the picture

4. Wait 2 hours to see your result

!!! In case of barcode reader failure while using a new lot, this action cannot be completed. Please contact Cepheid technical support to collect the Lot Specific Parameter.

Enter the number without space!!
Create a test

Once done, the below screen will appear

4. Fill in the Patient ID if available

5. Fill in the Sample ID

6. The module will be automatically selected
   DO NOT CHANGE IT

7. Click on Start Test

8. A green light will blink from a given module: Open the door and place the cartridge

9. Fully close the module door, the test starts immediately
   Wait 2 hours to see your result
How to stop a test and why
How to stop a test and why

In case your cartridge(s) was(were) not properly prepared, you might have to stop the test to avoid waist of time

1. Click “Stop Test”

2. Select the module(s) that need to be stopped, by marking the tickbox

3. After selecting click “Stop”
How to stop a test and why

4. Confirm your choice by clicking “Yes”

5. You will see the stopped test’s details in Check Status section
VIEW RESULTS
Click on “VIEW RESULTS”
To visualize one particular result, click on «VIEW TEST»
View results

Double click on the test you want to see

<table>
<thead>
<tr>
<th>Patient ID</th>
<th>Sample ID</th>
<th>Mod Name</th>
<th>User</th>
<th>Result</th>
<th>Assay</th>
<th>Status</th>
<th>Error Status</th>
<th>Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam 2</td>
<td>A4</td>
<td>&lt;None&gt;</td>
<td></td>
<td>MTB NOT DETECT</td>
<td>Xpert MTB-RIF 03</td>
<td>Done</td>
<td>OK</td>
<td>19/09/12 16:16:13</td>
</tr>
<tr>
<td>JOSE ALMEIDA</td>
<td>A3</td>
<td>&lt;None&gt;</td>
<td></td>
<td>MTB NOT DETECT</td>
<td>Xpert MTB-RIF 03</td>
<td>Done</td>
<td>OK</td>
<td>19/09/12 16:13:44</td>
</tr>
<tr>
<td>South Sudan 1</td>
<td>A2</td>
<td>&lt;None&gt;</td>
<td></td>
<td>MTB NOT DETECT</td>
<td>Xpert MTB-RIF 03</td>
<td>Done</td>
<td>OK</td>
<td>19/09/12 16:12:37</td>
</tr>
<tr>
<td>VNam</td>
<td>A1</td>
<td>&lt;None&gt;</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF 03</td>
<td>Done</td>
<td>OK</td>
<td>19/09/12 16:10:08</td>
</tr>
<tr>
<td>724</td>
<td>A3</td>
<td>&lt;None&gt;</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF 03</td>
<td>Done</td>
<td>OK</td>
<td>19/09/12 08:21:15</td>
</tr>
<tr>
<td>751</td>
<td>A2</td>
<td>&lt;None&gt;</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF 03</td>
<td>Done</td>
<td>OK</td>
<td>19/09/12 08:17:06</td>
</tr>
<tr>
<td>715</td>
<td>A4</td>
<td>&lt;None&gt;</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF 03</td>
<td>Done</td>
<td>OK</td>
<td>19/09/12 08:13:49</td>
</tr>
<tr>
<td>742Rc</td>
<td>A1</td>
<td>Administrador</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF 03</td>
<td>Done</td>
<td>OK</td>
<td>19/09/12 07:29:01</td>
</tr>
<tr>
<td>Rif mutant. Test 2</td>
<td>A4</td>
<td>Administrador</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF Assay</td>
<td>Done</td>
<td>OK</td>
<td>19/09/12 07:23:58</td>
</tr>
<tr>
<td>Rif mutant. Test 1</td>
<td>A3</td>
<td>Administrador</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF Assay</td>
<td>Done</td>
<td>OK</td>
<td>19/09/12 07:15:00</td>
</tr>
<tr>
<td>Rif WT. Test 2</td>
<td>A2</td>
<td>Administrador</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF Assay</td>
<td>Done</td>
<td>OK</td>
<td>19/09/12 07:14:27</td>
</tr>
<tr>
<td>Rif WT. Test 1</td>
<td>A1</td>
<td>Administrador</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF Assay</td>
<td>Done</td>
<td>OK</td>
<td>19/09/12 07:13:33</td>
</tr>
<tr>
<td>Spurum matrix. test</td>
<td>A4</td>
<td>Administrador</td>
<td></td>
<td>MTB NOT DETECT</td>
<td>Xpert MTB-RIF Assay</td>
<td>Done</td>
<td>OK</td>
<td>15/05/12 01:16:26</td>
</tr>
<tr>
<td>M Rif mutant. Test 3</td>
<td>A3</td>
<td>Administrador</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF Assay</td>
<td>Done</td>
<td>OK</td>
<td>14/05/12 04:45:56</td>
</tr>
<tr>
<td>M Rif WT. Test 4</td>
<td>A2</td>
<td>Administrador</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF Assay</td>
<td>Done</td>
<td>OK</td>
<td>14/05/12 04:45:09</td>
</tr>
<tr>
<td>M Rif WT. Test 3</td>
<td>A1</td>
<td>Administrador</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF Assay</td>
<td>Done</td>
<td>OK</td>
<td>14/05/12 04:44:23</td>
</tr>
<tr>
<td>M Rif WT. Test 6</td>
<td>A4</td>
<td>Administrador</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF Assay</td>
<td>Done</td>
<td>OK</td>
<td>11/05/12 03:37:18</td>
</tr>
<tr>
<td>M Rif WT. Test 5</td>
<td>A3</td>
<td>Administrador</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF Assay</td>
<td>Done</td>
<td>OK</td>
<td>11/05/12 03:36:05</td>
</tr>
<tr>
<td>M Rif mutant. Test 1</td>
<td>A2</td>
<td>Administrador</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF Assay</td>
<td>Done</td>
<td>OK</td>
<td>11/05/12 03:35:17</td>
</tr>
<tr>
<td>M Rif WT. Test 2</td>
<td>A1</td>
<td>Administrador</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF Assay</td>
<td>Done</td>
<td>OK</td>
<td>11/05/12 03:34:48</td>
</tr>
<tr>
<td>M Rif WT. Test 7</td>
<td>A4</td>
<td>Administrador</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF Assay</td>
<td>Done</td>
<td>OK</td>
<td>10/05/12 01:17:20</td>
</tr>
<tr>
<td>M Rif WT. Test 1</td>
<td>A3</td>
<td>Administrador</td>
<td></td>
<td>MTB DETECT</td>
<td>Xpert MTB-RIF Assay</td>
<td>Done</td>
<td>OK</td>
<td>10/05/12 01:06:28</td>
</tr>
</tbody>
</table>
View results

- Information about the test
- Interpretation of the Result
- Real-Time PCR curves
How to edit test related information
Edit test related info sample id

If necessary you can edit the test related information and notes after the test is finished or while it’s running.

1. All the white fields in this section are editable.

2. After editing click “Save Changes”.

Test Result

- Assay Name: Xpert MTB-RIF Assay G4
- Test Result: MTB DETECTED HIGH; RIF Resistance DETECTED

For In Vitro Diagnostic Use Only.
Edit test related info sample id

3. Click “Yes” to confirm the changes

4. The history of the changed information is saved under the tab “History”
Generate a result report in pdf
Generate a result report in pdf format

1. Click on “VIEW RESULT”

2. Click on "REPORT"
How to generate a pdf report

3. Select the result you may want to visualize in pdf

4. Click on “Preview pdf” for immediate visualization
How to generate specimen and patient reports in pdf
How to generate specimen and patient reports in pdf

Specimen Report

1. Click Reports -> Specimen Report

2. Fill in the Sample ID

3. “Preview PDF” will open the pdf file

3a. “Generate Report File” will save the report in GeneXpert Folder -> Report
How to generate specimen and patient reports in pdf

1. Click Reports -> Patient Report

2. Fill in the Patient ID

3. “Preview PDF” will open the pdf file

3a. “Generate Report File” will save the report in GeneXpert Folder -> Report
How to print automatically test report
How to print automatically test report

- Connect and install your printer
- You can print every report once test is finished

1. Click on “Setup”, then “System configuration”

2. Select the appropriate option “Print Test Report At End of Test”

3. Click “OK”
Data management tasks
**Difference between Archive/Backup**

The **Archive** contains only the raw results
- *the technical Support will request you that file in case of complaint*
- *can only be retrieved with GeneXpert DX software*
- *Save the archive every week on a CD or RW-CD*
- *extension is .gxx*

The **Backup** contains all information about the system (Log files, errors, raw results, definition of assays)
- *can be used to restore the data on the GeneXpert DX software in case of computer failure*
- *backup all your data every month on a CD or RW-CD*
- *extension is .zip*
How to archive results
How to archive results

1. Click “Data Management”

2. Click “Archive test”

3. Choose the tests that need to be archived
   Or “Select All”

4. You can choose to Delete Archived Tests

It means that the archived tests will no longer appear in the GxDx Software.
How to archive results

5. In the next dialog box click “Proceed”

The files will be saved in the folder “Export”.
In the file name you will see the date of archiving.

6. Click on “SAVE”

7. Click “OK”

It is highly advised to save (write) your archived data on a RW-CD.
How to retrieve results
How to retrieve results

1. Click “Data Management” and Click “Retrieve Test”

2. Select the file you want to retrieve

3. Click on “Open”
How to retrieve results

4. Select the test you may want to retrieve (or Select All)

5. Click OK

6. Click “Proceed”

7. Нажмите OK
How to backup the data
At the end of the working day while closing the GeneXpert software, you will have the following screen:

1. Click on “YES”
2. Click on “Database Backup”
3. Click on “Proceed”
How to Create a Backup

The software will create a zip file with all the results.

The file is saved on the desktop, in the GeneXpert folder -> Backup section.

4. Click on “SAVE”

5. Click “OK”

The zip file cannot be unzipped.
How to restore data from a backup
How to restore data

• In case of computer failure you might have to restore your data after reinstallation of all system.

By closing the GeneXpert software, you will have the following screen:

1. Click on “YES”
2. Click on “Database Restore”
3. Click on “Proceed”
A warning message tells you that current database will be lost

Click « Proceed » to continue

Select the database to be restored and Click « Open » to continue
A dialog box asks you if you want to create a backup of the current database. Click «Proceed» to create the backup. Click «Cancel» to continue Backup Restore.
Import the Assay Definition File (ADF)
In case of test update, you have to import the ADF on the software. Before using this lot, load it from the CD provided with each kit.

1. Insert the CD on the Computer CD drive
2. Click “DEFINE ASSAYS”
3. Click “IMPORT”
4. Find the CD
Import the Assay Definition File (ADF)

4. Open the folder “GeneXpert-Infinity Systems”

5. Choose the “Xpert MTB-RIF.gxa” file

6. Click on “IMPORT”

!!! ATTENTION!!!
The name of the file may vary from version to version. In any case, load the file with the .gxa extension.
Now you can work with the new Assay Definition File

*It will be showed here...*
How to copy/paste data to excel
How to copy/paste data to excel

1. Click “Data Management”

2. Click “Archive test”

3. Put the mouse cursor on first test click and hold the left mouse button
   Drag the mouse down until the last line

4. While the lines marked press Cltr + C at the same time on your keyboard
How to copy/paste data to excel

1. Open MS Excel by clicking Start -> All Programs -> Microsoft Office -> Microsoft Excel 2010

2. Click the right mouse button and in the menu and choose "Match destination Formatting" → click on it – see below

3. The chosen results will be pasted in excel sheet
For information on GeneXpert DX Software

- GeneXpert User Manual

- FTP server: ftp://hbdc:Crasa7Uc@ftp.caplaser.net
  Copy and paste the link in Windows Explorer (not Internet Explorer)