



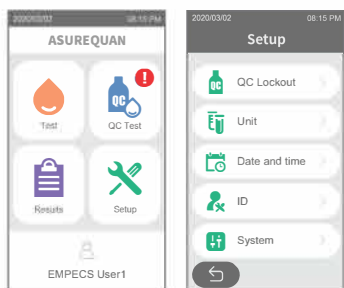
ASUREQUAN Analyzer Quick Guide



EMPECS Medical Device Co., Ltd.

ENG

System Configuration

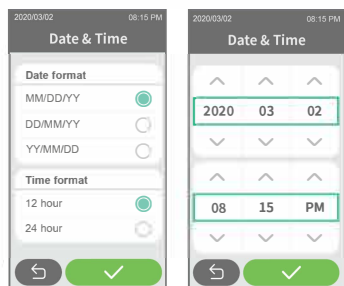


Follow the instructions to access the setup menu and set the configuration according to your needs before using the Analyzer.

(See pages 20~30 of the User Manual for more details)

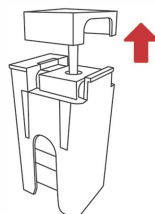
1. Touch "Setup" button in the main menu.
2. Select one menu you need to access.

(Example) Date and Time Setup

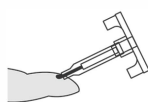


Touch "Date and Time" button in the setup menu to set a date and time

3. Select icon for date and time format you want. Touch button to confirm.
4. Use and buttons to adjust the date and time. Touch button to confirm.



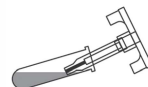
2. Pull the sampling device straight up to remove the sampling device from the cartridge body.



3. Collect sample

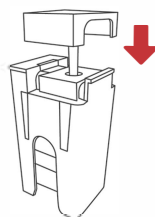
- (1) Capillary blood sample :

Put the capillary tube tip to the surface of the blood drop. The capillary tube will be filled automatically.



- (2) Venous blood sample, control solution sample :

Put the capillary tube tip to the surface of the sample. The capillary tube will be filled automatically.



4. Immediately insert the sampling device into the cartridge body.

Once a sample is collected into the capillary tube tip, insert the Test Cartridge into the cartridge chamber for analysis as shortly as possible.

Sample Collection for the test

The patient or control sample is particular for each test.

Do not use the Test Cartridge if it is dropped on the floor or bench after collecting the sample.

1. Shake the Test Cartridge

Before collecting sample, gently shake the Test Cartridge up and down 3~4 times.

NOTE Correct sampling (see page 36 of the User Manual)



(A) Correct (O)



(B) Excessive sample (X)

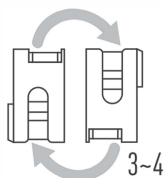


(C) Insufficient sample (X)

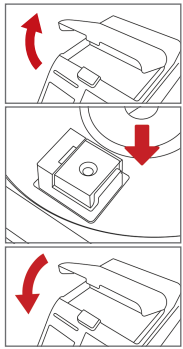


(D) Air bubble (X)

NOTE Read the **Package Insert** that comes with each ASUREQUAN HbA1c (Test Cartridge kit) for more information.



Insert Test Cartridge into the Cartridge Chamber to start



1. Press the lid open button to open the lid.
2. Insert the Test Cartridge into the Cartridge chamber. Make sure that the Test Cartridge is correctly placed in the cartridge chamber.
3. Close the lid manually.

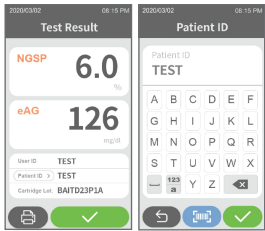
Close the lid immediately for analysis. If the lid is not closed within 5 minutes, an error code appears.



4. Touch **“Start”** button on the screen and the test starts automatically. The progress bar is displayed until the test is completed.

Do not open the lid during the analysis. When the lid is opened during the analysis, the test stops.

See page 37 of the User Manual for patient tests



5. After the analysis is completed, results will be displayed. Touch button to print the results.
6. If the patient ID is enabled, touch **“Patient ID”** to type patient ID. If an external barcode scanner is used, touch button and scan the barcode labels.

NOTE Patient ID cannot be input before the test is completed.

Precautions

Precautions for the Analyzer

- Place the Analyzer on a clean, flat and rigid surface.
- Make sure to reach **the ambient operating temperature (18–32°C or 64–89°F)**.
- Use your fingertip to touch the screen. Do not use pens or other sharp materials that may scratch or damage the screen.
- Empty the cartridge chamber and keep the lid closed when the Analyzer is not in use.
- If an error code appears on the screen during the analysis, please read **“Error codes and solutions”** (see pages 47–50 of the User Manual) and contact your local supplier.
- Do not move the Analyzer when the Analyzer is running.
- Do not drop or misuse the Analyzer, which may damage the calibrated optical system, electronic or other parts of the Analyzer. Always handle the Analyzer with care.

Precautions for the Test Cartridge

- Do not use Test Cartridges which have expired or are damaged.
- Do not reuse any part of the Test Cartridge.
- Do not touch or damage the optical reading area of the Test Cartridge. Hold the handle of Test Cartridge.
- Do not drop Test Cartridges. If any part of the Test Cartridge is damaged, do not use the Test Cartridge.
- Use gloves when collecting blood samples or control solution.
- Follow the indicated **storage temperature (2–8°C or 36–46°F)**.
- Allow the Test Cartridges to reach the operating room temperature for at least 30 minutes before use.
- Avoid direct sunlight during the storage and measurement.
- Do not eat silica gel and keep away from children.

Troubleshooting

Error codes and solutions

Human/operator's Errors

Code	Cause	Solutions
101	- No sample inserted - Serum, or plasma sample used in the patient test mode - Hemoglobin is not within the valid range (7g/dL~20g/dL)	Ensure that proper sample material and correct test mode are used. Repeat the test with a new sample and a new Test Cartridge.
102	Different brand of Test Cartridge inserted	Consult the Package Insert of ASUREQUAN HbA1c(Test Cartridge kit). Insert only ASUREQUAN HbA1c(Test Cartridge kit) instead of a different brand of product and repeat the test.
103	Test Cartridge expired	Check the expiry date of the Test Cartridge kit. Repeat the test using a new sample and a new lot of Test Cartridge.
104	- Used Test Cartridge inserted - No Test Cartridge in the chamber - Test Cartridge barcode label unreadable (dirty or damaged) - Test Cartridge positioning wrong in the chamber - Test Cartridge used in the self-test or IQC mode	Check the cartridge chamber status. Repeat the test in the proper test mode.
105	Ambient operating temperature too high	Ensure that the operating temperature is within the recommended range. Restart the Analyzer or repeat the test.
106	Ambient operating temperature too low	Ensure that the operating temperature is within the recommended range. Restart the Analyzer or repeat the test.
107	The lid opened	Close the lid and repeat the test.
108	More than 20 seconds passed without touching “Start” button after inserting Test Cartridge in the chamber and closing the lid.	Repeat the test with a new sample and a new Test Cartridge. Touch “Start” button immediately after closing the lid.

Analyzer's Errors

Code	Cause	Solutions
301	Rotor moving malfunction	Restart the Analyzer or repeat the test. If the problem continues, contact your local supplier.
302	Press moving malfunction	Restart the Analyzer or repeat the test. If the problem continues, contact your local supplier.
303	- Heating temperature too high - Heating temperature too low - Heater control system error	Restart the Analyzer after a while. If the problem continues, contact your local supplier.
304	LED intensity drift failed	Restart the Analyzer or repeat the test. If the problem continues, contact your local supplier.
305	LED light intensity malfunction	Restart the Analyzer or repeat the test. If the problem continues, contact your local supplier.
306	Control verification aborted.	Run a new control test to reset QC lockout status.
307	- Printer hardware failed - No paper	Restart the Analyzer. Insert paper roll. If the problem continues, contact your local supplier.
308	USB connection failed	Restart the Analyzer. Re-insert a USB flash driver. If the problem continues, contact your local supplier.
309	Clock function hardware failed	Restart the Analyzer. If the problem continues, contact your local supplier.
310	Temperature sensor hardware failed	Restart the Analyzer. If the problem continues, contact your local supplier.