IVD

markB Analyzer(Model No.: MB-100) User Manual

markB Analyzer

Immunoassay Analyzer

Thank you for purchasing markB Analyzer.
Please read the user manual carefully for adequate use. Please keep this manual carefully.

markB Analyzer is an in-vitro diagnostic medical device that can perform biomarker immunoassay with a small amount of blood.
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Chapter 1. Understanding markB Analyzer

1.1. Intended use

markB Analyzer is designed for markB test cartridges which the in vitro quantitative measurement of the biomarkers contained in fresh capillary whole blood, venous whole blood in heparinized tubes, heparinized plasma, and serum.

1.2. Principle

- markB Analyzer is a portable POCT(Point of Care Testing) device.
- markB Analyzer uses magnetic force-based electrochemical immunoassays to quantify single or multiple analytes from electrochemical signals generated in the markB Test cartridge, a disposable in vitro diagnostic device.
- The markB Analyzer moves the magnetic nanoprobes of the markB test cartridge to induce an antigen-antibody reaction with the magnetic field generated from the magnet mounted inside, and removes the unreacted magnetic nanoprobe.
- markB Analyzer measures the concentration of antigen by electrochemical signals from magnetic nanoprobes that have completed the antigen-antibody binding reaction.
- markB Analyzer can send measurement results to the specified server with wireless connection.

1.3. Precautions before use

- For proper use, please read this manual thoroughly before using the product.
- markB Analyzer should be used for in vitro diagnostics.
- Check the components before opening markB Analyzer for the first time.
- Please read the instruction manual carefully before starting the measurement.
- An AC power connection is required to drive and charge the markB Analyzer. Please make sure that the power specifications at the place of use match the input power specifications of this product.
- If the internal temperature rises while using markB Analyzer, the cooling fan in the ventilation hole will operate.
- A minimum of 10 cm (4 inch) clearance in the direction of the air vents is required for installation when using the appliance.
- Be careful not to let other substances enter the markB Analyzer vents.
- Metal material inside the markB Analyzer may cause malfunction or electric shock to the user.
- markB Analyzer must use markB Test cartridge.
- The markB Analyzer reads the NFC information in the test cartridge and recognizes the biomarkers that the corresponding test cartridge can measure. If it is not recognized, a software upgrade is required. Please contact your administrator or customer service center.
- If you need a detailed description of the markB test cartridge, please read the instruction manual of the test cartridge.
- If you do not intend to use markB Analyzer for a long period of time, turn off the power and disconnect the adapter.
- Do not handle or store liquids when using markB Analyzer.
- Do not use or store markB Analyzer near fire.
- Do not expose the markB Analyzer to high temperature or high humidity, rain, dust, or many other places.
- Do not strike, step on or drop the markB Analyzer.
- When moving markB Analyzer, be careful not to drop it.
- Do not disassemble or modify markB Analyzer.
- Use markB Analyzer indoors.
- markB Analyzer is not a waterproof product. Do not wipe with water or touch with wet hands.
- Do not use markB Analyzer except for professional medical personnel. This instrument is designed for professional use only.
- markB Analyzer should not be used for the diagnosis, screening or neonatal examination of a specific disease. Please use it only for medical purposes.
- Please do not let markB Analyzer be in the reach of children.
- Please dispose of markB Analyzer in a safe place according to disposal regulations.

1.4. markB Components

The following components are available upon purchase of the markB Analyzer. Please make sure that all components are included as soon as you receive them. If the components are missing or damaged, contact the place of purchase.

- markB Analyzer, 1EA
- Check cartridge, 1EA
- markB User manual
- markB Quick manual

To use markB Analyzer, you need to purchase consumables and accessories sold separately. Please contact the place of purchase.

- Power adaptor
- markB Test cartridge
- markB Control solution

1.5. Symbol

markB for details of the symbol mark included in the PSA's outer packaging, external description, attachments, etc., please refer to the explanation below.

Caution

Batch code

Catalog number

Please read user manual before use.

Dispose of separate from household waste.

Manufacture date

In vitro diagnostic device

Temperature limitations during transportation

Do not reuse

Manufacturer

Expiry date

European representative

Device complies with European Medical Device Directive 98/79/EC for in vitro diagnostic medical devices.

Contains ⟨n⟩ tests

Serial number

Chapter 2. markB products

2.1. Product Description

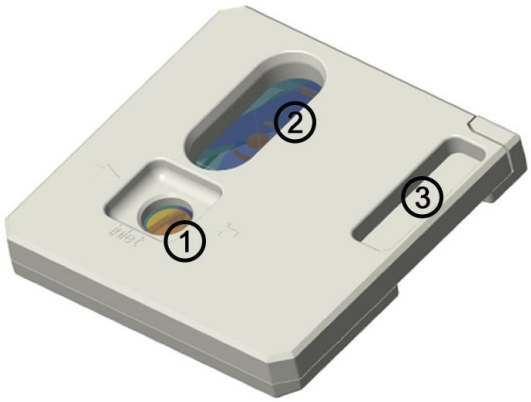
2.1.1 markB Analyzer

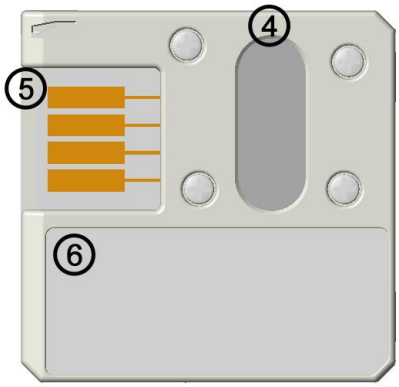
	Name	Description
①	Power button	It turns the device on or off.
②	Tray (closed)	It holds a test cartridge. Opening and closing of the tray are controlled by application.
③	Screen	It is for the user to operate the analyzer and check the result through the screen.
④	Tray	Same as ②.(Tray opened with cartridge inserted)
⑤	Fan	It is the air circulation to control the temperature inside of the analyzer.

⑥	Power connector	It allows the analyzer to be connected to the power source through an adapter for supplying power and charging the battery.
⑦	Test cartridge connector	Connections for cartridge measurement.
⑧	Cartridge recognition switch	Switch for checking cartridge insertion.
⑨	USB port	USB-A port for connection of Barcode Reader and Mobile Printer.

2.1.2 Check cartridge
MarkB check cartridge is used to assess analyzer's mechanical and electronic malfunction. Check cartridge contains alignment sensor for checking position of the top and bottom magnet in the analyzer.

[Front] [Back]





	이름	기능
①	Top magnet alignment window	The proper alignment of the top magnet is tested through this window.
②	Alignment sensor	Detects contact with magnet
③	Tray holder	It holds the cartridge to fit into the analyzer.
④	Bottom magnet alignment window	The proper alignment of the bottom magnet is tested through this window.
⑤	Electrochemical contact pad	The analyzer determines whether that top/bottom magnet is located in the proper position.
⑥	NFC Tag	Check cartridge's information is stored.

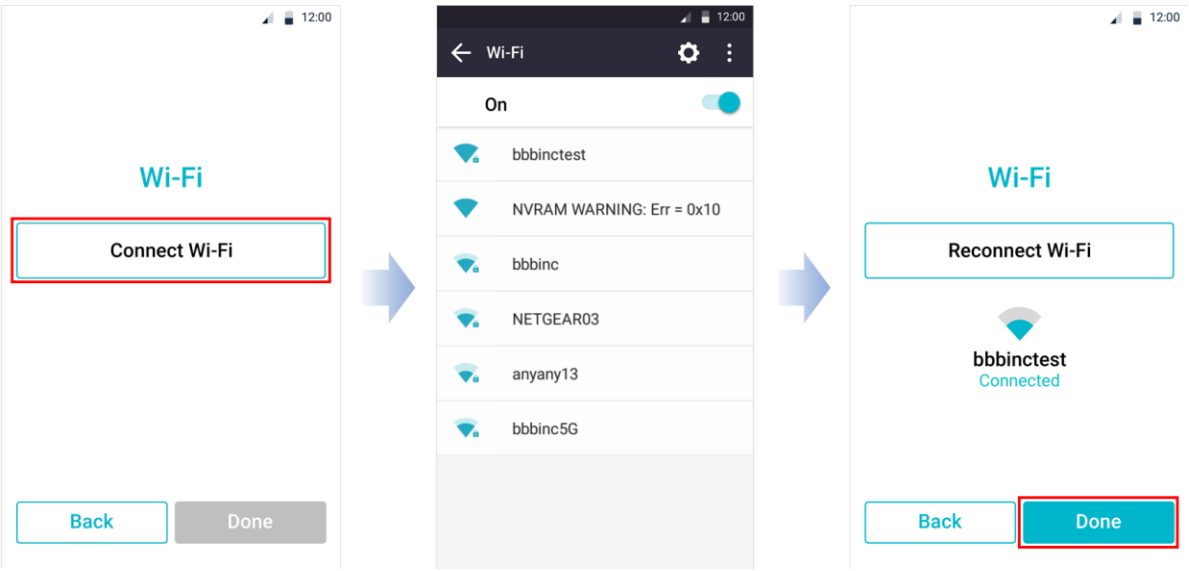
Chapter 3. How to use markB Analyzer

3.1. Initial Setting

(1) Connect the markB Analyzer's power adaptor.

(2) Power on the markB Analyzer in the direction shown in the picture.

(3) The first time you turn on markB, the Wi-Fi settings screen appears.
First, tap the Connect Wi-Fi button to turn on Wi-Fi and connect it to the Wi-Fi you want to connect to.
When connected properly, the "Done" button at the bottom of the screen is activated.



Icon	Status	Description
	Connected	Wi-Fi is connected normally.
	Requesting connection	Connecting WiFi. wait a minute please. If you do not get any response after waiting, please press the 'Reconnect Wi-Fi' button to retry the Wi-Fi connection.
	Connection Failure	The icon appears when Wi-Fi connection fails. Check the wireless connection status of Wi-Fi, or grab another Wi-Fi.
	Network not Connected	The icon appears when Wi-Fi can not be connected. Press the 'Reconnect Wi-Fi' button to connect to the Wi-Fi connection.

*Referance
- markB Analyzer requires Wi-Fi connection for initial setup.

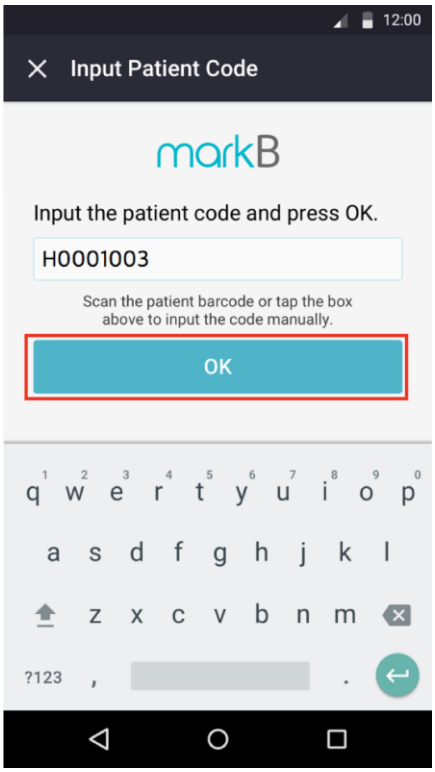
3.2 How to measure

(1) Start measurement by tap the start button.

Caution!

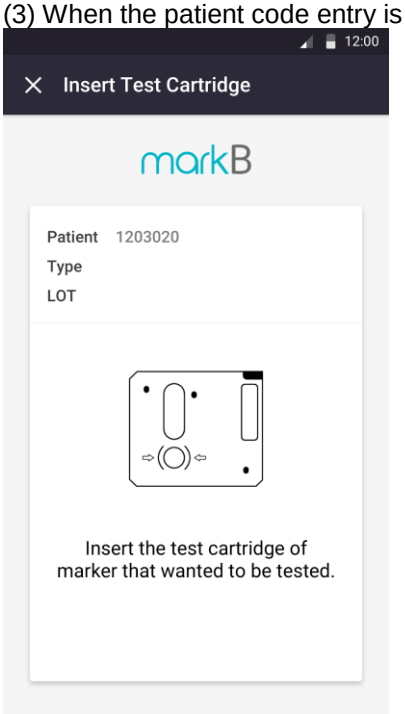
- The measurable temperature range is 18℃ ~ 28℃. Please make measurement environment and than start. It is not possible to measure out of the measurable temperature range.
- If the Battery remaining less than 15%, measurement can not be started. Please fully charge the battery and start measurement.

(2) Scan the patient code using the barcode reader or enter it directly using the keypad and press the OK button.



* Reference
-The barcode reader is an optional item.
- If you do not have a barcode reader, tap the field and enter the patient code directly on the keypad.

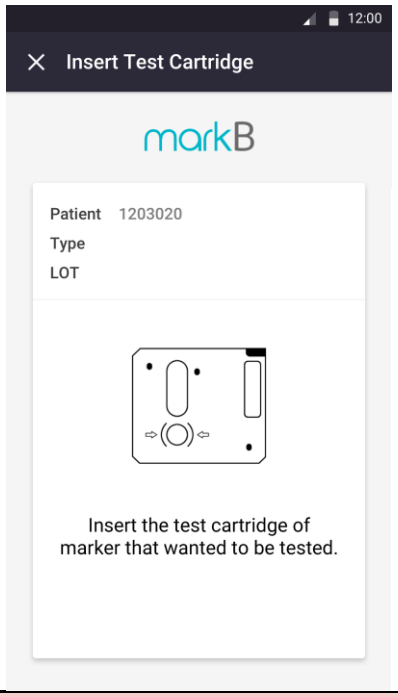
(3) When the patient code entry is completed, the tray at the bottom of the device will automatically.



Caution!

- If the tray does not come out, a popup message "Please contact system administrator" will appear. Please contact the administrator according to the popup instructions.

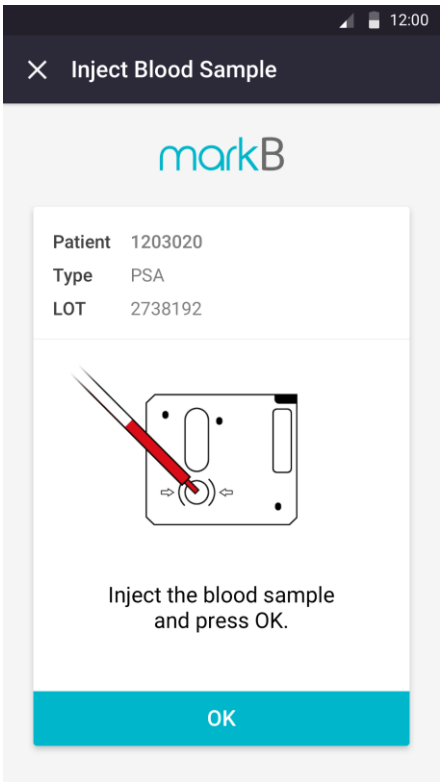
(4) Insert the cartridge of the marker you want to measure into the tray according to the instructions on the screen.



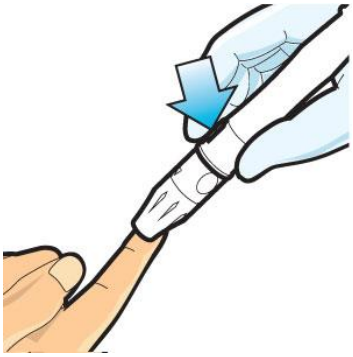
Caution!

- Please double-check that you have entered the patient code correctly before inserting the cartridge.
- Before inserting the cartridge, please make sure that the marker you want to measure is correct.
- Before inserting the cartridges, please make sure that they are not already used.
- If the NFC tag connection error occurs after inserting the cartridge, please try again with the new cartridge. If you repeatedly encounter the same problem, please contact the administrator by phone or e-mail address to resolve the problem.
- After inserting Cartridge, please stop using "Please contact the system administrator" Error pop-up and contact the administrator by phone or e-mail address to solve the problem.
- If you see the “Please contact the system administrator” Error popup after inserting the cartridge, please discontinue use and contact the administrator by phone or e-mail address.

(5) If the cartridge is correctly inserted, it automatically goes to the blood injection screen.
At this time, the name of the measurement biomarker and the LOT number read from the NFC of the test cartridge are displayed on the screen. (This screen is an example of output when the markB PSA test cartridge is inserted.) Prepare the sample for measurement.

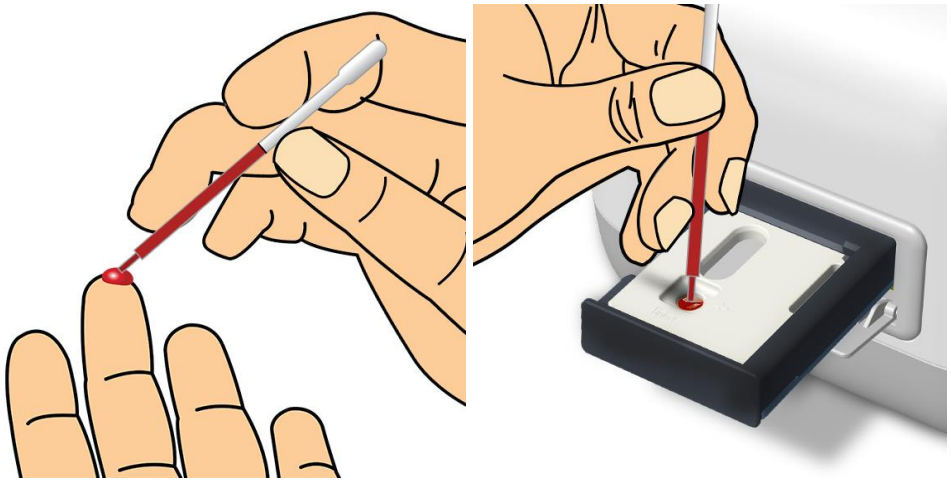


(6) Capillary whole blood is sampled using a lancing device.
* Capillary whole blood collection preparations: blood lancet, lanceter, alcohol swab



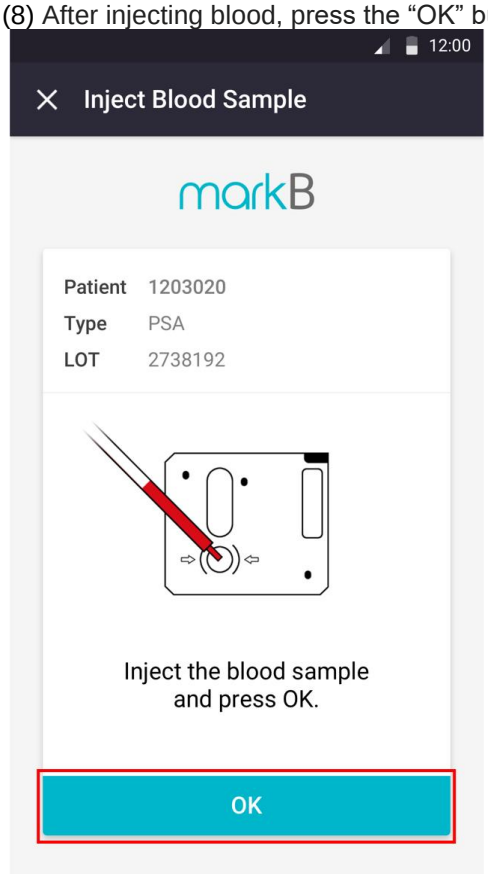
Caution!
- This procedure is necessary for capillary blood collection. For venous blood, serum, plasma, please refer to the sample collection and handling procedure of test cartridge.
- Before drawing blood, wipe hands and blood with warm water and soap, and let it dry before proceeding.
- The lancet is disposable. Do not reuse.
- Dispose of used lancet in a safe place in accordance with applicable regulations.

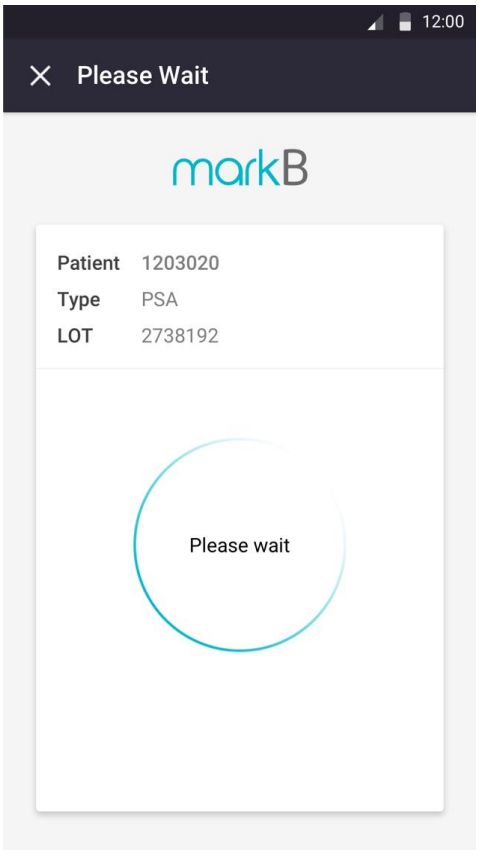
(7) Please collect blood to the capillary tube until the line.



Caution!
- This procedure is a procedure for taking capillary blood as an example. Venous blood When using whole blood, serum, or plasma, follow the instructions of the micropipette.
- Make sure that the cartridge is filled with the correct amount of blood before injecting the blood and enough blood (up to the marking of the eyedropper).
- Please inject blood within 2 minutes after inserting the cartridge.

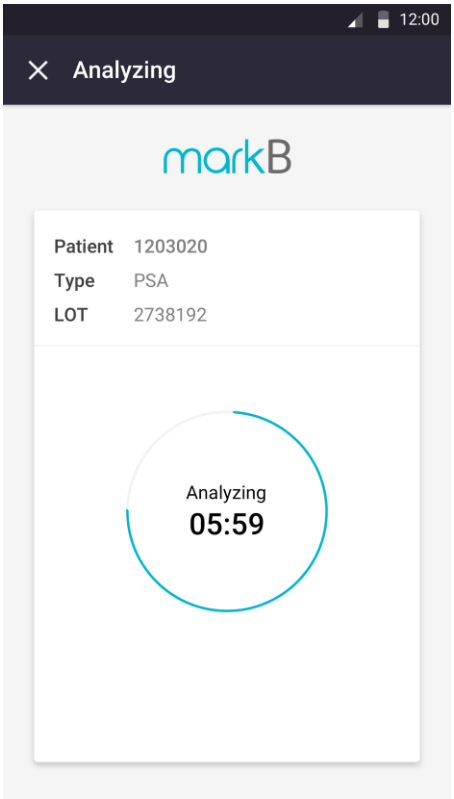
(8) After injecting blood, press the “OK” button to start measurement.





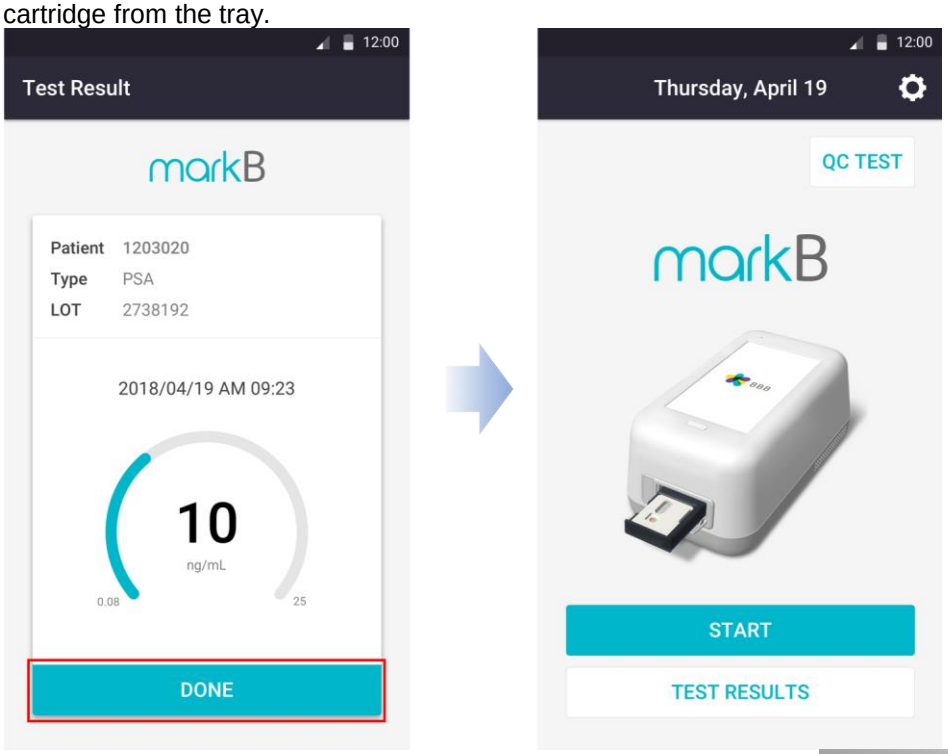
Caution!
- If the tray still does not come in 2 minutes after the blood injection is complete, please try again with the new cartridge.

(9) When preparation for measurement is completed, start blood analysis. Please wait for up to 10 minutes.

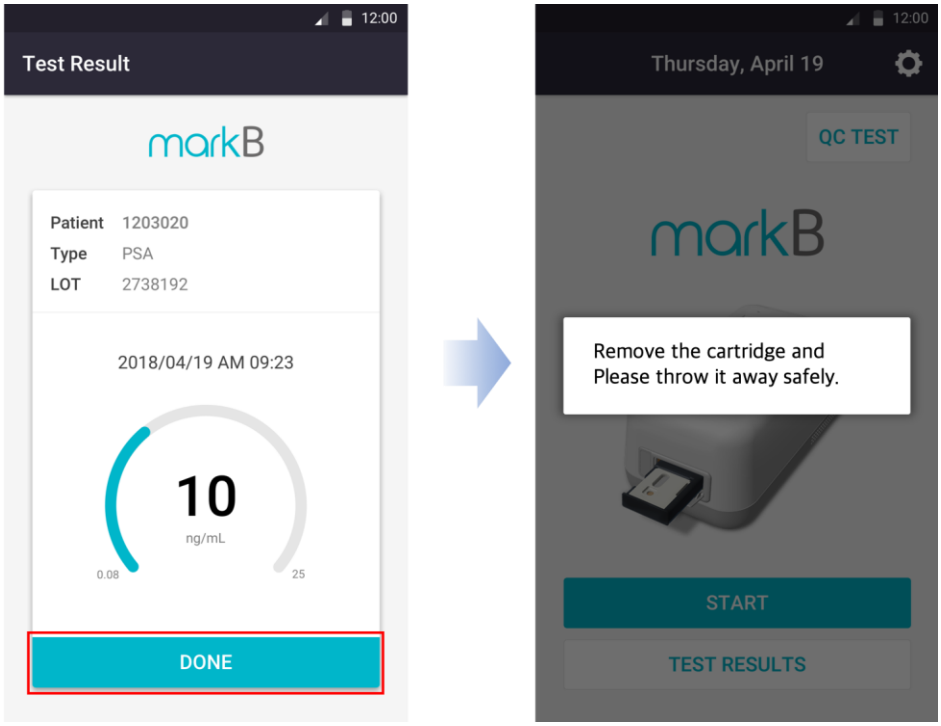


Caution!
- If there is an error during measurement or blood analysis, remove the cartridge, insert a new cartridge, and try the measurement again.

(10) When the blood analysis is completed, the result is displayed on the screen together with the patient code and the LOT number, and the tray at the bottom of the device comes out. Please remove the used cartridge from the tray.



(11) Moves to measurement start screen when tap the DONE button.



Caution!
- If you do not remove the cartridge from the tray, no new measurements are possible. Remove the cartridge from the tray.

* Reference
- This device always enables the GPS function, so the GPS data could be transmitted with the test data to the server if this device is used in the outdoor.
- You can not use GPS because it can not receive GPS signals in GPS signal shading areas such as indoors.

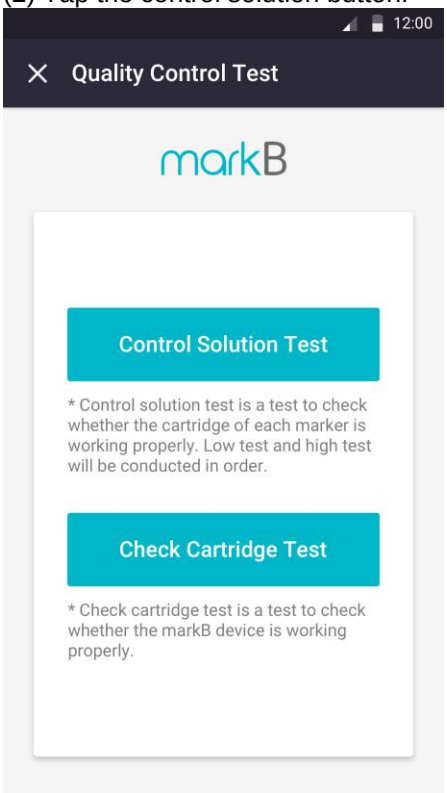
3.3. QC Test

3.3.1. Control Solution test

Checking the control solution can check that the meter and the measurement cartridge are working properly. The low / high test will proceed in order when checking the markers to be measured.

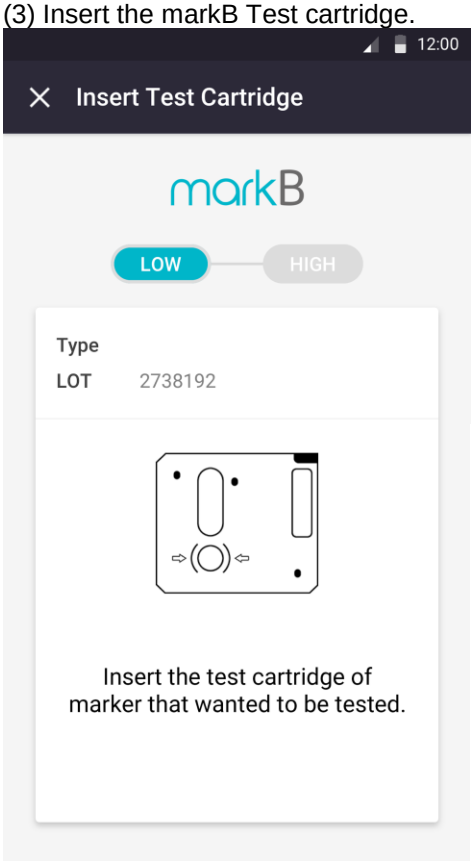
(1) From the measurement start screen, tap the ‘QC test’ button in the upper right corner.

(2) Tap the control solution button.

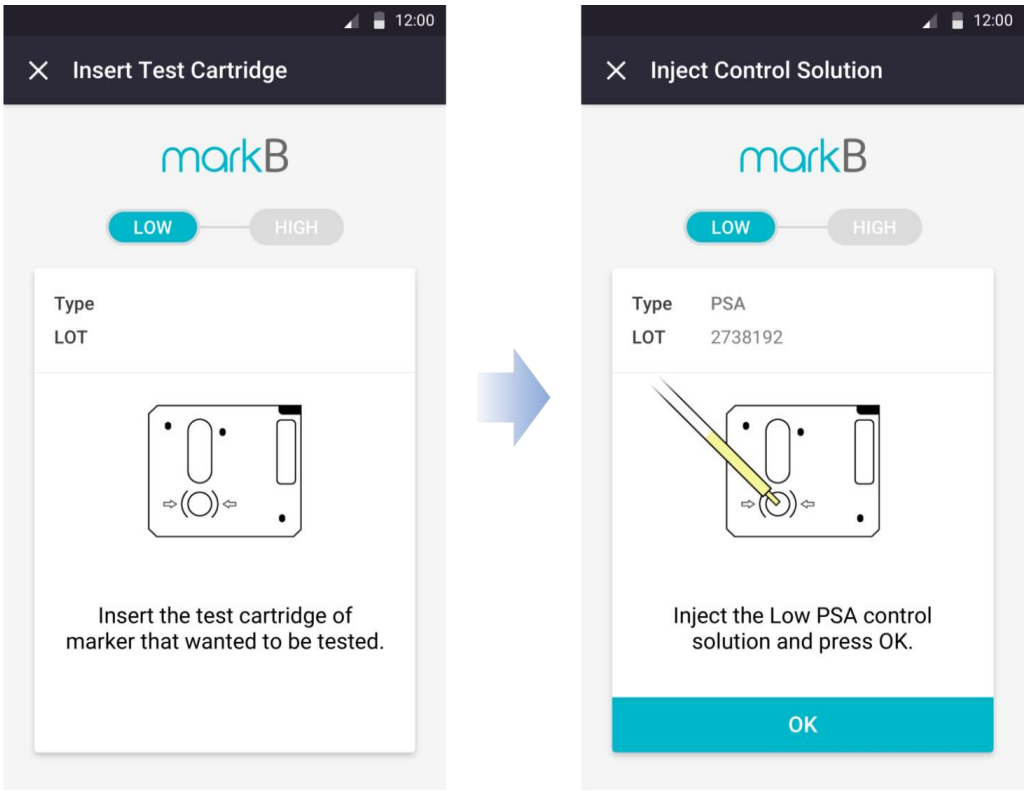


*Reference
- When using a new meter, when the meter is dropped, it is recommended that try Control solution test when the result is very different from what you expected.
- Before proceeding with the test, check the low and high control solution test sections for each parameter. If you use an invalid control solution, an error screen is displayed.

(3) Insert the markB Test cartridge.

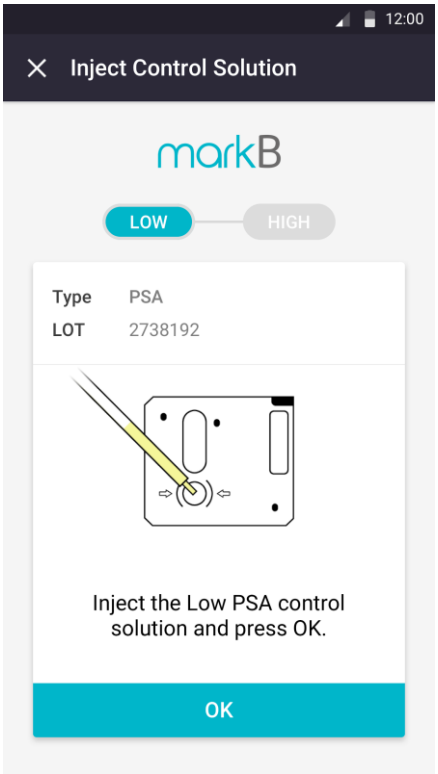


(4) When the validity check of the cartridge is completed normally, the screen of low control solution injection step occurs automatically.
Make sure that the marker on the cartridge inserted is correct.

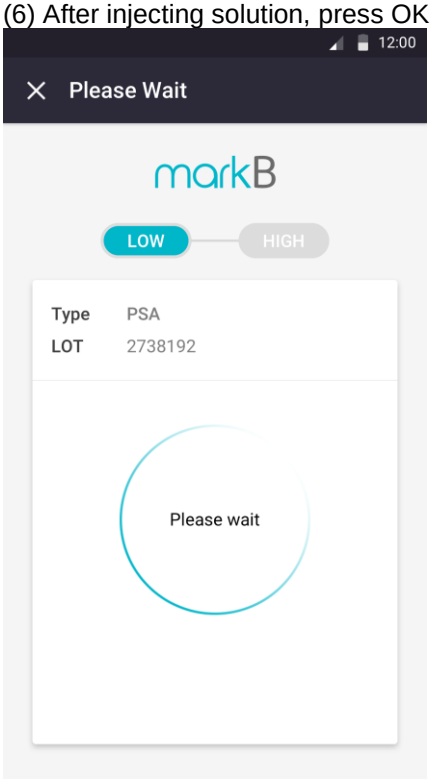


Caution!
- Please confirm that the marker of the cartridge you want to inspect is inserted correctly.

(5) Insert 1 ~ 2 drops of low control solution of the same marker as the inserted test cartridge into the cartridge. (ex. "PSA" low solution solution injection when inserting "PSA" test cartridge)



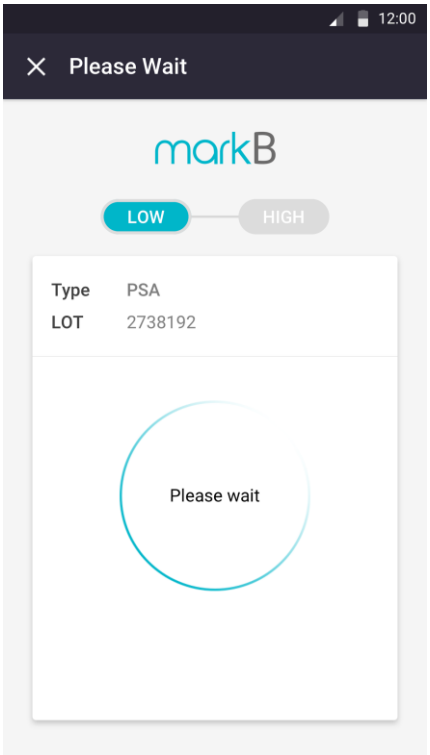
(6) After injecting solution, press OK button to start measurement.



Caution!

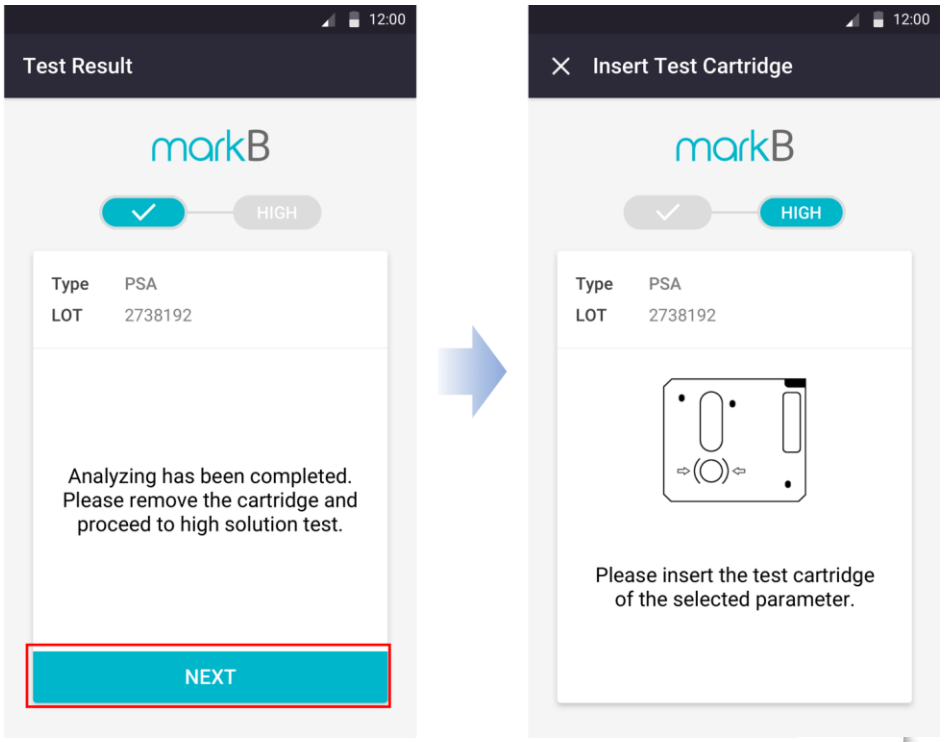
- If the tray does not come in 2 minutes after the solution injection is completed, please try again with a new cartridge.

(7) After preparation for measurement is completed, start blood analysis. Please wait for up to 10 minutes.

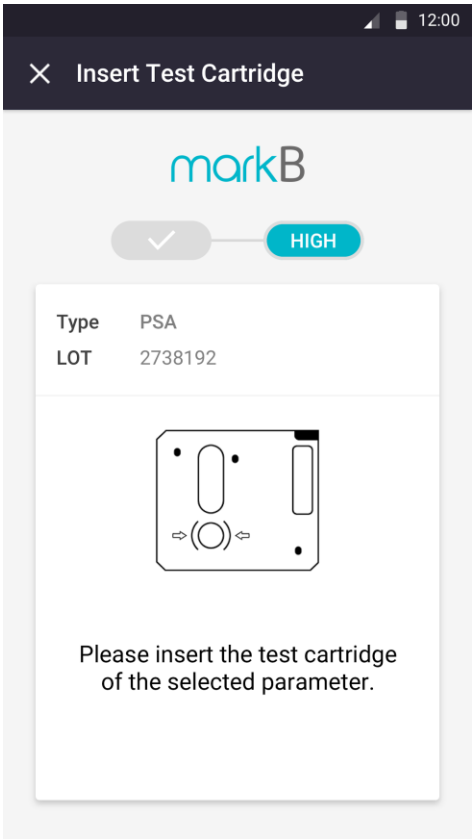


Caution!
- If an error occurs during preparation or during the analysis process, remove the cartridge, insert a new cartridge, and then retry the control solution.

(8) Low When the control solution is completed normally, a screen appears that the analysis is completed.
Then press the NEXT button to proceed with the high control solution test.
At this time, remove the used cartridge from the tray and insert a new test cartridge.

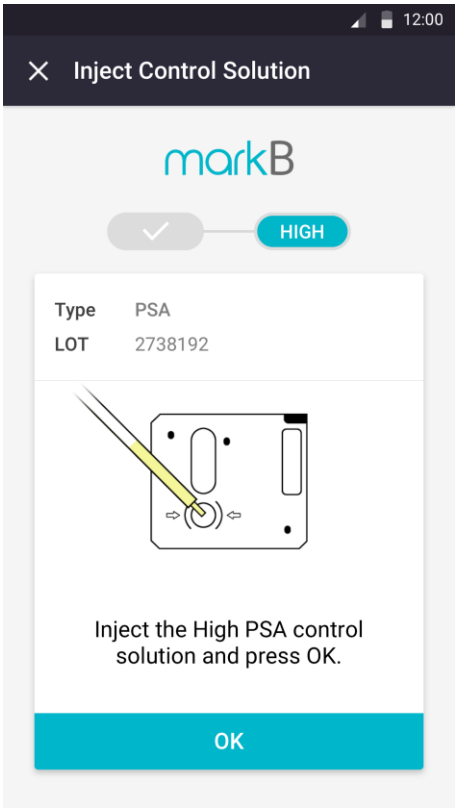


(9) Insert the same Test cartridge as in the low solution test.

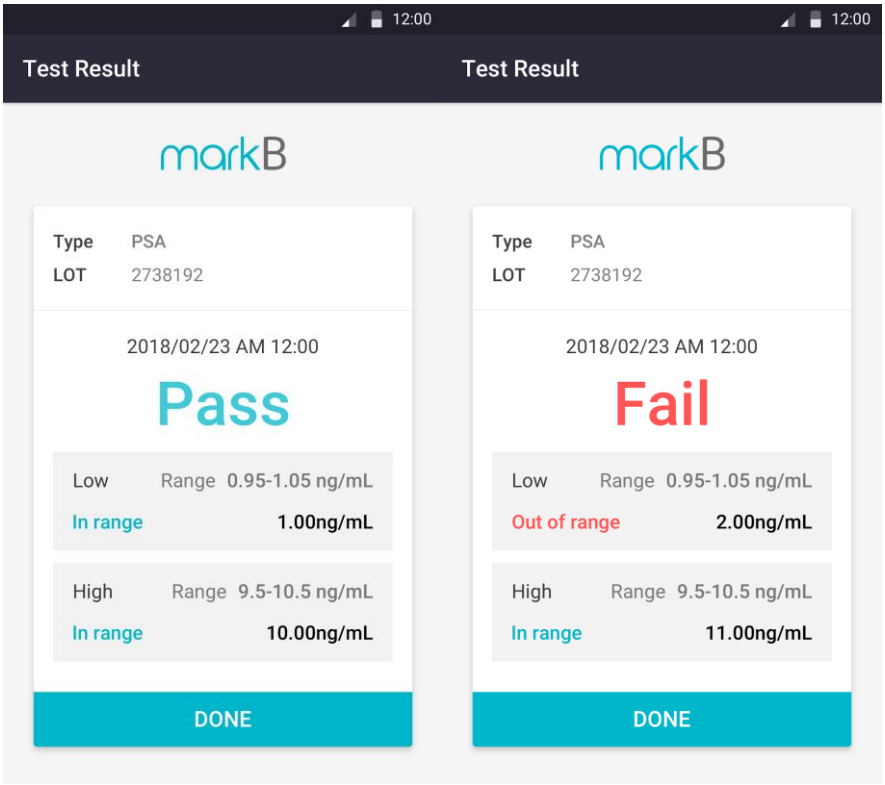


Caution!
- Be sure to insert the same test cartridge as the marker used in the Low Solution test.
- Measurement does not proceed when inserting cartridges.
- If you want to check the control solution of other markers, please press the X button on the upper left corner to discard the existing test and start again.

(10) When the check of the validity of the cartridge is completed normally, the screen for injecting the high control solution is automatically generated.
Insert a high control solution of the same marker as the inserted test cartridge into the cartridge for 1 to 2 drops.



(11) When the analysis is completed, the Low and High test result screen will be displayed on the screen. The whole test result is displayed as “PASS”, “FAIL”.
After removing the cartridge from the tray, Press the “Done” button to move to the measurement start screen.

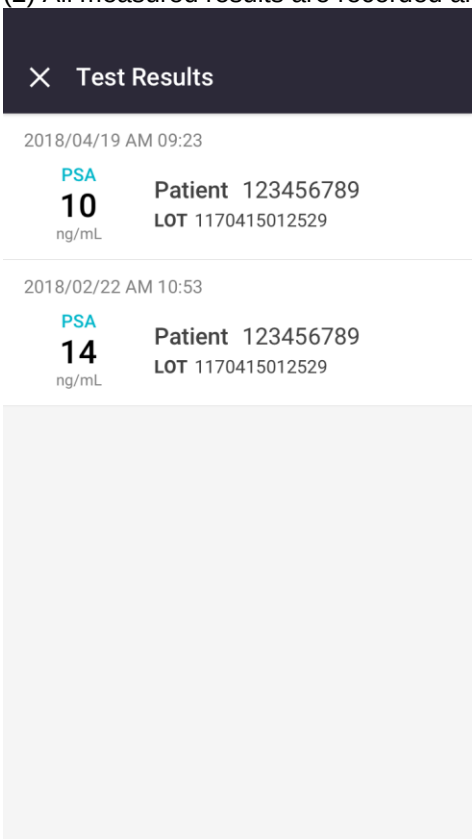


3.4. Measurement results

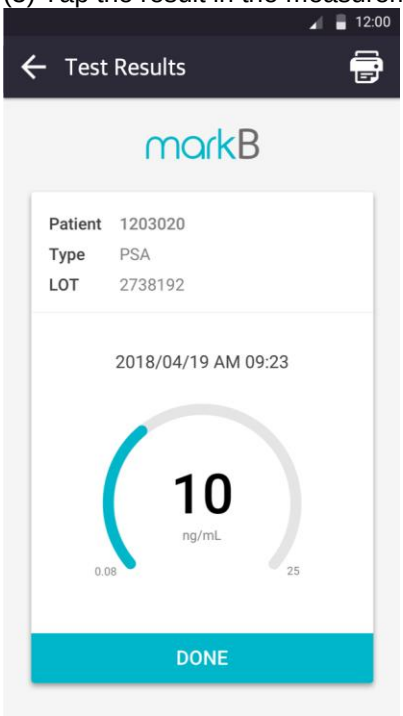
3.4.1. measurement results

(1) Tap the test results button on the main screen.

(2) All measured results are recorded and displayed in order of recent measurement.

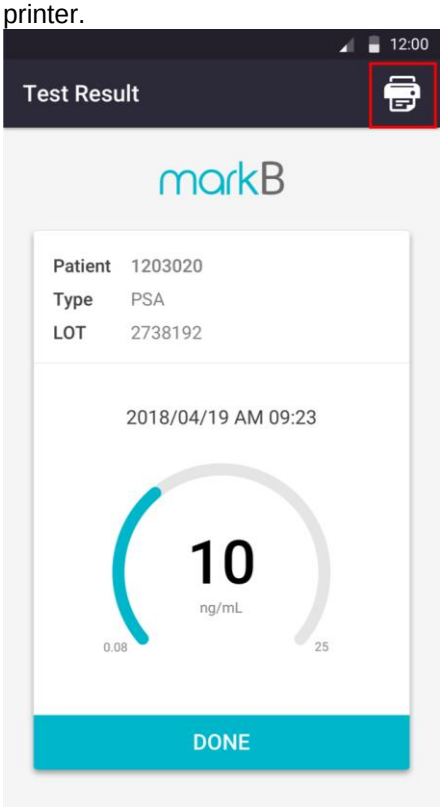


(3) Tap the result in the measurement list to see the detailed screen and print the result.



3.5. Printer

(1) Tap the print icon on the upper right of the screen and the results are printed by connected mobile printer.

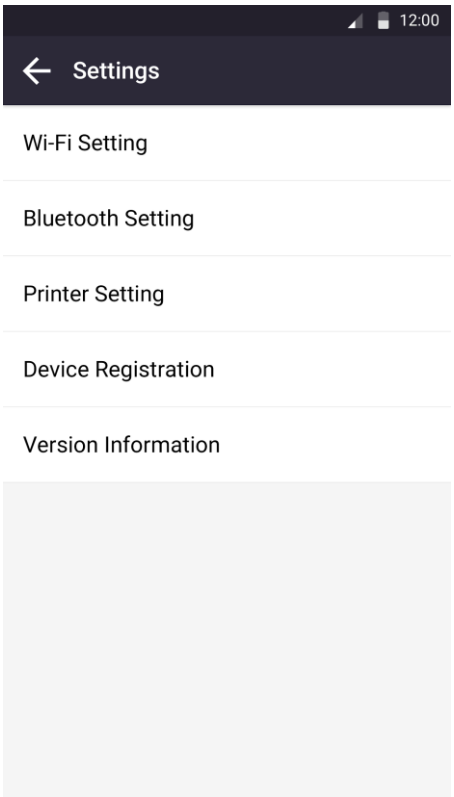


* Reference
- The mobile printer is an optional item.
- Please refer to 3.6.3. For connection method of mobile printer.

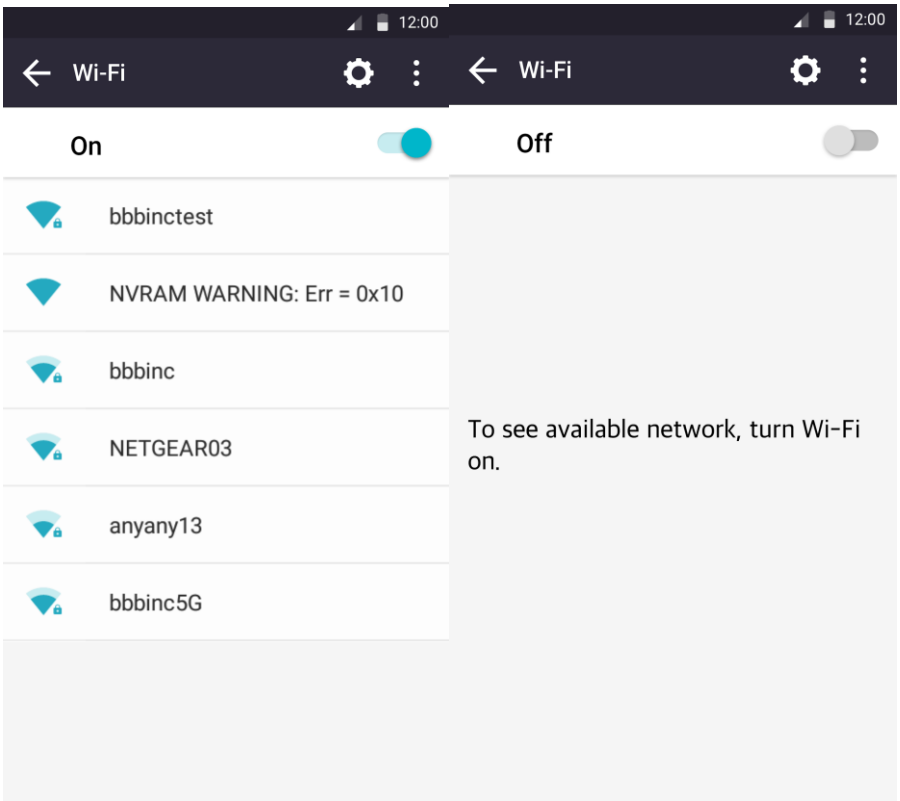
Notice!
- Mobile printers that are incompatible with markB may not print.
- If the printer is out of paper, replace it with a new paper and then use the printer.
- If the cover of the printer is open, it may not print. Close the cover and print.

3.6. Settings
In the Settings menu, you can set the following settings:

- Wi-Fi Setting
- Bluetooth Setting
- Printer Setting
- Device Registration
- Version Information

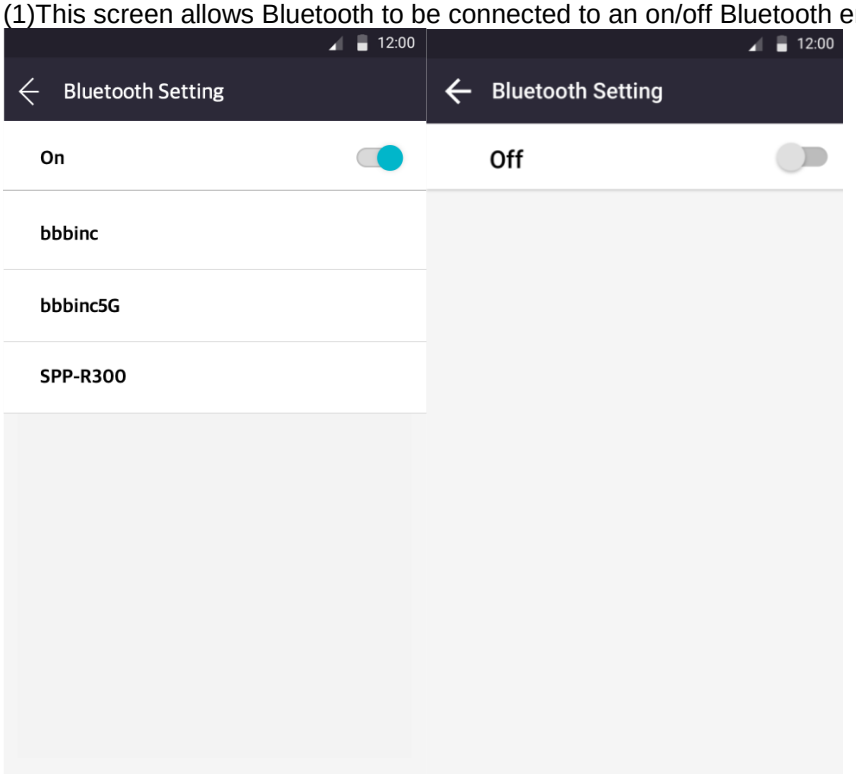


3.6.1. Wi-Fi Settings
You can turn on/off Wi-Fi or connect to a wireless network.



3.6.2. Bluetooth Settings

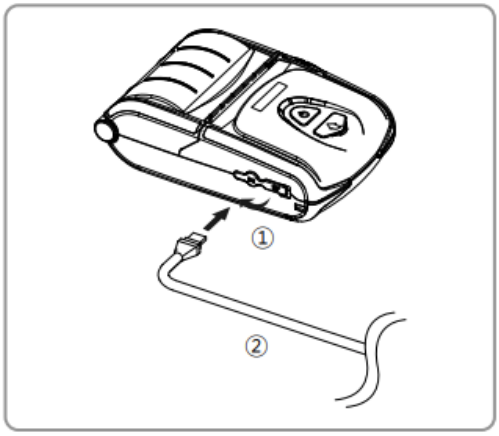
(1)This screen allows Bluetooth to be connected to an on/off Bluetooth enabled device.



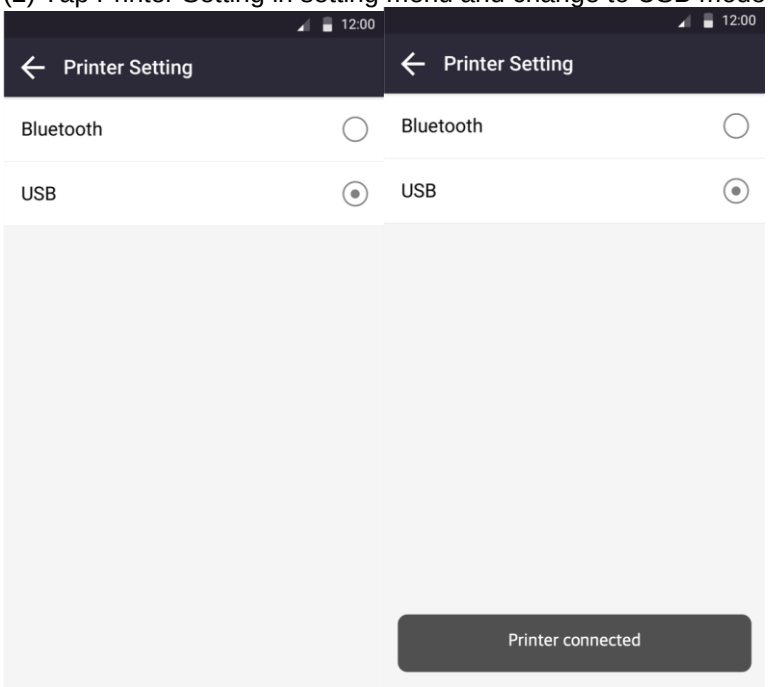
3.6.3. Printer Setting

3.6.3.1. USB Connection

(1) Connect the mobile printer to the USB-A port and please turn on the printer.



(2) Tap Printer Setting in setting menu and change to USB mode.

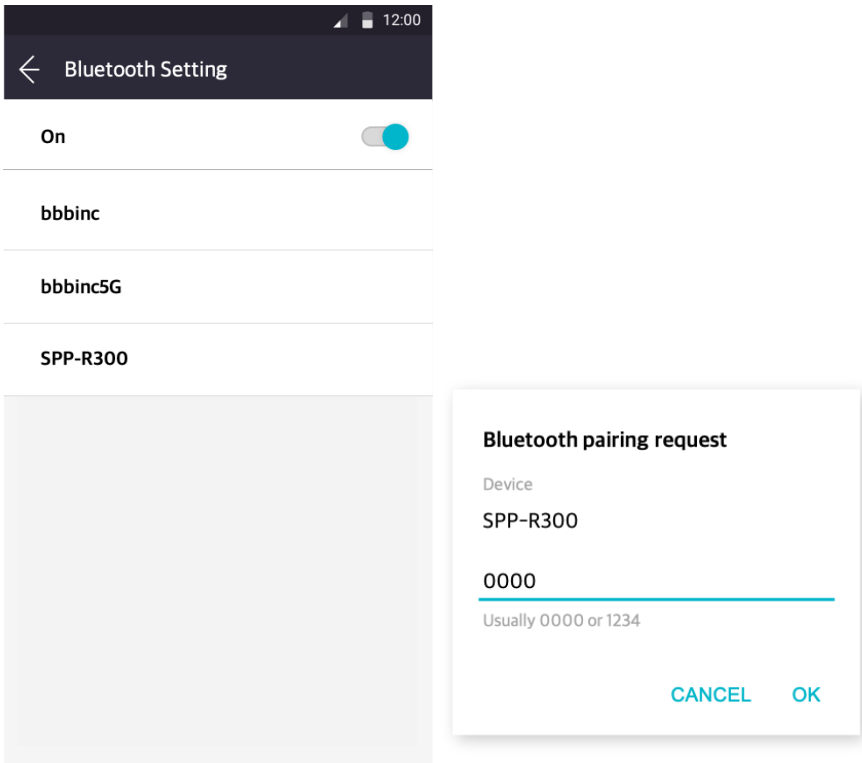


If the connection is successful, a “Printer Connected” toast will appear at the bottom of the screen.

4.6.3.2. Bluetooth connection

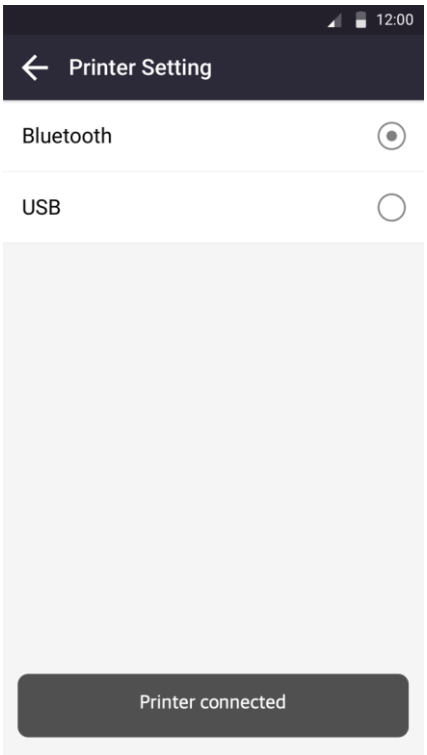
(1) Turn on the mobile printer device and prepare it for Bluetooth connection.

(2) First, turn on the Bluetooth in the Bluetooth Setting menu and select the printer to connect and pair with the analyzer.



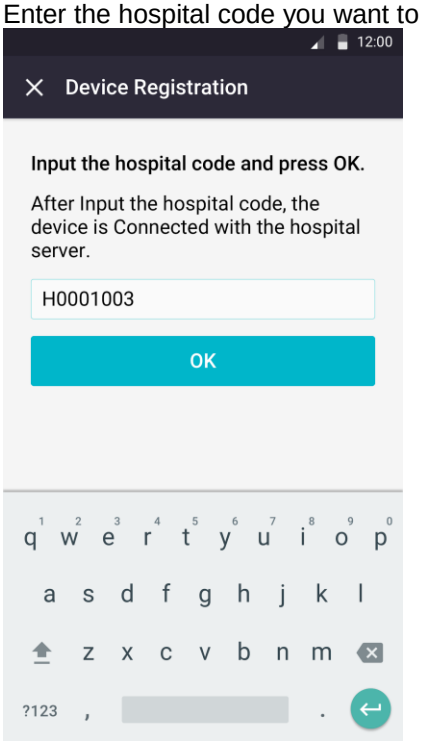
Pairing password: 0000 or 1234

(3) When pairing is complete, go to the Printer Setting menu of the setting and set it to Bluetooth mode. When the setting is completed, “Printer Connected” toast occurs at the bottom of the screen.

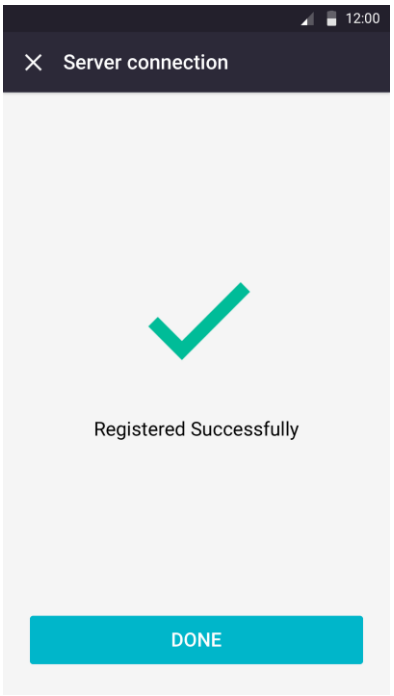


3.6.4. Device Registration

Enter the hospital code you want to register by tapping the input field.

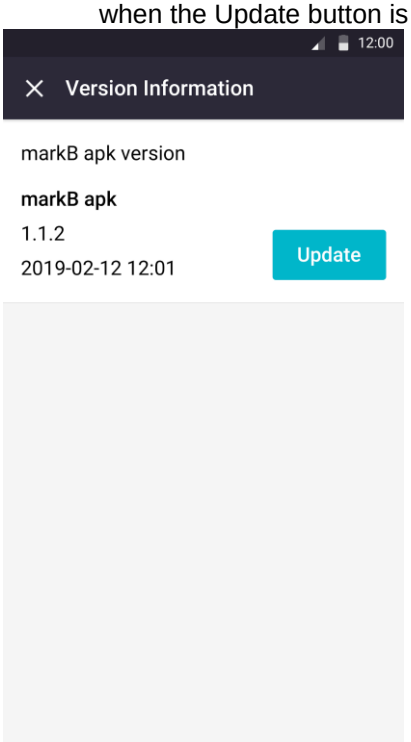


(2) When the registration is completed, the message “Registered Successfully” will be displayed and the main screen will be displayed when the “Done” button is tapped.



3.6.5. Version Information

(1) You can find the latest version the Version Information menu.
(2) If there is a version to update, the Update button is enabled. The update button will be updated when the Update button is clicked.



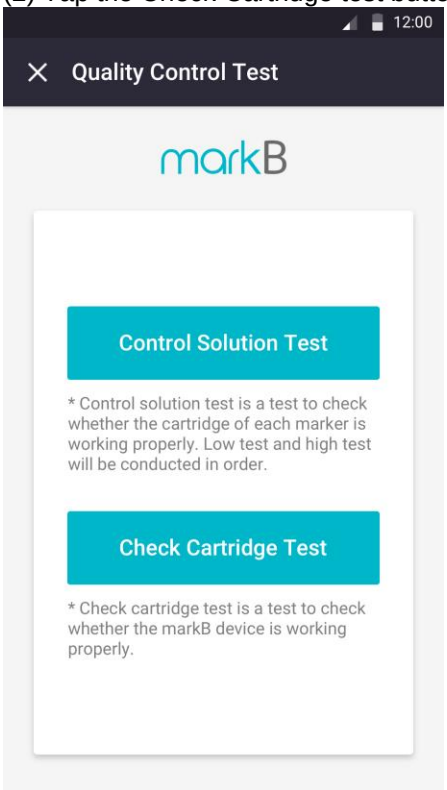
Chapter 4. Maintenance and management of markB Analyzer

4.1 Check cartridge test

Check Cartridge Inspection allows you to check that the markB meter is functioning normally.

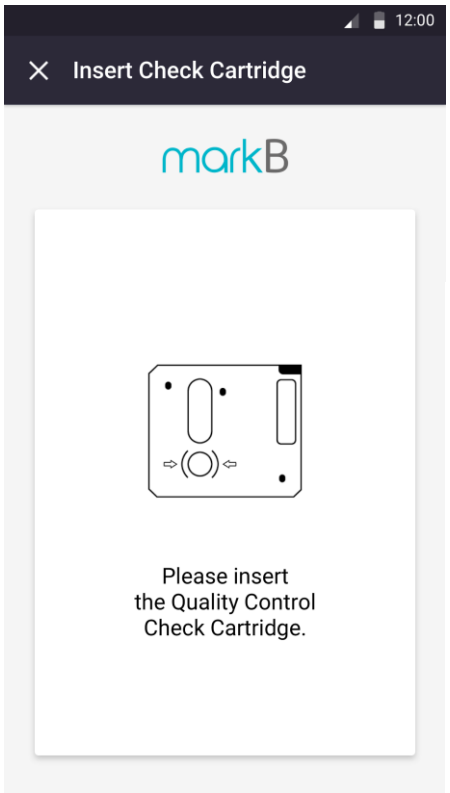
(1) Tap the QC test button.

(2) Tap the Check Cartridge test button.



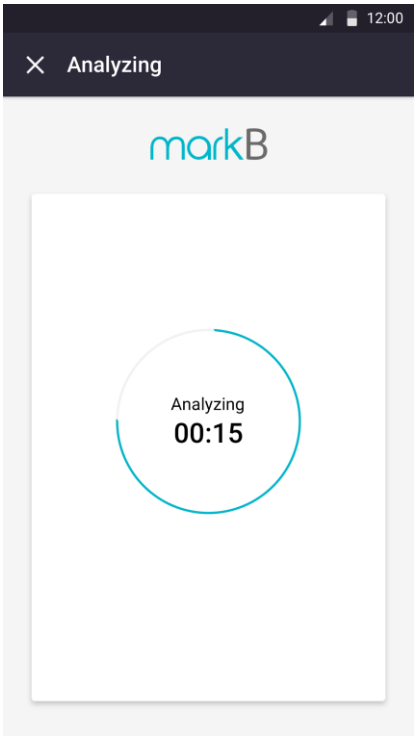
*Reference
- Check cartridge test is used to verify the hardware performance of Analyzer itself.
- It is recommended that you do this when you first receive the unit, or when you suspect that the unit's hardware performance has failed.

(3) Insert the check cartridge. If it is inserted normally, it will start scanning automatically.

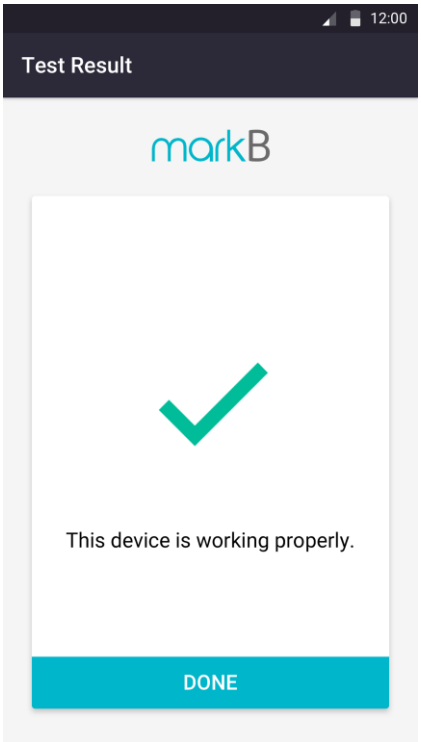


Caution!
- Be sure to insert the check cartridge.
- Check cartridge test is not possible when inserting test cartridge.
- If the information is not recognized even after inserting the cartridge correctly, please contact the administrator.

(4) Check cartridge test for 1 minute.

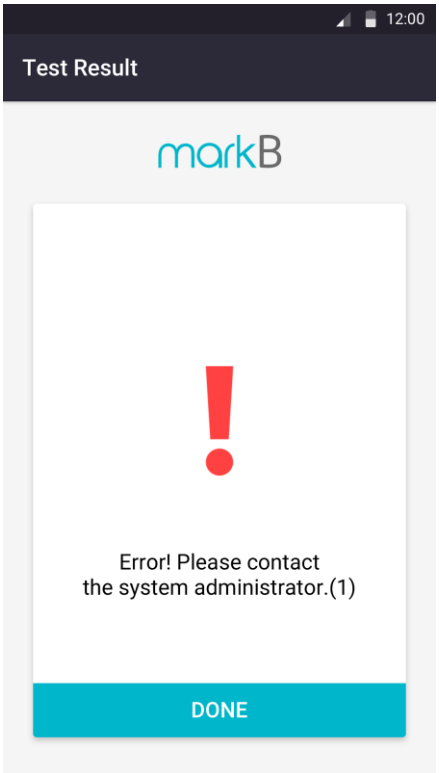


(5) When the device is operating normally, a message is displayed on the screen that the check image is working properly.



(6) When an error occurs during check cartridge test, an exclamation point image and message appear on the screen.

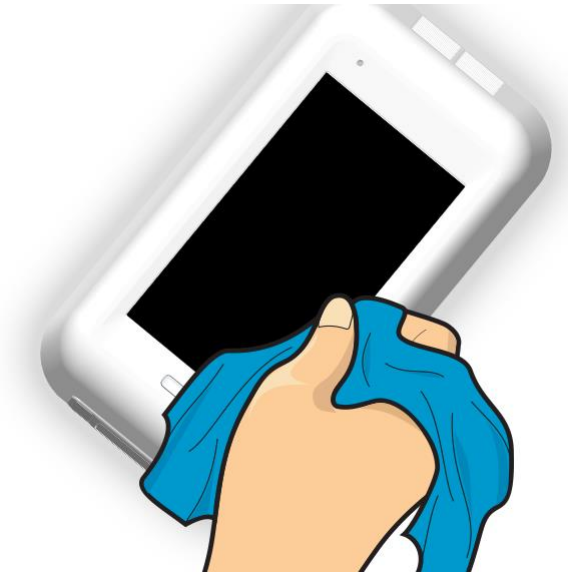
Please contact the administrator.



4.2. Cleaning of markB Analyzer

4.2.1 Cleaning of analyzer

- Clean the markB Analyzer periodically using a soft, dry cloth.
- Do not clean with strong cleansing agents, chemicals, or cleansing tissues containing chemicals that can damage the equipment.



Caution!
- Be sure to turn off the power before cleaning.

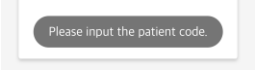
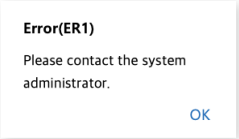
4.2.2 Cleaning the tray
If blood, moisture, or dust enters the tray, it may cause the device to malfunction. If necessary, wipe with a cotton swab moistened with water or alcohol.

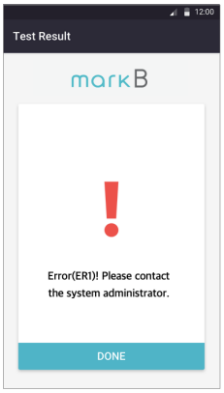
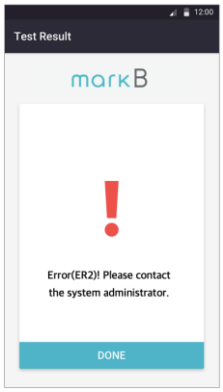
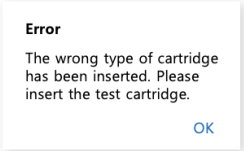
Caution!
- Be sure to turn off the power before cleaning.
- In case of electrode part, it is recommended to wipe away the electrode part because it is a sensitive part.

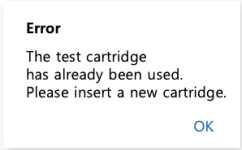
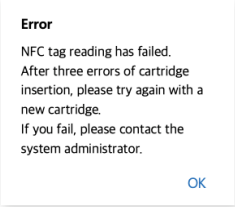
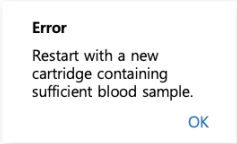
4.3. Precautions

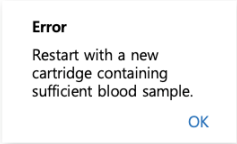
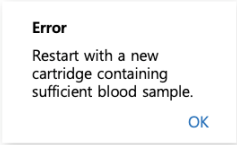
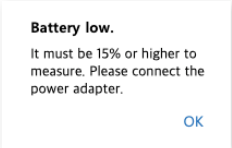
- Protect the Analyzer from dust.
- Do not expose the Analyzer to direct sunlight.
- The lower temperature and humidity storage conditions are recommended when storing Analyzer.
    - Temperature: -10 to 45 ° C (14 to 113 ° F)
    - Humidity: 10 to 80%
- When storing the Analyzer, avoid swinging or risk of falling.

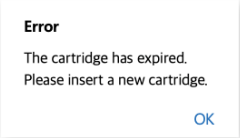
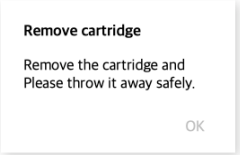
Chapter.5 Error message description and action

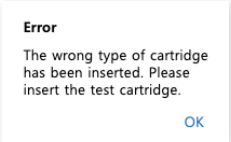
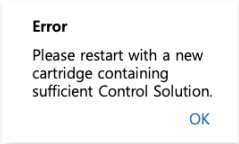
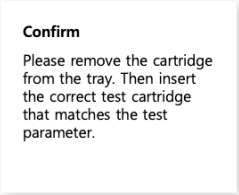
Error Message	Description
1 (Pop-up) Out of temperature range The temperature is not within operational range. For accurate readings, please try again at room temperature. Button: OK 	Measurement temperature error If the ambient temperature is higher or lower than the operating temperature range of the analyzer, this message will be generated. Leave it for 10 minutes at a place between 18 and 28 degrees and measure again. At this time, however, the meter should not be heated or cooled artificially.
2 (Toast) Please input the patient code.  	“DONE” button tap on keypad with patient code not entered The message occurs when you tap the done button on the keypad without entering the patient code. After entering the patient code, press the Done button.
3-1(Pop-up) Title: Error(ER1) Content: Please contact the system administrator. Button: OK  	Mark Operating part error If the tray at the bottom does not come out even after 10 seconds elapses from the cartridge insertion guide screen, a corresponding message will be generated. Please contact the administrator.

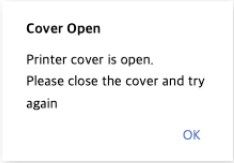
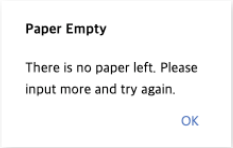
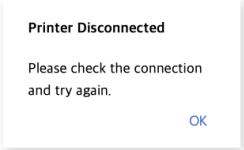
3-2(화면) 내용: Error(ER1)! Please contact the system administrator. 	Device error Check if the measured value in the cartridge is out of the error range.
4.(Screen) error(ER1)! Please contact the system administrator. 	Measurement error Check if the measured value in the cartridge is out of the error range.
5. (Pop-up) Title: Wrong catridge The wrong type of cartridge has been inserted. Please insert the test cartridge. Button: OK 	Incorrect cartridge insertion (when inserting Check Cartridge or Check Cartridge test cartridge) It is a popup that occurs when inserting Check Cartridge on blood screen or inserting Test Cartridge in Check Cartridge test of QC test. Please insert the correct type cartridge and proceed.

6. (Pop-up) Title: Used cartridge The cartridge has already been used. Please insert a new cartridge. Button: OK  	Used cartridge error The inserted cartridge is a used cartridge or a contaminated cartridge. Discard and re-measure using the new cartridge.
7. (Pop-up) Title: Error NFC tag reading has failed. After three errors of cartridge insertion, please try again with a new cartridge. If you fail, please contact the system administrator. Button: OK  	NFC recognition error If the error message occurs, please try the cartridge more than 3 times and try to insert a new cartridge when the same error occurs. If it still fails, contact administrator.
8. (Pop-up) Title: Error Restart with a new cartridge containing sufficient blood sample Button: OK  	Plasma separation error (firmware error) Blood analysis Discard used cartridges and try again with new cartridges to inject enough blood.

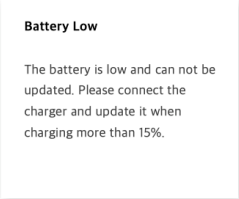
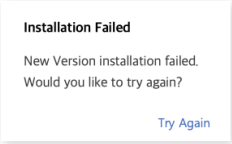
9. (Pop-up) Title: Error Restart with a new cartridge containing sufficient control solution. Button: OK  	Blood analysis process error (Firmware error) Blood analysis Discard used cartridges and try again with new cartridges to inject enough blood.a
10. (Pop-up) Start with a new cartridge with a sufficient amount of control solution. Button:OK  	The amount of injected control solution is not sufficient. Discard the used cartridge and re-measure it with a new cartridge by injecting enough solution.
11. (Pop-up) Title: Battery low It must be 15% or higher to measure. Please connect the power adapter. Button: OK  	low battery The measurement is possible when the remaining battery level is over 15% at the start of the measurement. We recommend that you use the battery fully after charging.

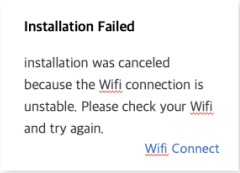
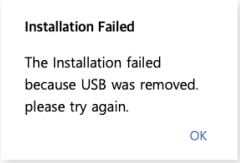
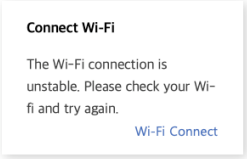
12. (Pop-up) Title: Expired cartridge The cartridge has expired. Please insert a new cartridge. Button: OK 	Cartridge expiration This error message occurs when inserting an expired cartridge. If the cartridge has expired, please use the new cartridge after discarding it.
13. (Pop-up) Remove cartridge Remove the cartridge and Please throw it away safely. Button:OK 	Cartridge remove pop-up This is a pop-up message that appears when you tap the ‘OK’ button in the popup without removing the cartridge before moving to the main screen. When the cartridge is removed, the ‘OK’ button in the popup is activated.
14. (Toast) Please remove the cartridge. 	Cartridge remove Error pop-up when the pop-up ‘OK’ button without removing the cartridge is a toast that occurs when tap.

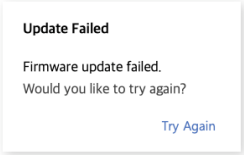
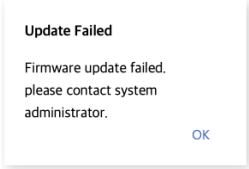
15. (Pop-up) Title:Error The wrong type of cartridge has been inserted. Please insert the Check cartridge. Button: OK 	Insert another check sheet When inserting a Test cartridge from the Insert Check Cartridge screen during the measurement process.
16. (Pop-up) Title: error Please restart with a new cartridge containing sufficient Control Solution. Button:OK 	Timeout or When injected Control Solution is inadequate.
17. (Pop-up) Title: Confirm Please remove the cartridge from the tray. Then insert the correct test cartridge that matches the test parameter. Button: OK 	If the cartridge of another marker is inserted after the Low solution test in the control solution test, the correct test result will not be obtained. Please insert the test cartridge of the same marker.

18.(Pop-up) Title: Cover open Printer cover is open. Please close the cover and try agian. Button:OK  	Cover open when connecting printer This error message occurs when the cover is open when connecting the printer. Please close the cover and print.
19.(Pop-up) Title: Paper empty There is no paper left. Please input more and try again. Button: OK  	When the paper is not enough. This error message occurs when the printer is out of paper. Please insert new paper and print.
20. (Pop-up) Title: Printer Disconnected Please check the connection and try again. Button:OK  	The printer is not connected. If the printer is not connected and the printer button is tapped, the corresponding error message will be displayed. Check the printer connection and print again.

21.(Toast) Unregistered hospital code. Please contact administrator.	When you enter an unregistered hospital code. This error message occurs when entering a hospital code not registered in the server. Please check the hospital code again.
22.(Toast) Registration failed because there was no response from the server. Please try again.	If there is no response from the hospital server. If there is no response from hospital server, error message about connection failure.

23. (Pop-up) Title:battery low The battery is low and can not be updated. Please connect the charger and update it when charging  	Battery is low when attempting to update If the battery level is less than 15%, a low battery notification pops up on the “Update” button tab. When the battery is charged to 15% or more, the pop-up closes.
24. (Pop-up) Title: Installation Failed New version installation failed. Would you like to try again? Button: Try again  	If the version installation fails, the popup will occur. Click the Retry button tab again to proceed with the update.

25.(Pop-up) Title: Installation failed. Installation was canceled bacause the Wi-Fi connection is unstable. Please check your Wi-Fi and try again.  	Wi-Fi connection is unstable during update Software update in progress Error message when Wi-Fi connection is unstable. Press the Wi-Fi connect button to check the Wi-Fi status in the Wi-Fi settings and try again.
26. (Pop-up) Title: Installation failed. The installation failed because USB was removed. Please try again.  	If you try to update to USB, remove USB or disconnect If you try to update by USB connection and it fails, please remove USB and try again.
27. (Pop-up) Title: Connect Wi-Fi The Wi-Fi Connection is untable. Please check your Wi-Fi and try again.  	If you try to update when your Wi-Fi connection is lost If WiFi is disconnected before pressing Update button, WiFi connection guide popup will occur when tap Update button.

28-1. (Pop-up) Title: Update failed. Firmware update failed. Would you like to try again? Button:Try again 	If the firmware update fails Proceed with firmware update when the software update is finished and the device is restarted. If the firmware update fails during the process, the corresponding error message occurs. Please try the firmware update again by pressing the 'Try again' button.
28-2 (Pop-up) Title: Update failed. Firmware update failed. Please contact system administrator. 	Firmware update failure repeated error message If the firmware is installed more than 3 times, the popup will occur.

Chapter 6. Technical information

Model Name	MB-100
CPU	MT8163B(Quad core)
Display type	5.5" HD display, Touch screen
Sound	Speaker
Memory capacity	8GB ROM / 1GB RAM
Battery	Main battery : 2,500mAh 14.4V (3.7V 18650 4cell) Sub battery : 2,700mAh 3.8V

Power	rating : 12VDC, 1.5A plug interface : 5.5mm * 2.5mm
Dimension/weight	114 x 206 x 86mm / 1,300g
OS	Android 7.0
LOT code reading	NFC Tag
NFC Reader	ISO/IEC 14443 A/B Type, ISO/IEC 15693, 3.3V, 13.56MHz
Operation temperature - sole analyzer operation condition(without test cartridge)	-10 ~ 45℃
Storage conditions	-10 ~ 45℃, lower than 80% of relative humidity condition
Wi-Fi	2.4GHz (IEEE 802.11/b/g/n)
Bluetooth	4.0
GPS	Support GPS and AGPS
USB port	USB A
Software version	v1.0.0
Firmware verison	MBMP100

*Reference
- You cannot adjust the volume level of the speakers. However, it is provided to the user in a fixed state at the optimal volume level.
- Product hardware has the capability to operate microphone and FM. Howerver, these will be disabled via software and will not be accessible to user.

Chapter 7. Warranty Information

In BBB, we guarantee the following products according to consumer dispute resolution standards. If a malfunction occurs, please contact us.

- Product Service Criteria
You can receive free service only if the manufacturer's fault or natural failure occurs within the warranty period.

Notice!
- you must submit a receipt for refund.

-Warranty
1 year from date of purchase.

- Warranty contents

-Contact
BBB Service center (070-4047-8282 / cs@bbbtech.com)

BBB Inc.
28, Yatap-ro, Bundang-gu, Seongnam-si,
Gyeonggi-do, Republic of Korea
TEL: 070-4047-8282 | FAX: 02-565-9654
www.bbbtech.com

BMD006AMEU-0B
Issue date:2019.05

FCC Information to User

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is con-nected.
• Consult the dealer or an experienced radio/TV technician for help.

Caution

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Compliance Information : This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.