

CE

REF QV-2

qLabs[®] Vet

User's Manual



MICROPOINT

Table of Contents

1. Introduction	3
1.1 Before You Start	
1.2 Intended Use	
1.3 Test Principle	
1.4 Packaging	
2. Accessory List	4
3. Product Overview	4
4. Operation Summary	6
5. Before Testing	6
6. Precautions, Limitations and Warnings	7
6.1 Care of Your qLabs® Vet	
6.2 Patient Health Status	
6.3 Performing a Test	
6.4 Collecting Blood Sample	
6.5 Electromagnetic Compatibility	
7. Powering the qLabs® Vet ON and OFF	9
7.1 Power Connection	
7.2 Powering the qLabs® Vet On	
7.3 Powering the qLabs® Vet Off	
8. qLabs® Vet Settings	11
8.1 Enter Setup Mode	
8.2 Setting the date	
8.3 Setting the Time	
8.4 Normal Range Setup	
8.5 Patient ID Setup	
8.6 Bluetooth Settings	
8.7 Backlight Setting	
8.8 Selecting Language	
9. Perform a Test	14
9.1 Entering Test Mode	
9.2 Insert a Test Strip	
9.3 Entering the Patient ID	
9.4 Confirming the Patient ID	

9.5	Selecting the Species	
9.6	Entering the Strip Code and Lot Number	
9.7	After Confirming the Code	
9.8	Heating Up	
9.9	Collecting a Sample	
9.10	Performing the Test	
9.11	Results and Explanation	
9.12	Finishing the Test	
10.	Reviewing Previous Results	21
10.1	Displaying QC Test Results	
10.2	Displaying Patient Test Results	
11.	Quality Control	24
11.1	Onboard QC Test	
11.2	Liquid QC Test	
12.	Maintenance	26
12.1	Care and Cleaning of Your Screen	
12.2	Installing/Replacing Batteries	
12.3	Servicing	
13.	Troubleshooting	27
14.	Symbols	29
15.	Performance Characteristics & Product Specifications	30
15.1	Operation Condition	
15.2	Product Specifications	
16.	Warranty	31
17.	Contact Address and phone number	33

1. Introduction

1.1 Before You Start

Before using qLabs® Vet, read the User's Manual carefully.

1.2 Intended Use

The qLabs® Vet is intended for use with qLabs® Vet test strips for in vitro quantification measurement of a patient's PT and APTT.



The qLabs® Vet is for veterinary use only.

The qLabs® Vet is validated for use with canine and feline samples only.

1.3 Test Principle

qLabs® Vet automatically detects the insertion of a qLabs® test strip and heats the strip to a preset operating temperature. After a drop of blood is applied to the strip, the capillary channels carry the blood to the reaction zones, where the blood mixes with pre-printed reagents and starts to coagulate. Each strip contains two reaction zones. Each reaction zone contains a pair of metallic electrodes, to which a constant voltage is applied by the qLabs® Vet. As the coagulation of the blood proceeds, the current monitored across the two electrodes changes. The qLabs® Vet detects the change of the current in the test zone and determines the PT and/or APTT results. The qLabs® Vet and test strips provide APTT, PT results.

1.4 Packaging

The qLabs® Vet was packed individually.

Upon receipt of package, please open and remove the packaging materials. Place the qLabs® Vet on a flat surface and connect the power adapter.

Do not keep the qLabs® Vet in direct sunlight, near a high heat source, or near an area with a strong magnetic field.

2. Accessory List

qLabs® Vet includes the following accessories:

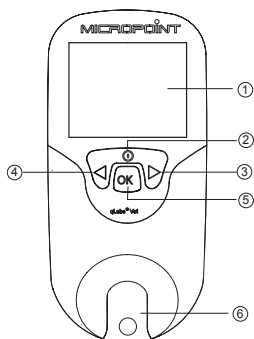
- qLabs® Vet
- Power Adapter
- User's Manual
- Quick Start Guide
- Lancet Device
- Lancet Needles
- Carrying Case
- Instructional DVD
- qLabs® Data Manager Installation DVD
- qLabs® Data Manager Installation Guide
- qLabs® eCable

NOTES:

- To avoid the possibility of damage, use only the power adapter supplied with the qLabs® Vet.
- Standard AA batteries can also be used for qLabs® Vet.
- The qLabs® eStation can be purchased separately from Micropoint Biotechnologies Co., Ltd. Please contact your local distributor for ordering information.

3. Product Overview

Identification of Components

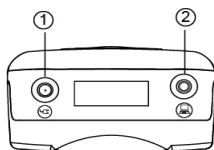
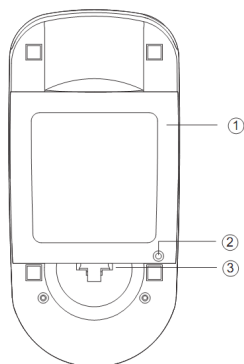


Front View

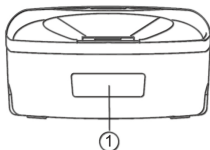
- 1) LCD Screen
- 2) Returning/Power Button
- 3) Right Button
- 4) Left Button
- 5) OK Button
- 6) Test Strip Guide

Back View

- 1) Battery Cover
- 2) Battery Cover Screw
- 3) Battery Cover Release

**Top View**

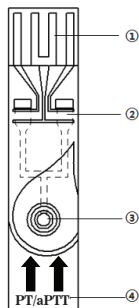
- 1) Power Supply Jack
- 2) Data Port

**Bottom View**

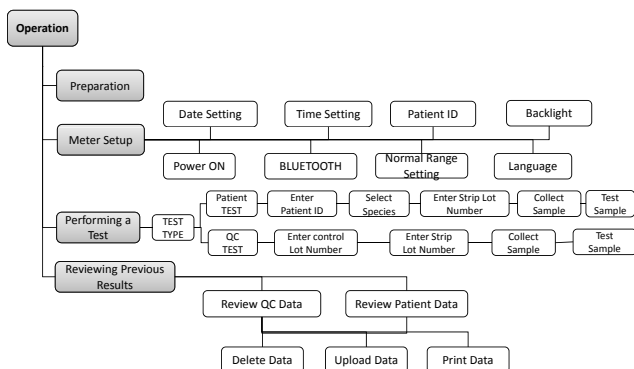
- 1) Barcode Scanner (Laser)

qLabs® Vet Test Strip

- 1) Electrode Leads
- 2) Test Zone
- 3) Sample Well
- 4) Test Name



4. Operation Summary



5. Before Testing

Before using qLabs® Vet to do a test, you will need:

- qLabs® Vet test strip
- Power supply or batteries

If you are testing fresh venous blood samples, you will also need:

- 21-gauge needle or larger with 1.0 mL syringe
- Sterile alcohol
- Disposable glove
- Puncture-resistant container for medical sharps
- Sterile band aid
- Bio-hazardous container

Or if you are testing citrated whole blood samples, you will also need:

- Eppendorf tube rack
- 200 uL pipette and pipette tips
- Disposable glove
- Sterile alcohol
- Disposable venous blood lanet
- 1.8 or 2.7 mL 3.2% (w/v) sodium citrate venous collection tube
- Bio-hazardous container

6. Precautions, Limitations and Warnings



qLabs® Vet is used only for animals in vitro diagnostics. Before using this system, take special note of **CAUTIONS** throughout this User's Manual.

As with all diagnostic tests, qLabs® Vet's test results should be scrutinized in light of a specific patient's condition and anticoagulant therapy. Any results exhibiting inconsistency with the patient's clinical status should be repeated or supplemented with additional test data or repeated with other testing methods.

6.1 Care of Your qLabs® Vet

- The qLabs® Vet is a delicate instrument and should be handled with care. Dropping or other mishandling may cause malfunction of qLabs® Vet.
- The qLabs® Vet should be transported in a carrying case or a secure container.
- DO NOT spill any liquid on the qLabs® Vet. If it happens, immediately contact local distributor from Micropoint Biotechnologies Co., Ltd.
- DO NOT store the qLabs® Vet below -10 °C or above 40 °C.
- DO NOT use the qLabs® Vet for any other types of test strips not provided by Micropoint Biotechnologies Co., Ltd.

6.2 Patient Health Status

Current patient health status may cause inaccurate or unexpected test results. It is important to take certain health factors into consideration when interpreting the test results and deciding on a course of action for your patients. Failure to do so may lead to an incorrect interpretation of the test result.

6.3 Performing a Test

- The qLabs® Vet should be operated on a level surface that is free of vibration. Testing on an uneven or unstable surface may cause inaccurate results. DO NOT hold the qLabs® Vet in your hands during the testing.
- The blood sample must be applied to the test strip immediately after collection. Otherwise, the blood sample may begin clotting, causing inaccurate results.
- DO NOT move or touch the qLabs® Vet during testing.



DO NOT switch power supplier from adapter to battery or vice versa during testing!

6.4 Collecting Blood Sample

- Use only fresh non anti-coagulated whole blood and citrated whole blood. Do not use plasma.
- The drop of blood must be a minimum of 10 µL.
- Hematocrit ranges between 30% and 55% will not affect test results.

6.5 Electromagnetic Compatibility

- This equipment has been tested and found to comply with applicable EMC emission requirements as specified in EN 301 489-1 V1.9.2 and EN 301 489-17 V2.2.1. The emissions of the energy used are low and not likely to cause interference in nearby electronic equipment.
- Do not use this instrument in a dry environment, especially if synthetic materials are present. Synthetic clothes, carpets, etc., may damage static discharges in a dry environment. That may cause incorrect operation or damage to the device. The recommended humidity operating range is 10% to 90%.
- Do not use this instrument near cellular or cordless telephones, walkie talkies, garage door openers, radio transmitters, or other electrical or electronic equipment that are sources of electromagnetic radiation, as these may interfere with the proper operation of the instrument.

7. Powering the qLabs® Vet ON and OFF

7.1 Power Connection

The qLabs® Vet comes with a power supply which must be plugged into the qLabs® Vet power supply jack. Alternatively, the qLabs® Vet can use 4 standard AA batteries (See Section 12.2).



The messages on the four-cell grid displayed at the bottom of the screen provide hints for the functions of the buttons.

7.2 Powering the qLabs® Vet On

LANGUAGE		
ENGLISH		
ITALIANO		
FRANÇAIS		
↑	SKIP	↓
	OK	

When the qLabs® Vet is initially powered on, it beeps and enters the “LANGUAGE” screen.

Use “↑” or “↓” to select desired language and then press “OK” to enter the next screen; or press “SKIP” to skip the language selection and enter the next screen directly.

SET	OFF VER	MEM

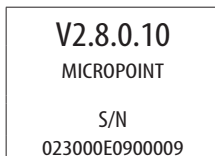
If a language is selected when the meter is initially powered on or it is manually selected in the “LANGUAGE” screen, the meter beeps when powered on and prompts the user to insert a test strip automatically.

When qLabs® Vet is in the standby mode, you have two choices to power on the monitor:

- 1) Press and hold the “Power” button for 2 seconds to turn on the qLabs® Vet, or
- 2) Insert a fresh test strip if you are ready to perform a test. The qLabs® Vet will then prompt you to confirm the test type.

Turning the qLabs® Vet ON in CHOICE 1, allows the user to:

- Perform a test, or
- Check the version of the software and the manufacturer information by pressing “VER” button, or



- Enter Setup mode by pressing “SET” button to change the Vet setting, or
- Enter Memo mode by pressing “MEM” button to review previous results.

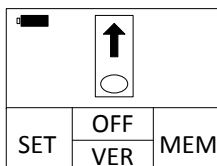
Turning the qLabs® Vet ON in CHOICE 2, allows the user to:

- Perform a test.

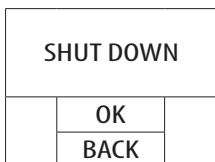


See the appropriate sections of this User’s Manual for complete information for all of these options.

7.3 Powering the qLabs® Vet Off



In the interface where the monitor prompts you to insert a test strip, press the functional “OFF” button to enter the shut down mode.



In shut down mode, the user can:

- Press the functional “OK” button to turn off and enter standby mode, or
- Press functional “BACK” button to return to the previous interface.

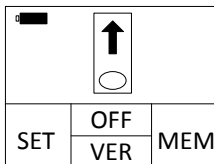
NOTES:

- Manually turn off the qLabs® Vet if not in use to conserve the batteries.
- If the qLabs® Vet is left idle for about 5 minutes, it will turn off automatically and enter standby mode.

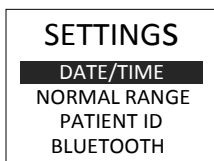
8. qLabs® Vet Settings

Follow the steps below to set up the qLabs® Vet.

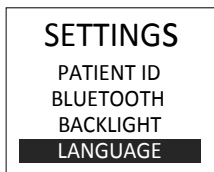
8.1 Enter Setup Mode



When the qLabs® Vet is turned on for the first time, the display screen will prompt the user to insert a test strip automatically.

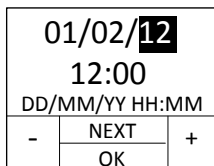


When the screen prompts the user to insert a test strip, press the functional “SET” button to enter the Setup mode.

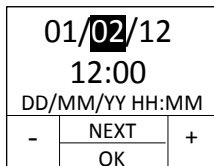


In “SETTINGS” screen, use “+” and “-” to switch between different items. The meter prompts to insert a test strip if “BACK” is pressed. The meter enters the selected item accordingly if “OK” is pressed.

8.2 Setting the date



The date format is DD/MM/YY. The first set of digit (YY) will be highlighted. Use the functional “+” and “-” buttons to change the date.



Press functional “NEXT” button to go to the second digit (MM) after a correct date is selected. Change the month and the date using the same method.

8.3 Setting the Time

The time is in 24-hour format: “HH:MM” (Hour: Minute)

01/02/12		
12:00		
DD/MM/YY HH:MM		
-	NEXT	+
	OK	

After the day setting, the setting option will prompt you to the hour setting mode. The hour will be highlighted on the display. Use “+” and “-” functional buttons to adjust the hour. Press “NEXT” functional button when you have the correct hour on the display.

01/02/12		
12:00		
DD/MM/YY HH:MM		
-	NEXT	+
	OK	

The minute will be highlighted on the display. Use “+” and “-” buttons to change the minute. Press “NEXT” to switch between Date and Time. Press “OK” to save the setting and return to “SETTINGS” screen.

Note:

After completing the “SETTINGS” screen, the meter saves the changes automatically and returns to “SETTINGS” screen if “OK” is pressed; if “BACK” is pressed, the meter returns to “SETTINGS” screen without saving the changes.

8.4 Normal Range Setup

An target range of PT and APTT for each supported animal species may be set to alert the user when the results are out of range.

NORMAL RANGE		
CANINE		
PT	LO 14 HI 20	
APTT	94 123	
-	NEXT	+
	OK	

First, use “+” or “-” buttons to select the species.

Press “NEXT” to accept. The next settable item will be highlighted

NORMAL RANGE		
CANINE		
PT	LO 14 HI 20	
APTT	94 123	
-	NEXT	+
	OK	


Then, use “+” or “-” buttons to set the low and high limit of PT and APTT for the selected species. Press “NEXT” to switch between the species and ranges.

8.5 Patient ID Setup

PATIENT ID <div style="text-align: right;">ON</div>		
-	BACK	+
	OK	

You can use “+” or “-” buttons to set the input of Patient ID ON or OFF. If you set the Patient ID ON, the meter will prompt you to input the Patient ID before you process a patient test.

8.6 Bluetooth Settings

BLUETOOTH  OFF		
-	BACK	+
	OK	

Press “+” or “-“ buttons to turn on/off the bluetooth. When the Bluetooth function is on, the user can use optional Bluetooth dongle to connect the meter to the user management software. Please refer to the Data Manager manual for Bluetooth driver installation and usage.

8.7 Backlight Setting

BACKLIGHT <div style="text-align: right;">ON</div>		
-	BACK	+
	OK	

Use “+” or “-” to turn on or turn off the backlight function.

8.8 Selecting Language

LANGUAGE ✓ ENGLISH FRANÇAIS DEUTSCH ITALIANO	
--	--

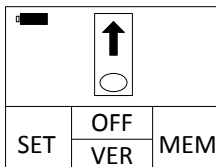
You can use right button “▶” or left button “◀” to select desired language and then press “OK” button to return to main menu.

NOTE:

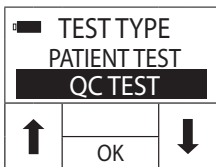
- The language option may be different, depending on the software configuration.

9. Perform a Test

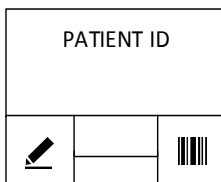
9.1 Entering Test Mode



When the qLabs® Vet is powered on from standby mode, it will enter the test mode automatically. When the qLabs® Vet is turned on by pressing the “Power” button, the display screen will prompt the user to insert a test strip. Go to Section 9.2 for test strip insertion.

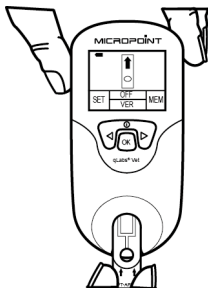


When the qLabs® Vet is turned on by inserting a new test strip, it will enter the “Test Type” screen.



After selecting the test type, press “OK” to input the patient ID if the input of patient ID is set to ON; otherwise, jump directly to “SPP” screen. Go to Section 9.3 for entering the patient ID.

9.2 Insert a Test Strip





Remove a fresh test strip from its foil pouch. Insert the strip into the test strip guide.

The following two observations indicate that you inserted the strip correctly:



- 1) The electrode leads go in first.
- 2) You can read test strip name clearly on the end of strip, left to right.

If the input of patient ID is set to ON, go to Section 9.3 for entering the patient ID; otherwise, jump directly to Section 9.6 for entering the strip code.

9.3 Entering the Patient ID

PATIENT ID		
		

The Patient ID can be composed of numbers or letters, with a length of no more than 16 digits.

Press “” to manually input the Patient ID or press “” to input Patient ID via barcode scanner.

9.3.1 Manual Input

PATIENT ID		
A000█-----		
-	NEXT	+
	OK	

Use “+” and “-” buttons to change the highlighted digit. Press “NEXT” button to accept and advance to next digit. If the input of the Patient ID is completed, press “OK” button to accept.

9.3.2 Auto Scan

In the Patient ID INPUT/SCAN interface, press “SCAN” and scan the patient barcode from a distance of approx. 15cm (6 inches).



The meter beeps once the barcode has been read successfully. The barcode information appears in the CONFIRM interface.

If a barcode is not scanned, the scanner turns off after 10 seconds.





Do not stare directly at the laser beam.

9.4 Confirming the Patient ID

PATIENT ID		
0123456789		
	OK	

If the Patient ID is entered correctly, press “OK” button to confirm.

Otherwise, press “” or “” to repeat Section 9.3 until all numbers are correctly entered.



9.5 Selecting the Species

SPP: ✓ CANINE FELINE OTHER		
-		+
	OK	

Use “+” and “-” buttons to switch highlighted item in the species list. Select the species you are testing. Press “OK” to confirm.

9.6 Entering the Strip Code and Lot Number

STRIP CODE PT/APTT 471213408 LOT: 3052E0503		
		
	OK	

If the displayed strip code and lot number match those on the strip pouch, press “OK” button to confirm. Otherwise, you can use “” to manually input the strip code or use “” to enter the code via barcode scanner. Press “OK” button to confirm the code after the strip code is correctly entered.

NOTES:

- The Strip Code contains information of the type of test. After you entered the Strip Code, the test name will be recognized automatically and displayed on the screen.
- A different type of test may have different length of code. Make sure both the length and each digit are exactly the same with those on the pouch.

9.6.1 Manual Input

STRIP CODE PT/APTT 4 71213408 LOT: 3052E0503		
-	NEXT	+
	OK	

Use “+” and “-” buttons to change the first digit highlighted.

STRIP CODE		
PT/APTT		
471213408		
LOT: 3052E0503		
-	NEXT	+
	OK	

Press “NEXT” button to accept and advance to next digit.

To change numbers more quickly, hold down the functional “+” and “-” buttons.

9.6.2 Auto Scan



User can also use the built-in barcode scanner to scan the strip code on the pouch.

9.7 After Confirming the Code

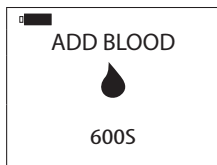
EXPIRED STRIP!		
	OK	

The meter will automatically check whether the strip is expired after confirming the code is correctly entered. If it is expired, an error will be reported. As a result, you need to use strips within the expiration date to perform the test.

9.8 Heating Up

HEATING

After confirming the code, the qLabs® Vet will heat up automatically for the test.



When qLabs® Vet is ready for sample testing, it will beep and prompt the user to apply a blood sample.

9.9 Collecting a Sample

After the heating is complete, collect whole blood samples and run test. Refer to the test strip insert for detailed sample collecting procedures.

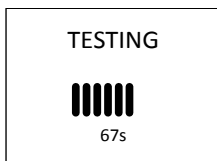
NOTE:

- To avoid mechanical hemolysis of the blood sample, nonheparinized syringe with 21 gauge needle or larger is highly recommended.
- Since the interstitial fluid (thromboplastin) will accelerate the clotting process, vascular puncture action is preferably a one-time action so as to minimize the interstitial fluid from entering into the blood sample.
- Excitement of the patient should be minimized when collecting the sample. The clotting reaction and test results will be affected when the patient is extremely exciting. Sedatives and analgesics can also affect the blood clotting process.
- When collecting the sample, follow the guidelines and procedures for blood collection as instructed by the veterinary clinic.

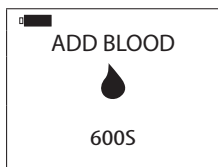
9.10 Performing the Test

Disuse the first drop of blood needle disuse, then apply a total of about 10-20 microliter blood sample to sample well of the strip.

Make sure to apply the blood sample directly on the sample well of the strip. DO NOT move the qLabs® Vet while adding the blood to the strip.



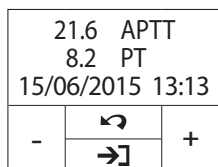
After the blood sample is added, the qLabs® Vet will perform the test automatically.



If insufficient blood sample is added, the qLabs® Vet will not begin its testing and will continue to prompt the user to add blood sample.

NOTES:

- There is a 10 minutes time limit for the user to apply the blood sample. When the time limit is reached, the qLabs® Vet will display an error code.



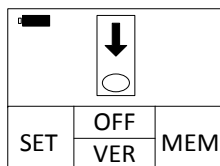
When testing is complete, the qLabs® Vet will beep and the test results will appear on the screen along with the patient ID and test time.



If the test results need to be reported instantly, press “→]” button to print or upload the results.

NOTE:

- A qLabs® eStation or qLabs® eCable is needed to support the upload/print function.



When the “↺” button is pressed, the qLabs® Vet will prompt the user to remove the test strip.

NOTES:

- Test results are automatically stored in the qLabs® Vet memory including all the information of the test (See Section 10 for reviewing past results).

- The qLabs® Vet can store up to 200 test results. If the memory is full, the new test result will overwrite the oldest test.

9.11 Results and Explanation



Please read qLabs® Vet test strips package inserts for detailed explanation of test results.

9.12 Finishing the Test

Remove and discard the used test strip into a sharps or other puncture proof container. It is recommended to power off the qLabs® Vet when it is not in use.

21.6 APTT		
8.2 PT		
15/06/2015 13:13		
-	↶	+
	→]	

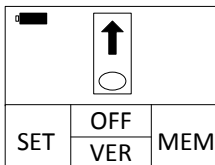
Before turning off the meter, press the “↶” button to return to the test mode.

 		
SET	OFF VER	MEM

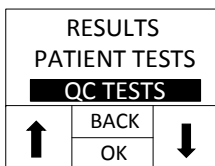
Remove the test strip from the meter. To perform another test, please use a fresh test strip. Please use a different finger for a new test.

10. Reviewing Previous Results

Follow these steps to review previous results that are stored in the meter memory.



In the Test Mode where the display prompts the user to insert a test strip. Press “MEM” button.



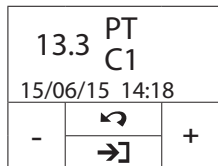
Select the type of results you want to view:
 Display QC TEST results
 Display PATIENT TEST results



If no results exist, the meter will prompt “NO RECORD”.

10.1 Displaying QC Test Results

The meter stores up to 12 QC results chronologically.



Press the “+” and “-” buttons to switch between QC result. Press “↶” button to exit.

10.2 Displaying Patient Test Results

Whenever a test is successfully performed, the result is automatically stored in the meter memory along with the date of the test. The meter memory will store up to 200 results.

03/08 a010010001		
03/08 a010010013		
02/08 a010040215		
02/08 a030010005		
↑	↶ OK	↓

Press the “↑” button to select previous results. Each page lists four results; use the functional “↓” button to scroll down to review the next four results.

Press the “↶” button to return to the Test Mode.

21.6 APTT		
8.2 PT		
15/06/2015 13:13		
-	↶ →]	+

Press the “OK” button to view the detailed information of the selected test including PT, and/or APTT, QC results, and Patient ID. Use the “+” and “-” buttons to scroll through the detailed results.

Press the “↶” button to exit.

CODE: 471213408		
LOT: 3054E0503		
SPP: CANINE		
🗑️	↶ →]	📖

Press the “→]” button to view more detailed information and operation options.

10.2.1 Deleting Patient Test Results

Press the “🗑️” button to enter “delete setting” interface.

Use “+” and “-” buttons to toggle between deleting all results or the current result.

DELETED		
CURRENT		
-	↶ OK	+

DELETED		
ALL		
-	↶ OK	+

Press the “OK” button to confirm or press “↶” button to exit.



DELETED

If the option to delete the current result is selected, the “DELETED” symbol will flash on the display for a short time, the subsequent results will be displayed.



NO RECORD

If the option to delete all results is selected, the display will show “NO RECORD”.

10.2.2 Printing Patient Test Results

Press the “” button to enter “print setting” interface.

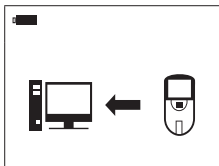


In print setting interface, press the “◀” and “▶” to set up the number of test results will be printed. Press “OK” to confirm printing.

NOTE:

- A qLabs® eStation is required for printing the test results.

10.2.3 Uploading Patient Test Results



Press the “” button to upload the selected results to the qLabs® Data Manager.

11. Quality Control

11.1 Onboard QC Test

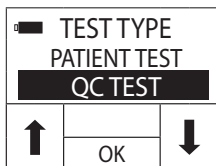
The qLabs® Vet also measures the clotting time in the Quality Control (QC) zone of PT or APTT strip. If the QC result fails to fall within a predetermined range, the qLabs® Vet will display an error code rather than give a possible erroneous PT or APTT result.

This safety measure guards the user against situations in which the qLabs® PT or APTT test strip may have been subjected to very high temperatures or humidity (which could happen if the foil pouch is torn or punctured).

11.2 Liquid QC Test



Micropoint Biotechnologies Co., Ltd. has optional liquid controls for qLabs® Vet system. The qLabs® PT and APTT liquid controls are used with qLabs® PT and APTT test strips to verify the qLabs® system performance, respectively. It is recommended that two levels of liquid controls are used to perform the test.

Please follow the QC test procedures below:



 TEST TYPE PATIENT TEST QC TEST		
↑	OK	↓

Turn on the meter by inserting a new test strip and enter the “Test Type” screen. Use the left and right buttons to select the test type. Select the “QC control” and then press “OK” to accept to enter the “Control Code” screen.

CONTROL CODE PT 9324428 LOT: 3052E0503		
	OK	

When the lot number input function is enabled, press “” to edit the control code and lot number or use “” to enter the control code and lot number via barcode scanner. Go to Section 9.6 for specific information. Press “OK” to accept and enter the “Strip Code” screen.

STRIP CODE		
PT/INR		
1505320		
LOT: 3050E0503		
	OK	

When the lot number input function is enabled, press “” to edit the strip code and lot number use “” to enter the strip code and lot number via barcode scanner. Go to Section 9.6 for specific information. Press “OK” to accept and heat up for the test. Go to Section 9.10 for subsequent test operation.

The qLabs® PT and APTT liquid controls can be purchased separately from Micropoint Biotechnologies Co., Ltd. Please refer to the qLabs® PT and APTT liquid controls package insert for detailed operation instructions.



Only use qualified qLabs® PT and APTT Controls for QC test.

12. Maintenance

12.1 Care and Cleaning of Your Screen

Follow these steps for cleaning the qLabs® Vet:

NOTE:

- No maintenance is required other than routine cleaning.
- Clean display screen with a clean damp cloth. If necessary, a mild detergent or disinfectant (such as 5% bleach solution or 70% isopropyl alcohol) may be used.
- Clean the area around the test strip guide with a swab or a pad that has been dampened with alcohol or 5% bleach solution.

12.2 Installing/Replacing Batteries

Follow these steps to install/replace the batteries:

- 1) Turn the qLabs® Vet upside down.
- 2) Remove the battery cover screw.
- 3) Remove the battery cover by pressing down on the battery cover release, remove the old batteries.
- 4) Replace with 4 standard AA batteries. Follow the direction for battery placement (+ and – ends) inside the battery compartment.
- 5) Fasten the battery cover. Tighten the battery cover screw.

NOTE:

- Turning the qLabs® Vet off manually when it is not being used will help conserve the battery power.
- Settings for date, time, past test results and reference range will be saved if batteries are replaced.
- If storing the Vet for an extended period, completely remove the batteries before the next use.



Dispose of the batteries in compliance with local regulations.



12.3 Servicing

All servicing and adjustment must be performed by Micropoint Biotechnologies Co., Ltd.'s service engineers only.

13. Troubleshooting
















When you receive an error code, please retest. If you receive a second error code, then contact your local distributor and test the patient with a laboratory method. Do not interpret an error code as a patient result in any case.

ERROR CODE	DISCRIPTION	CORRECTIVE ACTIONS
	qLabs® Vet is not connected to qLabs® eStation.	Connect the qLabs® Vet to the qLabs® eStation properly.
	The qLabs® eStation is Out of thermal paper.	Replace the thermal paper.
NO COAG	The meter did not detect coagulation.	Retest with a new strip. If this error message appears again, the result must be checked using another method.
E001	Low battery power.	Replace batteries or use power adapter as a power source.
E002	Heating process timeout.	Turn off the meter and let it equilibrate at ambient temperature (10-35°C) for at least 5 minutes before performing additional tests.
E003	The ambient temperature is outside of the operational temperature range.	Move the meter and strip to a location that is within the operational range of 10 °C to 35 °C and repeat the test.
E004	Insufficient blood was added to the sample well.	Retest with a new strip and make sure one big drop of blood is correctly added to the sample well.
E005	Internal QC check out of specifications.	<ol style="list-style-type: none"> 1. Make sure the strip is within the expiry date. 2. Make sure the Strip Code is entered correctly. 3. Retest with a new strip.

ERROR CODE	DISCRIPTION	CORRECTIVE ACTIONS
E006	External liquid QC check out of specifications.	<ol style="list-style-type: none"> 1. Make sure the strip and liquid controls are within the expiry date. 2. Make sure the Strip Code is consistent with the code printed on the liquid controls vial label. 3. Retest with a new strip.
E008	Barcode scanner error.	Restart the meter and retry.
E010	The operation of adding sample has timed out.	Please ensure the sample is added within 10 minute after the 'add sample' indicator is flashing
E011	You inserted a used test strip, or you applied a blood sample to the test strip before the meter warm-up was complete.	Retest with a new strip. Make sure to add sample within 10 minutes after the 'add blood' indicator is flashing.
E012	APTT calculation error.	Please retest with a new test strip. If you receive a second error code, then contact your local distributor and test the patient with a laboratory method.
E013	The strip is defective or im-properly operated when adding sample.	Retest using a new strip. Make sure the operation of adding sample is exactly correct according to the user manual guidance.
E014	The value of HCT may be out of range of 30%-55%.	Patients with abnormal HCT value may be recommended to test the PT and/or APTT using another method.
E02x	There is an error when calculating PT or APTT.	Please retest with a new test strip. If you receive a second error code, then contact your local distributor and test the patient with a laboratory method.
E015	Bluetooth initialization error.	Turn off the meter and restart the meter. If the problem still exists, please contact the technician for further assistant.

14. Symbols

SYMBOLS	EXPLANATION	SYMBOLS	EXPLANATION
	Caution. Read Carefully		Expiry Date
	Avoid Liquid Spills		Fragile
	Separate Collection		Biological Risk
	Temperature Limitation		DO Not Reuse
	Laser Radiation Risk		Manufacturer
	Lot Number		Consult Instructions For Use
REF	Catalog Number		Serial Number
CE	CE Mark		

15. Performance Characteristics & Product Specifications

15.1 Operation Condition

Temperature	between 10°C and 35°C (50°F and 95°F)
Humidity	10% and 90%
Atmospheric Pressure	700 hPa and 1060 hPa

15.2 Product Specifications

CPU	32-Bit V2 ARM Cortex-M3
Display screen	128x96 LCD
Test memory	200 test results
Barcode scanner	Laser Class 2, according to EN 60825-1:2007
Power	Battery: 4 X AA batteries Supply: Input: 100-240 VAC, 50-60 Hz Output: 7 VDC Power: 6 W
Size	135mm x 65mm x 34.5mm (L x W x H)
Weight	145g (With barcode scanner, without batteries)
Warranty period	2 years

16. Warranty

Use of the qLabs® Vet

The qLabs® Vet (the “Meter”) is designed for individual point-of-care coagulation test. Proper adherence to the instructions in the User’s Manual and package insert is critical to proper operation.

WARNING: Failure to comply with the user manual could lead to inaccurate results and incorrect medication dosing which could result in injury or death.

Limited Warranty

Micropoint Biotechnologies Co., Ltd. guarantees to the original purchaser of the Meter that the Meter is free from material defects in material and workmanship for two years from the date of purchase. This warranty does not guarantee the uninterrupted operation of the meter.

Micropoint Biotechnologies Co., Ltd.’s only liability and purchaser’s only remedy under this warranty is that during the warranty period Micropoint Biotechnologies Co., Ltd. shall replace or repair, at no charge, any Meter component with defects in material or workmanship. MICROPOINT BIOTECHNOLOGIES CO., LTD. MAKES NO OTHER WARRANTIES AND EXPRESSLY EXCLUDES ANY IMPLIED WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT OR FITNESS FOR A PARTICULAR USE.

The only user serviceable parts of the Meter are the battery, the cleaning door and the battery door. Tampering with any other portion of the Meter, abusing the Meter or using the Meter in a manner inconsistent with its user manual will void this warranty. This warranty does not apply to any component that is damaged by improper storage or accident or that is subject to alteration, misuse, tampering or abuse. Before returning any defective components, you must obtain a “Return Material Authorization” number and return instructions from Micropoint Biotechnologies Co., Ltd. Technical Support by calling +86 755 86296766.

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17. Contact Address and phone number

Customer Service and Technical Support

Available 8:30 AM to 5:30 PM (Beijing Standard Time), Monday-Friday.

Tel: +86 755 86296766



Micropoint Biotechnologies Co., Ltd.

2F/3F/6F, No.3, Industry 5 Road, Shekou,
Shenzhen, Guangdong 518067, China

Tel: +86 755 86296766

Fax: +86 755 86673903

www.micropointbio.com