Z3 Series Hematology Analyzer Quick Guide

1. Daily Operating process

STEP 1 Preparation

STEP 2 Startup

STEP 3 Daily L-J QC

STEP 4 Sample Preparation

STEP 5 Sample Analysis

STEP 6 Result Review

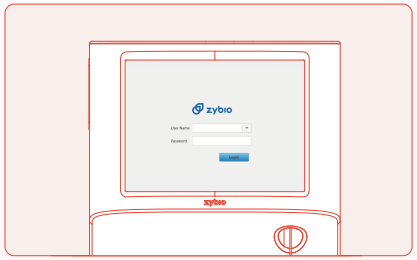
STEP 7 Shutdown

1.1 Preparation

- Check the waste bucket and make sure it's not full.
- Check the reagents to see if the reagents are expired or frozen.
- Check the thermal printer and make sure enough printer paper is installed.

1.2 Startup

- Press power switch at the back of the analyzer.
- Input **username** and **password**. (Default: Username: **admin**,Password: **admin**)



1.3 Daily L-J QC

- Tap the menu option **"QC"** => **"L-J QC"** => **"Setting".**
- Enter the **"L-J QC setting"** screen. Tap **New**, or select a QC file without QC results.
- Enter the expiration date of the lot.
- Select **"control level"**, **"control type"** and **"QC mode"** and set **"QC sample ID"** .
- Enter the target and limits in the edit boxes according to the package insert of the lot of controls.
- Take out one level of control from the refrigerator and handle it as the control insert.
- Run control under the "QC" screen and review the **"QC graph"** or **"QC table"** .

1.4 Sample Preparation

- The analyzer can run 3 types of samples:venous whole blood samples, capillary whole blood samples and pre-diluted samples.
- Venous whole blood: collect at least 0.5 mL EDTA-K_3 or EDTA-K_2 whole blood and run it within 15 min to 8 hours after being collected to ensure the accuracy of the results.
- Capillary whole blood: collect at least 100 μL whole blood and run it within 5 min to 2 hours after being collected to ensure the accuracy of the results.
- Blood samples shall be mixed as shown in the following figures.

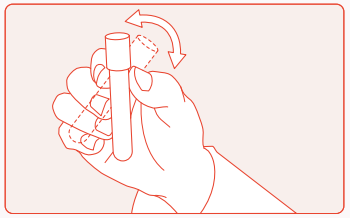


Figure 1 Upside down and mix at least 8 times

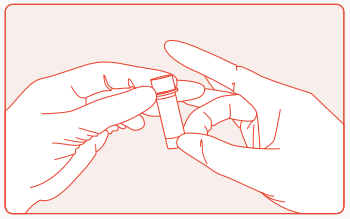


Figure 2 Flip and mix well(Used for capillary whole blood)

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1.5 Sample Analysis

1.5.1 Whole blood Analysis

Tap **“Analysis”** and tap **“Next sample”**.

Choose analysis mode.

Input patient information.Mix the sample as above 1.4.

Put the sample under the sample probe and press aspirate key.

1.5.2 Prediluted Blood Analysis

Tap **“Diluent”** and use a clean centrifugal tube to aspirate 580 μL diluent.

Collect 20 μL of capillary blood with a tube contained diluent. Mix the sample as above 1.4.

Run it within 5 min to 30 min after being collected to ensure the accuracy of the results.

Choose analysis mode and input patient information.

Put the mixed sample under the sample probe and press aspirate key.

1.6 Result Review

Select **“Review”** .

Select relevant results to manage: **“Graph Review” / “Trend graph” / “Print” / “Export” / “Validate”** .

Tap and enter **“Graph Review”** Interface to see the parameter, histogram.

1.7 Shutdown

Tap **“Shutdown”** .

Put Probe cleanser under the sample probe and press aspirate key.

Press the power switch after cleaning.

2. Replace Reagent

When Lyse or Diluent is ran out,

Please tap **“Reagent”** => **“Replace Reagent”** .

Take out a new reagent and scan the barcode from the label of the reagent bottle or input the code manually.

Put the new reagent to the right place.

Tap **“Apply”** and prime the reagent automatically.

3. Routine Maintenance

- When analyser shows any alarm, please tap **“Alarm”** information interface and tap **“Clear”** . If alarm still exists, please follow steps below.
- **【Background Abn./ Sample result is not good】** Tap **“Management”** => **“Service”** => **“Maintenance”** => **“Whole Device”** , then start probe cleanser soaking.
- **【WBC/RBC Clog】** Tap **“Management”** => **“Service”** => **“Maintenance”** => **“Unclog”** , then start probe cleanser soaking.
- **【HGB Blank Voltage Abn.】** Tap **“Management”** => **“Setup”** => **“System”** => **“Gain”** => **“4.5 V”** => **“OK”** , then retest one sample.
- **【Lyse/Diluent Empty】** Tap **“Management”** => **“Service”** => **“Maintenance”** =>**“Diluent or Lyse”** ,then start to prime reagents.
- When the analyser reminds you to do the **“cleanser soak”** , perform it as instruction.
- If the analyser is not to be used over 1 week or needs transportation, perform **“Drain All”** as instruction.

4. Note

- The White Blood Cells tested in Z3 are classified as **“Granulocyte” , “Lymphocyte”** and **“Mixed cell”**. The Mixed cell consists of Monocyte, Eosinophil and Basophil.