

# Cup Reader User Manual ACR-100



Hangzhou AllTest Biotech Co., Ltd.

# Contents

| Chapter 1 Introduction                   | 3  |
|--|----|
| 1.1 Intended Use                         | 3  |
| 1.2 Scope of Application                 | 3  |
| 1.3 Product Name and Model Type          | 3  |
| Chapter 2 Warnings and Safe Use          | 4  |
| Chapter 3 Components and Structure       | 6  |
| 3.1 Standard Equipment List              | 6  |
| 3.2 Cup Reader                           | 6  |
| 3.3 Technical Specification              | 8  |
| Chapter 4 Installation                   | 9  |
| 4.1 Checklist upon Opening the Box       | 9  |
| 4.2 Environmental Requirement            | 9  |
| 4.3 Placement                            | 9  |
| 4.4 Power Supply Voltage Requirements    | 10 |
| 4.5 Reader Installation                  | 10 |
| Chapter 5 Directions for Use             | 11 |
| 5.1 Start the Reader                     | 11 |
| 5.2 Main Functions                       | 12 |
| 5.3 Auxiliary Functions                  | 23 |
| Chapter 6 Troubleshooting                | 26 |
| Chapter 7 Daily Maintenance and Cleaning | 27 |

|     | 7.1   | Maintenance                    | 27 |
|-----|-------|--------------------------------|----|
|     | 7.2   | Maintenance Plan               | 27 |
|     | 7.3   | Precautions                    | 27 |
| Cha | apter | 8 Service, Repair and Disposal | 28 |
| Cha | apter | 9 Manufacturer Information     | 29 |
| Арр | endi  | x                              | 30 |
|     | A.    | Warranty                       | 30 |
|     | В.    | Warranty Card                  | 32 |

# **Chapter 1 Introduction**

### 1.1 Intended Use

The Cup Reader is an instrument intended to read the results of the DOA urine cup digitally and provide the results in electronic and printable forms. It displays and prints the qualitative results only. The Reader is designed to gather the product information through QR Code and can be used exclusively with DOA test cups manufactured by *AllTest*. The Cup Reader offers the advantages of high accuracy and fast results. The Cup Reader should be only used with consumables manufactured by Hangzhou AllTest Biotech Co., Ltd. as per package insert provided.

Please read this User Manual carefully before operation.

# **1.2 Scope of Application**

The Cup Reader is intended to be used for reading the test results obtained with urine DOA rapid test cup for detection of drugs of abuse in the urine. It's for professional *in vitro* diagnostic and Point of Care Use. It may be used in central laboratories of medical institutions, outpatient or emergency departments, clinical departments or medical services (such as community health centers), or medical center, etc. It can also be used in research laboratories.

# 1.3 Product Name and Model Type

- Product name: Cup Reader
- Model/Specifications: ACR-100

# **Chapter 2 Warnings and Safe Use**

#### Warnings:

- 1) Failure to comply with the User Manual could lead to damage and inaccurate results.
- 2) Patient ID and Test Type cannot be edited once the test begins.
- 3) Do not open the Cup Reader Chamber Cap during reading.
- 4) Do not test the used test cup again once the result has been reported.
- 5) Do not remove the USB drive during the software update.

#### Cautions:

- Use only the power supply that is recommended by Cup Reader. Use the power adapter provided with the Cup Reader. The correct power supply can maintain the safety and electromagnetic compatibility of the Cup Reader.
- 2) Always operate the Cup Reader on a clean, flat, level and stable surface not in direct sunlight.
- 3) Do not move the Cup Reader while a test is in progress.
- 4) Follow proper infection control guidelines for handling all specimens and related items. Properly dispose of all contaminated waste according to local regulations. Clean the Cup Reader and external surfaces according to instructions provided in *Chapter 7 Daily Maintenance and Cleaning*.
- 5) Risk of electrical shock. Do not operate the Cup Reader, if it has been opened, damaged or exposed to moisture, condensation or rain.
- 6) Do not disassemble or attempt to repair the Cup Reader or other accessories as there is a risk of damage to the Cup Reader. The Cup Reader does not contain serviceable parts and should be returned for repair. Disassembling the Cup Reader will also void the warranty.
- 7) Only operate the Cup Reader for its intended purpose and in accordance with this user manual and warnings. If the Cup Reader is used in a manner not specified in the user manual, protection provided by the warranty stands will be cancelled. The Cup Reader (including power supply) is designed to operate within the manufacturer's specifications.
- 8) Position the Cup Reader with clear access to connectors. Keep connected cables clear of work areas so that tripping or entangling will not pull the Cup

Reader off its work bench. The mains socket outlet intended for use with Cup Reader power supply should be located near the Cup Reader and be readily accessible. Manufacturer recommends that cables are disconnected when not in use for an extended period.

- 9) Do not immerse the cup reader in water or cleaning solutions.
- 10) Clean only with indicated solutions.

# **Chapter 3 Components and Structure**

# 3.1 Standard Equipment List

| Packing List |                  |              |          |  |  |  |
|--------------|------------------|--------------|----------|--|--|--|
| No.          | Description      | Quantity     |          |  |  |  |
| 1            | Reader           | ACR-100      | 1        |  |  |  |
| 2            | Power Adapter    | GSM40A12-P1J | 1        |  |  |  |
| 3            | Power Cord       | /            | 1        |  |  |  |
| 4            | Print Paper Roll | 57*30 mm     | 1        |  |  |  |
| 5            | User Manual      | /            | 1        |  |  |  |
| 6            | Calibration Cup  | /            | 1        |  |  |  |
| 7            | Touch Pen        | /            | 1        |  |  |  |
| 8            | Scanner          | /            | Optional |  |  |  |

On receiving the box, please check the contents with this list and ensure that nothing is missing. Scanner is an optional accessory, which is available only against specific requirement and not as a standard accessory.

Note: If some parts are missing or damaged, please contact with local distributor.

### 3.2 Cup Reader

#### 3.2.1 External View (Ref Fig 1, Fig 2)

The power switch is on the rear side of the reader. Adapter connection port, LAN Port and USB ports are on the left side of the reader for the purposes of connecting the reader with the mains socket, Laboratory Information System, keyboard and so on.



Fig 2







# 3.3 Technical Specification

| Principle                             | Photoelectric Conversion   |
|---------------------------------------|--|
| Test formats                          | Cup  |
| Touch Screen                          | 7 inches   |
| Measurement                           | Qualitative  |
| Read Time                             | 1-2.5 minutes ( Depends on the placement of QR code )  |
| Power Source                          | DC 12 V, 2 A   |
| Dimensions                            | 221 mm (Length) ×215 mm (Width) ×165 mm<br>(Height)  |
| Weight                                | < 1.5 kg   |
| Mains supply     voltage fluctuations | ±10%   |
| Overvoltage category                  | II   |
| Pollution Degree                      | 2  |
| Excitation light     source           | LED  |
| Connecting Ports                      | LAN Port, 4 USB Ports  |
| Storage Conditions                    | Temperature: -10-60 °C; relative humidity: 20% to<br>90%; atmospheric pressure: 86 to 106 kPa and in a<br>ventilated environment free of corrosive gases.<br>Measures should be taken to avoid moisture and<br>prevent impact and severe vibration during<br>transportation. |
| Operating Conditions                  | 15-30 °C   |
| Printer                               | Built-in thermal printer   |
| Place                                 | Indoor use, stable table, avoid of direct strong light<br>and strong electromagnetic interference source.  |
| Altitude                              | Up to 2,000 m  |

# **Chapter 4 Installation**

### 4.1 Checklist upon Opening the Box

#### 4.1.1 Check before opening the box:

Before opening the box, check the packaging is in good condition and box was not damaged during transportation.

#### 4.1.2 Check after opening the box:

① Open the box carefully, check the contents according to **3.1 Standard Equipment List** to ensure it is complete.

② Examine the reader power adapter to see whether it is in good condition. If any defects are found, please contact the manufacturer or your local agent.

**Note-1:** Please keep the original box of reader and packing materials for any future shipping/reference purpose.

**Note-2:** *AllTest* strives to provide the right kind of power plug suitable for each country. However, in some cases, it may not be possible. Use of right kind of adapter to connect to power supply is recommended in such cases.

### 4.2 Environmental Requirement

- Surrounding temperature: 15-30 °C;
- Relative Humidity: 20% to 90% RH;

Avoid strong magnetic field, vibration, shock, corrosive gas, direct sunlight, high humidity, and high temperature in work area, where the reader is placed for operation.

### 4.3 Placement

- The reader should be placed on a stable and level countertop, and in an indoor environment free of dust, direct sunlight or corrosive gases. The countertop must be able to sustain a weight of 1.5 kg.
- 2 No strong vibration source and strong electromagnetic fields around.
- ③ The reader should be placed in a well-ventilated place. There should be at least 10 cm space around the reader to ensure the necessary space for operation and maintenance.

## 4.4 Power Supply Voltage Requirements

 $\triangle$  The power supply of the reader varies between 100- 240 V /50/60 Hz AC depending on countries where the reader is used. The input voltage is 12V DC. Avoid short circuit and electric shock during the use. The reader is grounded through power adapter.

### 4.5 Reader Installation

Please use the reader under the proper conditions mentioned in **4.2** *Environmental Requirement*.

- 1. Place the reader on a stable platform.
- 2. Loading paper

Open the printer cover, place the printing paper into the printer, pull out approximate 3 cm of paper from the roll, then close the cover of the printer.

- 3. Connect the power adapter and the power connector of reader.
- 4. Turn on the power switch and start the reader.

# **Chapter 5 Directions for Use**

The Cup Reader can be operated by commands on touchscreen.

# 5.1 Start the Reader

Connect power with cup reader through the DC adapter and press the power switch to turn on the reader. The initializing screen will display as Fig 4.



Fig 4

After initializing, fill in the username and password (Ref Fig 5), the reader will have a self-testing. If the self-testing is passed, it will enter the main operation interface.

#### 5.1.1 Login

Tap to initiate the virtual keyboard, fill in the username and password, the initial username: **admin**, and the initial password: **admin**, tap "**Login**" to enter. Users can be added or deleted refer to *5.2.1.3 User Management.* 

|   | L     | ogin |           |
|---|-------|------|-----------|
| - |       |      | _         |
|   |       |      | _         |
| _ |       |      |           |
|   | Login |      | Shut Down |

Fig 5

#### 5.1.2 Shut Down

Tap "**Shut Down**", a prompt will display as Fig 6, tap "**Yes**" to turn off the reader, tap "**Cancel**" to give up.

| Shut Down |         |        |         |  |  |  |
|-----------|---------|--------|---------|--|--|--|
|           | Shut do | wn the | Reader? |  |  |  |
|           | Yes     |        | Cancel  |  |  |  |
|           |         |        |         |  |  |  |

Fig 6

#### 5.1.3 Self-Testing

After login, reader will enter the self-testing procedure. (Ref Fig 7)



Fig 7

### **5.2 Main Functions**

There are five main functions: Setting, Records, Read, Upload and Print, and several Auxiliary Functions. (Ref Fig 8)

| Import and<br>keyboard id |             |                     | Update and Provide the | ower off<br>on      |
|---------------------------|-------------|---------------------|--|---------------------|
|                           | <b>GIMA</b> | 2022-10-25 09:29:03 | 3 (1) 6  | Product<br>and      |
|                           | Cup         |                     | Patient  | Patient             |
| Ref.                      |             | ID                  | Name   | Informa-            |
| Lot                       | Exp.        | Age                 | Gender   | tion Area           |
|                           |             | Result              |  | Result<br>Area      |
| Setting                   | Records     | Read                | pload Print  | Function<br>Buttons |

Fig 8

#### 5.2.1 Setting

Press "Setting" to switch to the interface. (Ref Fig 9)

|             | Pre         | fe | rences        |     |   |             | LIS                |     |
|-------------|-------------|----|---------------|-----|---|-------------|--------------------|-----|
| Language    | English     |    |               | -   |   | Protocol    | HL7                | -   |
| Date & Time | 10/25/2022  | •  | 09:29:10      |     |   | Server IP   | 192.168.168.100    |     |
| Timezone    | China       | •  | Asia/Shanghai | -   |   | Server Port | 2100               |     |
| Print Mode  | O Automatic | :  | Manual        |     |   | Upload Mode | Automatic   Manual |     |
|             |             |    |               |     |   |             |                    |     |
| ` 1         | 2           | 3  | 4 5 6         | 5 7 |   | 89          | 0 - = •            | -   |
|             | q w         | r  | ert           | v   | u | ic          |                    | ( ک |
|             |             | 1  |               |     |   |             |                    |     |
|             | а           | s  | d f g         | յ ի | J | j k         |                    |     |
| <b>†</b>    | < z         |    | x c v         | b   | n | m,          |                    |     |

Fig 9

- 5.2.1.1 Preferences Functions Setting
- 1) **Language:** The language can be selected, English is the default selection.

2) Date & Time: Press at the right side of date displaying box to select

target date, fill in the target time with the virtual keyboard, press it to save the change. (If the reader is connected to the Ethernet via LAN Port, the date and time will be synchronized on the network, and cannot be changed.)

3) **Timezone:** The country and city can be selected to set the time zone and

press 🗹 to save the change.

- 4) Print Mode: Select "Automatic" to print test result automatically after each test, if "Manual" is selected, the test result will not be printed automatically after each test and the user should give a print command, if a printout is desired.
- 5.2.1.2 LIS Connection Setting
- 1) **LIS Connection:** The reader can be connected to LIS via Ethernet.

Step 1: Select communication protocol in protocol drop down box, press 🖾 to

save.

Step 2: Connect Ethernet

Step 3: Fill in the server IP address and port information in the server IP and Port

respectively, press 🔄 to save.

- Upload Mode: Select "Automatic" to upload test result automatically after each test, if "Manual" is selected, the test result will not be uploaded automatically after each test.
- 5.2.1.3 User Management

Press ko set user management, then it shows as Fig 10.

| User Management                            |        |
|--|--------|
| Pref admin Add                             |        |
| Language English Delete                    | - 🕑    |
| Date & Time 10/25/2022  Username           | .00    |
| Timezone China · Password Save             |        |
| Print Mode Automatic Confirm Password Exit | Manual |
|  |        |
| <u>` 1 2 3 4 5 6 7 8 9 0 -</u>             |        |
| →Iqwertyuiop                               |        |
| 🔒 asdfghjkl;                               |        |
| <b>t</b> < z x c v b n m , .               |        |

Fig 10

• Add User: Press Add, fill in username, password and confirm password, tap **Save** to save and tap **Exit** to give up.(Ref Fig 11)

|             |              | U                | ser Managem | ent       |         |  |
|-------------|--------------|------------------|-------------|-----------|---------|--|
|             | Pref         | admin            |             | Add       |         |  |
|             |              |                  |             | Delete    |         |  |
| Language    | _            |                  |             |           | -       |  |
| Date & Time | 10/25/2022 、 | Username         | user        |           | .00     |  |
| Timezone    | China        | Password         | ••••        | Save      |         |  |
| Print Mode  | O Automatic  | Confirm Password |             | Exit      | Manual  |  |
|             |              |                  |             |           |         |  |
| <b>1</b>    | 2 3          | 4 5              | 6 7 8       | 90-       |         |  |
|             |              |                  | 0 / 0       |           |         |  |
| →I          | q w          | e r t            | y u         | i o p     | [ ] [ ← |  |
|             |              |                  |             |           |         |  |
|             | a s          | d f              | g h j       | k I ;     |         |  |
| Î ↑         | < Z          | x c v            | b n l       | m (, (, ( |         |  |
|             |              |                  |             |           |         |  |

(a)

|             |              | User Management  |        |        |
|-------------|--------------|------------------|--------|--------|
|             | Pref         | admin            | Add    |        |
|             |              | user             | Delete |        |
| Language    | English      |                  |        | · ·    |
| Date & Time | 10/25/2022 , | Usemame          |        | .00    |
| Timezone    | China        | Password         | Save   |        |
| Print Mode  | Automatic    | Confirm Password | Exit   | Manual |
|             |              | User added.      |        |        |
| ` 1         | . 2 3        | 4 5 6 7 8 9      | 0 -    | = ←    |
| →I          | q w          | ertyui           | o p    |        |
|             | as           | d f g h j k      |        |        |
|             |              |                  |        |        |
| <b>†</b>    | < z          | xcvbnm           | , .    | /      |

(b)

Fig 11

• Delete User: Select user which needs to be deleted, press Delete. (Ref Fig 12)

|             |              | User Management  |             |        |
|-------------|--------------|------------------|-------------|--------|
|             | Pref         | admin            | Add         |        |
|             |              |                  | Delete      |        |
| Language    | English      |                  |             | • 🗹    |
| Date & Time | 10/25/2022 、 | Username         |             | .00    |
| Timezone    | China        | Password         | Save        |        |
| Print Mode  | O Automatic  | Confirm Password | Exit        | Manual |
|             |              | User deleted.    |             |        |
| \ <b>1</b>  | 23           | 4 5 6 7 8 9      |             |        |
| <u> </u>    | 23           | 4 5 6 7 8 9      | 0 -         |        |
| →I          | q w          | ertyui           | о р         |        |
|             |              |                  |             |        |
|             | a s          | d f g h j k      | ;           |        |
| <b>↑</b>    | < z          | x c v b n m      | , , , , , , | /      |
|             |              |                  |             | ·      |

Fig 12

5.2.1.4 About

Press 🚺 to display the software version and the serial number as is shown in

Fig 13. Press it return to the main operation interface.

| C                                | up Reader  |  |
|----------------------------------|------------|--|
| Version: 1.0.1<br>Serial: 000000 | 00b3b0460c |  |
|                                  | OK         |  |
|                                  | Fig 13     |  |

#### 5.2.2 Records

Press "**Records**" to switch to the records interface (Ref Fig 14). The results will be displayed in the records, and the detailed information will be displayed in result area. Press the target row, the detailed information will be shown accordingly. The functions of buttons are explained in table 1.

| Records |            |          |              |              |   |    |      |     |        |          |  |
|---------|------------|----------|--------------|--------------|---|----|------|-----|--------|----------|--|
| No.     | Date       | Time     | Ref.         | Lot          | Exp.  | ID | Name | Age | Gender | Operator |  |
|         |            |          |              | DOA22080001E |   |    |      |     |        |          |  |
| 2       | 2022-10-25 | 08:53:33 | DUA-R1157-A1 | DOA22080001E | 2024-07   |    |      | 0   |        | admin    |  |
| 3       | 2022-10-25 | 08:54:45 | DUA-R1157-A1 | DOA22080001E | 2024-07   |    |      | 0   |        | admin    |  |
| 4       | 2022-10-25 | 08:56:18 | DUA-R1157-A1 | DOA22080001E | 2024-07   |    |      | 0   |        | admin    |  |
| 5       | 2022-10-25 | 08:57:30 | DUA-R1157-A1 | DOA22080001E | 2024-07   |    |      | 0   |        | admin    |  |
|         |            |          |              |              | K         ≤ 1/4         >         >         ≫         Image: Second secon |    |      |     |        |          |  |
| Result  |            |          |              |              |   |    |      |     |        |          |  |

#### Fig 14

#### **Table 1 Function Buttons**

| Button | Function  |
|--------|---|
| < or > | Previous or Next Page   |
| K or X | The First or Last Page  |
| →o     | Jump into the target page filled in the dialog box            |
| A      | Press to initiate or collapse Virtual Keyboard                |
| EQ     | Search records with the information filled in the dialog box. |
| ALL    | Display all records   |

| C)  | Print the selected record(s)           |
|-----|--|
| æ   | Transfer the selected record(s) to LIS |
| CSV | Export record(s) as an excel           |
|     | Delete selected record(s)              |
| 6   | Return to the main operation interface |

#### 5.2.3 Read

Allow the cup, urine specimen, and /or controls to reach room temperature (15-30  $^{\circ}$ C) prior to testing.

#### 1) System Calibration

Step 1: Take out the calibration cup; put the cup into reader detection chamber.

Step 2: Tap "Read" to read the results. (Ref Fig 15)

#### Note:

- 1) The reading time may take 1 minute to 2 and half minutes, which depends on the placement of QR code.
- 2) When placing the cup into the reader chamber, align QR code on the cup label to the direction as shown in Fig 17 for faster results.

#### Interpretation of result:

**PASS** result means system running is normal, user can perform a test. While the calibration result is **FAIL**, please do not use the device, and contact *AllTest* for Technical Support.





#### 2) Run a test

**Step 1:** Bring the cup pouch to room temperature before opening. Remove the cup from the sealed pouch and use it within one hour.

Step 2: Collect specimen.

**Step 3:** Secure the cap and put the cup on a flat surface.

**Step 4:** Check the temperature label up to 4 minutes after specimen collection. A green color will appear to indicate the temperature of the urine specimen. The proper range for an unadulterated specimen is 32-38 °C (90-100 °F).

**Step 5:** Date and initial on the security seal and attach the security seal over the cup cap.

Step 6: Peel off the label on the cup.

#### 3) Read the results by Reader

**Step 1**: Fill in patient information, such as ID, Name, Age and Gender on the screen.

**Step 2**: Put the cup into reader detection chamber at 5 minutes and close the chamber cap, as shown in Fig 16.





|         | <b>@GIMA</b> | 2022-10-25 | 09:40:19 | (0)    | 6      |
|---------|--------------|------------|----------|--------|--------|
|         | Сир          |            | Pa       | tient  |        |
| Ref.    |              | ID         | 123      | Name   | Abc    |
| Lot     | Exp.         | Age        | 20       | Gender | Male 🗸 |
|         |              | Result     |          |        |        |
|         |              |            |          |        |        |
|         |              |            |          |        |        |
|         |              |            |          |        |        |
|         |              |            |          |        |        |
|         |              |            |          |        |        |
| Setting | Records      | Read       | Upload   |        | Print  |
|         |              |            |          |        |        |

Fig 18

The cup information will be filled in the boxes automatically after a few seconds of starting test, and the process will change continuously from 0% to 100%. (Ref Fig 19)

|        |            | Cup          |     |       |     | Patient |        |   |
|--------|------------|--------------|-----|-------|-----|---------|--------|---|
| f. DUA | A-R1157-A1 |              |     | ID    | 123 | Nam     | e Abc  |   |
| t DOA  | A22080001E | Exp. 2024-07 |     | Age   | 20  | Gende   | r Male | • |
|        |            |              | Res | sult_ |     |         |        |   |
|        |            |              | Res |       | 0%  |         |        |   |
|        |            |              |     |       | 0%  |         |        |   |

19

Step 4: When the process reaches 100%, the test result will display on the screen as Fig 20.





#### 5.2.4 Upload

After each test, press "**Upload**" to transfer the result to LIS. (The result will be transferred automatically on the condition that the LIS setting has been set correctly.) (Ref Fig 21)





#### 5.2.5 Print

Press "**Print**" to print the current result with the built-in thermal printer. (Ref Fig 22) (The result will be printed automatically on condition that the automatic function of print is switched on.)

| TEST REPORT   | r   |
|---|-----|
| 1) CUP  |     |
| Ref.: DOA-A1157-<br>Lot: DOA1909002<br>Expiry Date: 202108  |     |
| 2) PATIENT  |     |
| ID:<br>Name:<br>Age: 0<br>Gender:   |     |
| 3) RESULT   |     |
| TICH         RESULT           BUP         BOD           TIC         BOD           TIC         BOD           TIC         BOD           HET         BOD           BAP         BOD           BAD         BOD           BAD         BOD           BAD         BOD           BAD         BOD           BAD         BAD           BAD <td></td> |     |
| Tested: 2020-05-05 19:59<br>Printed: 2020-05-05 20:25   | :24 |

Fig 22

# **5.3 Auxiliary Functions**

Auxiliary functions including: Import, Update, Locked and Shutdown.

#### 5.3.1 Import

A specific configuration file will be provided with one batch of test cups. If a new batch arrives, the configuration file should be stored in a USB disk and imported

into the reader by pressing the button . (Ref Fig 23)





# $\int$







Fig 23

#### 5.3.2 Update

The software is updated via USB port. A new software version will be provided by email when the Reader does not work properly due to software damage.

Pressing in the main operation interface. (Ref Fig 24) Tap "**Yes**" to enter update procedure, tap "**Cancel**" to give up.

Warning: Do not remove the USB drive during the software update.

| Update           |  |  |  |  |  |
|------------------|--|--|--|--|--|
| Update software? |  |  |  |  |  |
| Yes Cancel       |  |  |  |  |  |
|                  |  |  |  |  |  |

Fig 24

#### 5.3.3 Locked

During one day, when the Reader is not in use, it can be temporarily locked by

tap the icon (6). When it is used again, enter the username and password to enter the operation interface. We recommend that the instrument be turned off after using in one day.

#### 5.3.4 Shutdown

Press (2) to turn off the reader. A prompt "**Shut down the reader**?" will be displayed on the screen, press "**Yes**" to turn off, press "**Cancel**" to give up. **Note**: Do not turn off the power switch immediately after the screen is turned off, about 1 minute later, the power switch can be turned off.

# **Chapter 6 Troubleshooting**

Operating and maintaining the cup reader following the instructions in this User Manual usually enables the reader to function correctly. Some common faults may be encountered during the use of the reader. The following table will introduce the common faults and solutions:

| Error   | Solutions  |
|---|--|
| Description   |  |
| Invalid<br>username or<br>password                        | <ol> <li>Make sure the username or the password are existed and right,<br/>login again.</li> <li>If the prompt still exists, fill in the original username and</li> </ol>  |
| prompts when login.                                       | password to check the added user information.  |
| The virtual<br>keyboard<br>blocks the<br>login interface. | <ol> <li>Tap the password input box, press the Tab key and then tap<br/>Enter key, it will be ok.</li> <li>Tap the virtual keyboard icon to initialize the keyboard.</li> <li>If the error still exists, please contact the local distributor or the<br/>manufacturer.</li> </ol>                  |
| The batch<br>information<br>was not found.                | <ol> <li>Import the corresponding batch configuration file and try again.</li> <li>If the error still exists, please contact the local distributor or the manufacturer.</li> </ol>   |
| Prompt<br>"Invalid<br>cups?"                              | <ol> <li>Take the cup out; make sure there is a QR code on the cup<br/>label.</li> <li>Make sure the QR code direction is correct; put the cup in the<br/>chamber as shown in Fig 17.</li> <li>If the error still exists, please contact the local distributor or the<br/>manufacturer.</li> </ol> |
| The<br>touchscreen is<br>stuck.                           | <ol> <li>Switch off and restart the Cup Reader.</li> <li>If the error still exists, please contact the local distributor or the<br/>manufacturer.</li> </ol>   |

#### Table 2 Troubleshooting

# **Chapter 7 Daily Maintenance and Cleaning**

### 7.1 Maintenance

Basic maintenance is to keep the outside of the Cup Reader clean.

External cleaning and maintenance method: Clean the outer surface of the reader with a damp cloth with no more than 70% alcohol. Do not use strong bleach ( $\geq 0.5\%$  bleach solution), because oxidizing substances and solvents may damage the reader's parts and touchscreen. Do not clean any internal parts and inner surface.



Turn off the power switch before cleaning! Ensure the power cord is disconnected to avoid the risk of short circuit and electric shock!

### 7.2 Maintenance Plan

| Maintenance item    | Every week | When needed             |
|---------------------|------------|-------------------------|
| Dust cleaning       | Х          |                         |
| Replace print paper |            | When the paper runs out |

### 7.3 Precautions

- i. Do not place the reader in a position that is difficult to operate or inconvenient to disconnect.
- ii. Treat tested samples as potentially contagious and use protective gloves and other protective measures.
- iii. Use test kits manufactured by Hangzhou AllTest Biotech Co., Ltd. and supplied by authorized distributors of Hangzhou AllTest Biotech Co., Ltd. only.
- iv. Do not replace the removable MAINS power cord with an improperly rated power cord.
- v. Any serious incident that has occurred in relation to the device shall be reported to the manufacturer and the competent authority.

# **Chapter 8 Service, Repair and Disposal**

Cup Reader does not require special maintenance except for keeping it clean and replacing printing paper when necessary. If service is required, please contact with the local distributor.

Cup Reader's internal parts, including the circuit boards, optical detection modules, display, and built-in thermal printer, can only be provided by manufacturer. Such items should not be sourced from any third-party, even if they claim to provide the same function. When issues related to the reader occur, contact the local distributor. We provide technical support for users to perform troubleshooting. If the reader needs to be sent back to manufacturer, please contact local distributor and/ or Hangzhou AllTest Biotech Co., Ltd. It normally takes about one week to fix problems. If it turns out that the reader cannot be repaired within warranty period, we will replace it with a new one. If for any reason the reader needs to be disposed of, please follow the procedures and rules of local regulations.

We provide technical support and software maintenance, including functional maintenance, corrective maintenance, software fixes or upgrade. We are only responsible and provide services when the reader is properly used in compliance with the manufacturer's instructions, otherwise any damages incurred will not be covered.

This product is required to comply with the European Unions' Waste Electrical & Electronic Equipment (WEEE) Directive. If you wish to discard electrical and electronic equipment (EEE), please contact your dealer or supplier for further information.



# **Chapter 9 Manufacturer Information**

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|        |  |        | =   |        |   |
|--------|--|--------|---|--------|---|
|        | Consult<br>instructions for<br>use or consult<br>electronic<br>instructions for<br>use | Σ      | Contains<br>sufficient for<br><n> tests</n> | IVD    | <i>In vitr</i> o diagnostic medical device                                      |
| -10 °C | Temperature<br>limit   | REF    | ACR-100                                     | EC REP | Authorized<br>representative<br>in the European<br>Community/<br>European Union |
|        | Manufacturer   | CE     | CE Mark                                     |        | Keep dry  |
| Ţ      | Fragile, handle with care  |        | Keep away<br>from sunlight                  |        | Protect from heat<br>and radioactive<br>sources                                 |
|        | Caution  | BD     | Biological risks                            | UDI    | Unique device<br>identifier   |
| SN     | Serial Number  | $\sim$ | Date of manufacture                         | 20%    | Humidity<br>limitation  |

**Index of Symbols** 



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| Number:        | 14602852600 |
|----------------|-------------|
| Revision date: | 2025-01-14  |

# Appendix

### A. Warranty

Please complete the warranty card included in the packaging. Mail it to your local distributor to register your purchase within one year of purchase.

For your records, write the purchase date of your starter kit here:

**Note:** This warranty applies only to the reader in the original purchase. It does not apply to the other materials included with the reader.

*Hangzhou AllTest Biotech Co., Ltd.* warrants to the original purchaser that this reader will be free from defects in materials and workmanship for a period of one year (12 months).

The one year starts from the later of the date of original purchase or installation (except as noted below). During the stated one year period, *AllTest* shall replace the unit under warranty with a reconditioned unit or, at its option, repair at no charge a unit that is found to be defective. *AllTest* shall not be responsible for shipping charges incurred in the repair of such a reader.

This Warranty is subject to the following exceptions and limitations:

This warranty is limited to repair or replacement due to defects in parts or workmanship. Parts required which were not defective shall be replaced at additional cost. *AllTest* shall not be required to make any repairs or replace any parts that are necessitated by abuse, accidents, alteration, misuse, neglect, failure to operate the reader in accordance with the operations manual, or maintenance by anyone other than *AllTest*.

Furthermore, *AllTest* assumes no liability from malfunction or damage to readers caused by the use of products other than products manufactured by *AllTest*. *AllTest* reserves the right to make changes in the design of this reader without obligation to incorporate such changes into previously manufactured readers.

#### **Disclaimer of Warranties**

This warranty is expressly made in lieu of any and all other warranties expressed or implied (either in fact or by operation of law) including the warranties of merchantability and fitness for use, which are expressly excluded, and is the only warranty given by *AllTest*.

#### Limitations of Liability

In no event shall *AllTest* be liable for indirect, special or consequential damages, even if *AllTest* has been advised of the possibility of such damages. For warranty service, please contact your local distributor.

### **B. Warranty Card**

Please complete this warranty card and mail it to your local distributor to register your purchase within one year of purchase.

| Purchaser        |  |
|------------------|--|
| Model            |  |
| Serial Number    |  |
| Date of Purchase |  |
| Address          |  |
| Telephone Number |  |
| E-Mail Address   |  |



#### Hangzhou AllTest Biotech Co., Ltd.

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