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# SuperTest 3000 Universal Biological Sample Drug Analyzer

**Operation Manual** 

Supervised by Jiangsu Superbio Testing Technology Co., Ltd.

CHAPTER I. INSTRUCTIONS FOR USE	1
1.1 Instrument Summary	1
1.2 SCOPE OF APPLICATION	1
CHAPTER II. SYSTEM COMPONENTS AND MAIN STRUCTURE	2
2.1 INSTRUMENT STANDARD CONFIGURATION LIST	2
2.2 MAIN STRUCTURE	2
Left Side Structure	3
RIGHT SIDE STRUCTURE	3
POWER ADAPTER	4
CHAPTER III. INSTRUMENT BASIC PARAMETERS AND SERVICE CONDITIONS	5
3.1 BASIC PARAMETERS AND SERVICE CONDITIONS	5
3.2 TRANSPORTATION AND STORAGE CONDITIONS	5
3.3 SERVICE CONDITIONS	6
CHAPTER IV. INSTRUMENT INSTALLATION	6
CHAPTER V. DETAILED OPERATION STEPS	7
5.1 System Settings	7
5.2 TEST ITEM MANAGEMENT	15
5.3 SINGLE SAMPLE TEST	17
5.4 BATCH TEST	19
5.5 HISTORICAL RECORDS	23
CHAPTER VI. INSTRUMENT MAINTENANCE	24
6.1 Maintenance	24
6.2 MAINTENANCE PLAN	24
6.3 PRECAUTIONS FOR INSTRUMENT USE	25
CHAPTER VII. TROUBLESHOOTING GUIDE	25
HANDLING STEPS FOR SYSTEM CRASH	25
CHAPTER VIII. SERVICE, REPAIR AND DESTRUCTION	26

### CATALOGUE

#### **Chapter I. Instructions For Use**

Thank you for choosing the SuperTest 3000 Universal Biological Sample Drug Analyzer of Jiangsu Superbio Testing Technology Co., Ltd. This product is a time-resolved immunofluorescence detection system based on the principle of photoelectric detection. It can perform fast quantitative and qualitative tests on common drugs in biological samples including hair, so as to complete the fast screening of suspicious drug users by multiple means. The instrument can also be used in the field of sewage drug testing and drug inspection. This operation manual is applicable to Supertest 3000, and the actual interface operation shall prevail.

This operation manual describes the features and relevant information of the product in detail, and the schematic operation steps are convenient for your use. Please read the manual carefully before using this analyzer.

#### **1.1 Instrument Summary**

- 1. Model / Specification: SuperTest 3000
- 2. Size: 306\*357\*367 (length \* width \* height, unit: mm);

#### **1.2 Scope of Application**

SuperTest 3000 Universal Biological Sample Drug Analyzer adopts advanced time-resolved fluorescence immunoassay technology, it needs to be used together with sample drug reagents. No longer limited to urine detection, the SuperTest 3000 can be widely used in the detection of drug content in hair, blood, dry blood spots, sweat, saliva, urine and other biological samples, and can complete the fast screening of suspicious drug users by multiple means.

The detection sensitivity of the analyzer for morphine, methamphetamine, ketamine and other common drugs can reach 0.001ng/mg, which can play a strong role in the field of drug detection. By swabbing the samples, the media such as luggage, parcels, fingers, vehicle steering wheel, room door handle and exhaust fan that have been exposed to drugs can be quickly detected on site, so as to quickly lock the suspects.

Meanwhile, the SuperTest 3000 has a strong specificity. It can complete on-site fast detection in the field of sewage drug monitoring. In a few minutes, the analyzer can quickly quantify the concentration of trace drugs in sewage, trace the source of drug pollution to the upstream, and provide case information clues in time.

### **Chapter II. System Components And Main Structure**

After opening the package, please check whether the components are missing or damaged according to the following standard configuration list.

Note: if any missing or damaged components are found, please contact Suzhou Hemai Precision Instrument Co., Ltd. and local sales representative in time. For contact details, please refer to Chapter IX of this user manual.

No.	Name	Quantity	Unit
	Universal Biological		
1	Sample Drug	1	Set
	Analyzer		
2	Power Adapter	1	Set
3	ID Card	1	Piece
4	Quality Control Card	1	Piece
5	Printing Paper	1	Roll
6	Compact Disc	1	Piece
7	Scanning Gun	1	Sat
/	(optional)	1	Set

#### 2.1 Instrument Standard Configuration List

#### 2.2 Main Structure

Note: the appearance of instrument and accessories shall be subject to the actual product.

1. Instrument

Front structure:





(Pic 3) Right side structure of SuperTest 3000

#### Power adaptor



(Pic 5) USB cable



(Pic 6) Note: this accessory is used with different testing reagents

#### Structure of test reagent card

Note: This accessory is a kind of consumable in reagent kits.

ID card

**USB** cable

Product symbol description

No.	Symbol	Description
1	$\land$	Be careful! Please refer to the accompanying text.
2	IVD	In vitro diagnostic equipment
3		Biohazard

## Chapter III. Instrument Basic Parameters And Service Conditions

#### **3.1 Basic Parameters**

Excitation light source: LED Excitation spectrum center wavelength:  $\lambda_0$ =365nm Receiving spectrum center wavelength:  $\lambda_1$ =610nm Interface: RS232, USB Printer: Built-in thermal printer Repeatability: CV≤10% Stability: CV≤10%

#### **3.2 Transportation and Storage Conditions**

After being packaged, the SuperTest 3000 shall be stored in an environment of -10  $^{\circ}$ C ~ 40  $^{\circ}$ C, relative humidity 20% ~ 90%, atmospheric pressure (86 ~ 106) kPa, no condensation, no corrosive gas, and good ventilation.

During transportation, attention should be paid to avoid moisture, shock and vibration.

#### **3.3 Service Conditions**

#### 1. Positioning and placement requirements

1) The instrument shall be placed on a stable and horizontal workbench in a room without serious

dust, direct sunlight and corrosive gas, and the worktable can bear a weight of more than 2.5kg.

2) There is no strong vibration source and strong electromagnetic field around.

3) The instrument should be placed in a well-ventilated place, and there should be more than 10cm

space around the instrument to ensure the necessary space for operation and maintenance.

#### 2. Power supply and voltage requirements

The instrument uses a 220 V/50 Hz AC power supply and the input voltage is 12 V DC. The power of the instrument is: 36VA. Care should be taken during use to avoid short circuits and electric shock!



Note: The file must be consulted in all cases marked with this symbol.

Instrument grounding instructions: Connect to the ground through an external power adapter.

### **Chapter IV. Instrument Installation**

Please use the instrument under the service conditions. (Refer to 3.3 "Service Conditions" in Chapter III for details.)

1. Place the universal biological sample drug analyzer on a stable workbench.

2. Connect the power adapter with the power interface of the universal biological sample drug

analyzer.



3. Turn the power switch to the "On" position and start the instrument.

### **Chapter V. Detailed Operation Steps**

The analyzer is operated by finger operation of the touch screen of the universal biological sample drug analyzer. Connect the power cord of the instrument, turn on the power switch on the left side of the instrument, and start the instrument. The instrument is powered on and starts self-check.

After the self-check is successful, this interface will be displayed.



Before using the instrument, please set the system according to actual needs. After the system setting is completed, users can perform fast test and standard test, and operate on historical records.

#### **5.1 System Settings**

Click [System Settings] to enter this interface, and the secondary menu will appear: Function Settings, Tools, Time Settings, About, and Restore Factory Defaults.

#### **5.1.1 Function Settings**

Click [Function Settings] to enter the following interface. Click the corresponding item to select the item to be set.

icon after the

开(

Single Sample Test	Batch Test	Test Item Management	Historical Records	X System Settings	
i	Microswitch Barcode Scanning Automatic Printing	Off	ID Number Ge Auto Generati Keyboard Inpu	ion On	
			Adm	ninistrator	

1. Enable micro-switch: On - when the test strip is inserted in place, the detection will be started automatically.

Off - Manually click the "Test" button to start the test process.

2. Enable barcode scanning: On - scan the barcode before each test and automatically match the test information.

Off- uses the currently selected test information of the instrument, and does not need to start barcode scanning and matching test information.

At this time, the test item defaults to the System Settings - > selected item in the Test Item Management interface.

 3. ID Number Generation
 Auto generation: On - automatically generate ID number according to date code Off - enter ID number manually
 Keyboard input: On - input ID number with soft keyboard Off - automatically generate ID number

#### **5.1.2 Tools**

Click [Function Settings] to enter the following interface. Main tools include: calibration tool, network configuration, touch calibration, quality inspection, motor debugging, program upgrade, barcode scanning. Among them, the functions of quality inspection, motor debugging, program upgrade and barcode scanning have not been realized.

Single Sample Test	Batch Test	Test Item Management	Historical Records	System Settings	
Function Settings					
ہے۔ Tools	Calibratic Tool	on Network Configurat	k Barcodi tion Scannir	e ng	
C Time Settings	Quality Inspectio	n Motor Debuggir	Prograr ng Upgrad	n le	
i About			Touch Calibrati	on	
Restore Factory Defaults			Guibiat		

### (1) Calibration tool

Click [Calibration Tool] to enter the following interface.

		Card 1	Card 2 Ca	ard 3 Card 4	Card 5		
Item No.	1						
Batch No.	1			Result 1 R	esult 2 Result 3		
Batch Code	t123	Number of Scanning Line	两线 💆	Group	Measured Value	Concentration	<u>^</u>
Durin oodo		Decimal Place	2	1	0.0000	0.0000	
Expiration Date	2018-10-31 🔽			2	1.0000	10.0000	
		Effective Minim C Value	100	3	1 <del>73</del>	6 <del>7</del> 8	
Fitting Model	分段线性 💌	C Position	215	4	() <del></del> .	-	
Incubation Time	5s 🔽	T1 Position	335	5	-		
		TTPOSIDOT	1000	6 7	1050	57.	-
Sample Type	粮食谷物 🔽			12		3 <del>7</del> 33	
Test Method	金标 🔽			Calibration 2	Calibratio	n T1 🖌	
Card Type	三联 💌			Group 14	Method	1	
ourd type 1	*			Name tes	t Unit	ml	
Write to	Read ID			Newfor	(O )	<b></b>	
ID Card	Card			Negative Range	- 10	ameter A	
				p		ameter B	
						ameter C 0	
Save	Exit			p	10 Par	ameter D 0	

1 Fill in the overall parameters: fill in the item number, batch number and corresponding batch code, select the expiration date, fitting model, incubation time, sample type, detection method and card type.



Each item number and batch number has a unique corresponding test information and calibration curve. Reset will overwrite the original settings.

	Card 1 Card 2 Ca	ard 3 Card 4	Card 5		
Item No.		Result 1 R	esult 2 Result 3		
Batch No.	Number of				
Batch Code t123	Scanning Line 两线 💟	Group	Measured Value	Concentration	
	Decimal Place 2	1	0.0000	0.0000	
Expiration Date 2018-10-31	Effective Minimum 100	3	1.0000	10.0000	
Fitting Model 分段线性	C Value	4		_	
	C Position 215	5	-		
Incubation Time 5 s	T1 Position 335	6	-	-	
Sample Type 粮食谷物 💽		7	-		-
Test Method 全标		Calibration 2	Calibratio	on T1 💌	
Card Type   三联		Name tes		m	
Write to ID Card ID Card		Negative Range		ameter A 0 ameter B 0	
Save Exit		Detectable Ran	10	ameter C 0	

2 Multi-card standard curve setting

Note: 1) Card 1, Card 2 ... Card 5

This corresponds to the number of test strips on the multi test card. For example, if the detection card is a 3-way card, then selects 3-way card. Card 1 corresponds to the first strip on the left of

3-way card, card 2 corresponds to the middle strip, and so on. Each card can set the number of scan lines, decimal places, effective minimum value of C value, and CT position.

Card 1 Card 2 C	Card 3 Card 4	Card 5		
	Result 1 F	Result 2 Result 3		
Number of Scanning Line 两线 💽	Group	Measured Value	Concentration	<u>^</u>
	1	0.0000	0.0000	-
Decimal Place 2	2	1.0000	10.0000	
Effective Minimum 100	3	1175	-	
C Position 215	4	-	-	
	5	-	-	
F1 Position 335	6	-	-	
	7	. H	-	~
	p	e of Concentration Par 10 Par nge of Concentration Par nge of Concentration Par	m T1 mi ameter A 0 ameter B 0 ameter C 0 ameter D 0	

2) Result 1, Result 2, Result 3

Each card can get different results according to different calibration methods of T1, T1 / C and T1 / T2.

Different test results can be set with item name, unit, corresponding calibration data, negative range of concentration and detectable range of concentration. The calibration data must be arranged in the table according to the measured value from small to large.

		Card 1	Card 2	Card 3 Car	d 4 Card 5		
Item No.	1 			Result 1	Result 2 Result 3		
Batch No.	1	Number of					
Batch Code	t123	Scanning Line	两线 💌	Group	Measured Value	Concentration	
Expiration Date 2	2018-10-31	Decimal Place		2	0.0000 1.0000	0.0000 10.0000	
		Effective Minir C Value	num 100	3	10 <del>.</del> 0	5-5	
Fitting Model	分段线性 🔽	C Position	215	4	-		
Incubation Time	ōs 💌	T1 Position	335	6	-	-	-
Sample Type 🛛	粮食谷物 💌		,	7	2		
Test Method	金标 💌			Calibration Group	2 Calibratio	<sup>on</sup> T1	
Card Type	三联 💌			Name	test Unit	m	
Write to ID Card	Read ID Card			Negative R	<u>10</u>	rameter A 0 rameter B 0	
Save	Exit	2		Detectable	10	rameter C 0	

As shown in the figure, when the test result T1 is 11, the test result is positive. When the test result

is 11, the test result is > 10.

### (2) Network configuration

Click [Network Configuration] to enter the following interface.

Local address: users can select "Obtain IP through CHCP" or enter the IP address directly.

Server address / port: input the address information of the master computer software installed on the network.

### (3) Touch calibration

Click [Touch Calibration] to enter the following interface.



Use the stylus or fingernail tip to accurately click the center of the crosshairs. When the target moves on the screen, repeat the action.

#### 5.1.3 Time Settings



Click [Time Settings] to enter the following interface.

Click [Modify Time] to set the time. Click the field you want to modify, and then press + or - to adjust. After modification, click [Modify Time] again to confirm the modification.

Single Sample Test	Batch Test	Test Item Management	Historical Records	System Settings	
Function Settings					
Tools	Year	Month Day	Hour Minute	+ Second	
C Time Settings					
L About					
Restore Factory Defaults					
→ <b>C</b> Exit			M	odify Time Cancel	

### 5.1.4 About

Click [About] to enter the following interface to display the model and version information of the analyzer.



#### **5.1.5 Restore Factory Defaults**

Click [Restore Factory Defaults] to open the dialog box. All data will be cleared and all settings will be restored to defaults.





### 5.2 Test Item Management

Click [Test Item Management] to enter the following interface. Click the corresponding item to select the test information suitable for the current test.

Single Sample To	est	Batch Test	Test Item Management	Historical Records	System Settings	
No.	Item No.	Batch No.	Sample Type	Item Name		Batch Code
1	1	1		test		t123
<b>¢</b> Previous	N	<b>&gt;</b> lext		ii→ vort to Card		

Click [Previous] and [Next] to browse the inspection items saved by the instrument. Click [Delete Selected] to delete the selected test item information.

#### The ID card is imported as follows:

Step 1: Insert the ID card into the ID card socket at the front of the instrument. Step 2: In the test item management interface, click the [Import ID Card] button to complete the import of test information.

Additional instructions for ID card import:

1) Each item number and batch number has a unique corresponding test information and calibration curve. Reset will overwrite the original settings.

2) When the ID card is inserted, the instrument scans the matched barcode, and after a test, the test items of the current ID card will be added to the list.

Instructions for the user to change the test items:

1) When "Start Barcode Scanning" is turned off, the user can determine the current test information by manually selecting test items in this interface. The test information is not read from the ID card at this time.

2) When "Start Barcode Scanning" is turned on, the user can scan the barcode through the side window to obtain the current test information.

3) If there is a barcode on the test strip shell, the instrument will automatically obtain the current test information when the "Built-in Barcode" is turned on.

#### 5.3 Single Sample Test

In the following operation instructions, it takes disabled "Microswitch", enabled "Start Barcode Scanning" and disabled "Automatic Printing" in the System Settings -> Function Settings as an example.

Step 1 Install the instrument, turn on the power switch, and start the instrument.Step 2 Click [Single Sample Test] to enter the following interface.

Single Sample Test	Batch Test	Test Item Management	Historical Records	Syste	K em Settings
Item Name					Sample ID
C Value					Item Name
T Value					
Concentration					Batch Code
Result					Test Time
Display of Curves					
350					4
280					Fast Test
140					
70					Standard Test
0, 50	100	150 200	250 300	350	Standard Test

Step 3 Scan the barcode to obtain test items and batch information.

The instrument adopts the default test information in the test item management directory. If the test information is not the current item to be tested, place the barcode in front of the scanning window and keep  $10 \text{cm} \sim 20 \text{cm}$  away from the scanning probe, and the infrared ray will scan the whole barcode.

Step 4 Click on the [Fast Test] button.

Single Sample Test	Batch Test	Test Item Management	Historical Records	System Settings	
Item Name				Sample ID	201611170001
C Value T Value				Item Name	test/test1/test2
Concentration				Batch Cod	e 1
Display of Curves				Test Time	2016-11-17 14:34:42
350					L
280					<b>7</b> Fast Test
140					م
70					Standard Test
° .	50 100	150 200	250 300	350 Under t	testing

If clicking on the [Standard Test] button, the incubation time countdown will be displayed, and the test will not be started until the countdown is over.

Ø	677	<b>P</b>	Ēc	×	
Single Sample Test	Batch Test	Test Item Management	Historical Records	System Settin	lgs
Item Name C Value				Sample	D 201611170001
T Value				Item Na	test/test1/test2
Concentration Result				Batch (	Code 1
Display of Curves				Test Ti	me 2016-11-17 14:34:42
350					4
210					Fast Test
140 70					Standard Test
0 <mark>0 5</mark>	0 100	150 200	250 300	350 Und	der incubation 5

After the test, the results will be displayed.

Single Sample Test	Batch	<b>P</b> Test	Test Item Management	Historical Records	System Settings	
Item Name	test				Sample ID	201611170001
C Value	186	37	31		Item Name	
T Value		1	345			test/test1/test2
Concentration	>10.00	>0.00	>0.00		Batch Code	1
Result					Test Time	
Display of Curves					rescrime	2016-11-17 14:34:42
46207				A		
39849			Λ	/\		<b>7</b> Fast Test
33491						Fast Test
27133						2
20775						Standard Test
14417	50 10	00 18	50 200	250 300	350	

**Step 5**. Check test results.

Select the boxes of different colors to view the test results of different card strips.

#### 5.4 Batch Test

#### In the following instructions, the "Microswitch" is turned on.

The batch test status changes as follows:

Start Incubation - In Incubation - Please Insert Reagent Strip - Under Test - Please Pull Out Reagent Strip

Click [Batch Test] to enter the following interface.

Single Samp		Batch Test	Test Item Management	Historical Records		m Settings		
Item Name	1					Sample ID		
C Value T Value						Batch Code		
Concentra	tion				i	Test Time		
	No.	Sample ID	Countdown	State				
						Delet Select	e	Clear
<					>	Ø	2	C
						Add Sar	mple	Start ncubation

#### Step 1. Input sample ID

**》** 加样

Method 1: scan sample barcodes with the scanning gun, and then add samples.



to add the IDs of all samples to be tested.

Single Sample Test	Batch Test	Test Item Management	Historical Records	System Settings	
Item Name				Sample ID	
C Value T Value				Batch Code	
Concentration				Test Time	
No.	Sample ID	Countdown	State		
	161115000	3	Start incubation	ī	in x
2	161115000	94	Not added	De	elete Clear
3	161115000	15	Not added	1000 C	lected
<b>* 🔲</b> 4	161115000	16	Not added	Add	Sample

Step 2. Start incubation

Add samples to the test strip, and click countdown begins.

The current state changes and the incubation

Follow up samples shall wait for sample addition according to the countdown of sample adding interval (15s).

Single Sample	Test	Batch Test	Test Item Management	Historical Records	System Setting	s	
Item Name					Sample I	D	
C Value					Batch Co	ode	
T Value					Test Tim	e	
Concentratio	n						
	No.	Sample ID	Countdown	State	-		
	1	161115000	3 4	Start incubation		m	×
	2	161115000	4 14	Not added		Delete	Clear
	3	161115000	5	Not added		Selected	
	4	161115000	6	Not added	>		
						Add Sample	Start Incubation



When incubation time is over, the system prompts "Please Insert Reagent Strip".

Single Sample	Test	Batch Test	Test Item Management	Historical Records	System Sett	ings	
Item Name					Samp	le ID	
C Value					Batch	Code	
Concentratio	n				Test T	ïme	
	No.	Sample ID	) Countdown	State			
	1	161115000	)3	Insert the reagent stri	ip .	前	×
	2	161115000	)4	Start incubation		Delete Selected	Clear
	3	161115000	)5	Not added	>	Selected	
	4	161115000	96	Not added		Add Sample	C; Start Incubation

Insert the incubated reagent strip according to the prompt and then start test.

Single Sample	∢ Test B	<b>Batch Test</b>	Test Item Management	Historical Records	System Settin	gs		
Item Name					Sample	ID		
C Value					Batch C	Code		
T Value					Test Tir	ne		
Concentration	n							
	No.	Sample ID	Countdown	State			·	
	1	1611150003	3	Under testing		面	×	
	2	1611150004	4	Start incubation		Delete	Clear	
	3	161115000	5	Not added		Selected		
	4	161115000	5	Not added	>			
						Add Sample	Start Incubation	

At the end of the test, the test results will be displayed. Sample status: please pull out the reagent strip.

Single Sample Tes	st	Batch Test	Test Item Management	Historical Records	Syst	iem Settings		
Item Name	test	test2	test3			Sample ID	16111	5003
C Value	705	577	813			Batch Code		
T Value	661	435	841			Test Time	1	
Concentration	6610.00	4350.00	8410.00				2016-	11-15 16:25:21
N	lo.	Sample ID	Countdown	State		Ì	-	
	1	161115000	3	Pull out the reagent str	qin	ī	Ī	×
	2	161115000	4	Wait for addition		De	ete	Clear
	3	161115000	5	Not added		Sele	cted	
<b>`</b>	4	161115000	6	Not added	>	-		
						Add S	<b>, a</b> mple	Start Incubation

Step 4. Pull out the reagent strip according to the prompt, and the list will no longer show the tested samples.

Step 5. Repeat the previous operation to test the next reagent strip.

### **5.5 Historical Records**

Click on the "Historical Records" button on the main menu page to switch to the following interface. Users can browse and manage the records.

Single Samp	e Test	Batch Test	Test Item Ma	anagement Histori	Cal Records S	ystem Settings	
No.	Item No.	Batch No.	Item Name	Batch Code	Concentration	Result	Test Time
1	1	1		t123	7910.000	Positive	2016-11-15 17:49:07
2	1	1		t123	3990.000	Positive	2016-11-15 17:49:02
3	1	1	test	t123	6110.000	Positive	2016-11-15 17:48:55
4	1	1		t123	8390.000	Positive	2016-11-15 17:47:31
5	1	1		t123	4380.000	Positive	2016-11-15 17:47:27
6	1	1	test	t123	6440.000	Positive	2016-11-15 17:47:19
7	1	1		t123	8690.000	Positive	2016-10-31 09:39:22
8	1	1		t123	4480.000	Positive	2016-10-31 09:39:17
9	1	1	test	t123	5730.000	Positive	2016-10-31 09:39:10
10	1	1	test	t123	6430.000	Positive	2016-10-31 09:38:24
Click		> <sup>⊤−页</sup> to vi	ew test reco	rds.			
Click #	100	print the se	lected test r	esults through	the built-in pr	inter;	
	للله شق to c	lelete the s	elected test	records.			
100 million (100 m	to c	elear all tes	st records.				
Click d	10	ers can ent	er various fi	lter conditions	s to search test	records.	

No.	Item No.	Conditional Sear	ch						st Time
1	1	10.00							-15 17:49:07
2	1	Time	2016	Year 11	Month 17	Day 19	Hour 0	Minute	-15 17:49:02
3	1							_	l-15 17:48:55
4	11		2016	Year 11	Month 17	Day <sup>19</sup>	Hour	Minute	-15 17:47:31
5	1								l-15 17:47:27
6	1	Sample ID							-15 17:47:19
7	1								)-31 09:39:22
8	1	Item No.	0						)-31 09:39:17
9	1								)-31 09:39:10
10	1			Search	]	Retur	n		)-31 09:38:24

Select the time, sample ID, item number, enter the search field, and click on the [Search] button to find the corresponding record.

## **Chapter VI. Instrument Maintenance**

#### 6.1 Maintenance

The universal biological sample drug analyzer only needs to keep the exterior clean.

External cleaning and maintenance method: use wet cloth and 70% ethanol to clean the external surface of the instrument, and do not use strong bleaching agent ( $\geq 0.5\%$  solution), because the oxidant and solvent may damage the outer case and touch screen. Take care not to clean any internal parts or internal surfaces.



Before cleaning the instrument, turn off the power switch to ensure that the power cord plug is disconnected and avoid short circuit and electric shock!

#### 6.2 Maintenance Plan

Maintenance	Weekly	Quarterly	On Demand
Item	weekly	Quarterly	Oli Demand
Dust Elimination	×		
Replace printing			When the printing paper runs out
paper			ti nen tile printing puper fund out

#### **6.3 Precautions For Instrument Use**

1. Do not place the instrument where it is difficult to operate or disconnect the device.

2. Except for the reagent cards provided by the manufacturer, do not put any other items into the test strip holder.

3. If the test sample of reagent card has potential infectivity, please use protective gloves or other protective measures to avoid skin contact with the sample adding port of reagent cards.

4. The used reagent cards should be disposed of in accordance with the *Regulation on the Administration of Medical Treatment Wastes*.

5. Please use the instrument in strict accordance with the instructions provided by the manufacturer. Otherwise, the protection provided by the instrument will be destroyed.

6. Instructions for data storage and recovery procedures: The instrument can save the calibration curves related to the items and batches imported by the manufacturer as well as the detection records. When the manufacturer imports the calibration curves through ID card or the master computer transmits directly, the instrument will save automatically. The instrument can save calibration data of up to 16 items at the same time, and each item has 3 batches of calibration data. The test results during normal use will be automatically saved to the instrument in the form of records, and the instrument can save up to 50,000 records. The saved data can be recovered automatically after power failure, and will not be lost. Data will be cleared when the user selects " Restore Factory Defaults".

7. The personnel who use and operate the PC software supporting the universal biological sample drug analyzer need to have relevant knowledge: be familiar with the use of Windows XP and Windows 7 operating systems, and the installation and uninstallation of the software package on Windows XP and Windows 7.

#### **Chapter VII. Troubleshooting Guide**

#### Handling Steps For System Crash

1. When clicking the button on the interface or the instrument button does not respond, the machine crashes. Please restart the instrument according to the following steps:

1) Turn off the power switch;

2) Re-connect the power cord;

3) Turn on the power switch.

2. If the PC software does not respond and continues to crash, please restart the software as follows:

1) Use Ctrl-Alt-Del to open the Windows Task Manager to end the task and turn off the PC software;

2) Restart the PC software;

3) If the PC software is not working properly, restart the computer that controls the instrument and then run the PC software.

#### **Description of common errors:**

1. If there is an error in the user interface, the instrument may not be able to perform the "Test" function, while the data backup and transmission functions will not be affected. At this time, the backup records can be uploaded to the master computer software, and then the instrument can be sent to the factory for maintenance.

2. The logic error of the application program itself has a very low probability of occurrence. When it occurs, the current test data will be lost, but the historical data backed up in the instrument will not be lost. At this time, the instrument should be powered off and restarted for continued use.

3. When the system or network resources are not available, the test function and data backup function can continue to be used, but it may affect the upload of records to the master computer software. After the system or network resources are stable, the function will be restored automatically.

### **Chapter VIII. Service, Repair and Destruction**

As long as the instrument is kept clean and the printing paper is replaced, the universal biological sample drug analyzer generally does not need special maintenance. For service or repair, please call the company.

If for some reason, the user needs to destroy the universal biological sample drug analyzer, it is recommended that the user destroy it according to the regulations of Class B electronic instruments.

The technical support and maintenance provided by the company for the software include functional maintenance, corrective maintenance and software error change or upgrade.

The company declares that the above service guarantee can be obtained only when the manufacturer's operation instructions are fully complied with. The company will not be responsible for any other damages.

## **Contact Information**

Manufacturer: Jiangsu Superbio Testing Technology Co., Ltd. Address: 11F, Block B, Sino-Danish Ecological Life Science Industrial Park, No. 3-1 Xinjinhu Road, Pukou District, Nanjing Tel: 025-58277529 QQ: 834729327 E-mail: subotest@superbio.cn Website: http://www.subotest.com Postal code: 261000