



Product Image Coming Soon

## VERTICAL AUTOCLAVE

AUT11-054A



# INDEX

1. About the Instrument	2
<hr/>	
1.1 Application	2
1.2 Sterilization principle	2
1.3 Types of microorganisms killed	3
1.4 Product structure.	3
1.5 Normal working conditions	3
1.6 Transportation requirement	4
1.7 Storage requirement	4
1.8 Service life	4
1.9 Technical specifications	4
1.10 Parts & Appearance	6
1.11 Parts Function	7
2. Installation of Autoclave	10
<hr/>	
2.1 Placement of Autoclave	10
2.2 Power Supply Connection	10
2.3 Checking Package	11
2.4 Cleaning	11
2.5 Setting of Local Altitude	11
3. Operation Instruction	12
<hr/>	
3.1 Basic Sterilization Illustration & Operation Instruction	12
3.2 Creating, Modifying, Deleting the Program	18
4. Maintain & Management	19
<hr/>	
4.1 Cleaning	19
4.2 Maintenance	20
4.3 Setting of Administrator Menu	21
5. Troubleshooting	22
<hr/>	

# 1. About the Instrument

## 1.1 Application

- This series of products are used for sterilization of scientific research institutions, laboratory utensils, culture media and unsealed liquids or preparations.

## 1.2 Sterilization principle

- Steam is used as sterilization factor to kill loaded microorganisms. The main technical parameters of sterilization, such as pressure, temperature and time, are set and controlled by the program.

## 1.3 Types of microorganisms killed

- Using hot and humid high pressure steam as sterilization factor to kill loaded microorganisms, including spores of bacteria, spores of fungi, etc.

## 1.4 Product structure.

It is mainly composed of shell, sterilization chamber, sterilization door, built-in steam generator, pipeline system, temperature control system, pressure detection, safety interlock protection device and so on. The specification is preset and carried out automatically.

## 1.5 Normal working conditions

- Ambient temperature: 5 °C ~ 40 °C
- relative humidity not greater than 85%.
- Atmospheric pressure: 70kPa~106kPa.
- Suitable for power supply AC 220V ±22V, (50 60) Hz ±1Hz.

## 1.6 Transportation requirement

Instruments are not allowed to stand upside down, overlap, below is not allowed to put items, avoid rain, carefully handle, there should be anti-movement measures.

## 1.7 Storage requirement

- Ambient temperature:-20 °C ~ 55 °C.
- Relative humidity not greater than 93%.
- An indoor or sheltered place free of corrosive gas and well ventilated

## 1.8 Service life

- It is recommended to use up to 8 years

## 1.9 Technical specifications

### Technical Data

Model	AUT11-054A
Capacity(L)	54
Dimension(L*W*H,mm)	460x542x1070
Chamber dimension(Dia*H,mm)	φ325x725
Chamber material	SUS 30408
Rate power supply(w)	2200 W
Power requirement	220V,11A, 50/60HZ
Working environment	5-45°C, relatively humidity 10%-85%
Stainless steel basket(Dia*H,mm)	(φ300x200)x3
Temperature accuracy	0.1°C
Working environment	5-45°C, relatively humidity 10%-85%
Sterilization temperature	105-135°C
Sterilization time range	1-999minutes
Melting temperature	60-100°C
Melting time	1-999minutes
Warming temperature	45-60°C
Warming time range	1-9999 minutes
Exhaust Level	6 Levels adjustable
Exhaust mode	Fully automatic internal exhaust
Exhaust collecting bottle	Built in
Sterilization cycle	1.Solid cycle 2.Agar cycle (with warming) 3.Self-defined
Exhaust	Automatic internal discharging , with a steam collecting bottle inside. Exhaust speed can be selected by 6 levels
Display range of pressure gauge	-0.1-0.5Mpa
Pressure	Max working pressure:0.25Mpa,design pressure:0.29Mpa
Controller	“Smart IIII” fast speed microcomputer controller

Safety device	Self-induction pressure interlocking device, lid closing checking, over temperature protection, temperature monitor, dry scorch protection system, over pressure protection,safety valve,over current and short circuit protection, leakage protection device,anti-scald safety protection, automatic troubleshooting system
Standard spare parts	Stainless steel baskets,water plate,waste water bottle,drainage hoses
Optional spare parts	Printer, printing set,load thermometer

Table 1

Note: If there is any change to the technical specifications, no further notice will be given, subject to the material object.

## 1.10 Parts & Appearance

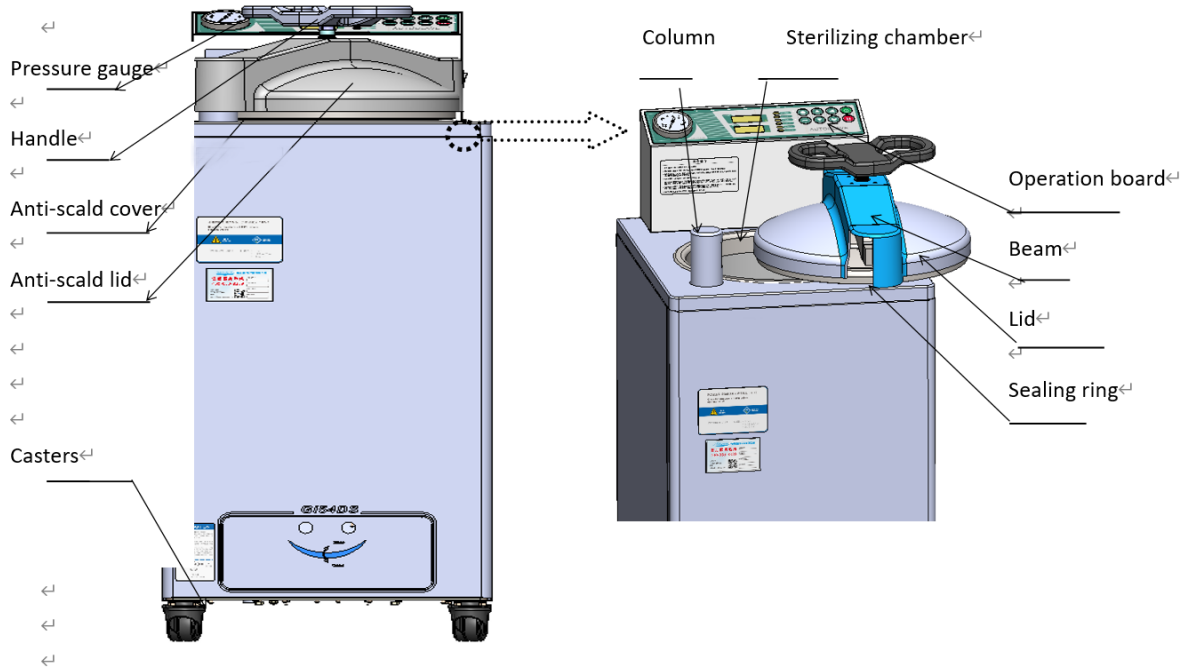


Figure 1

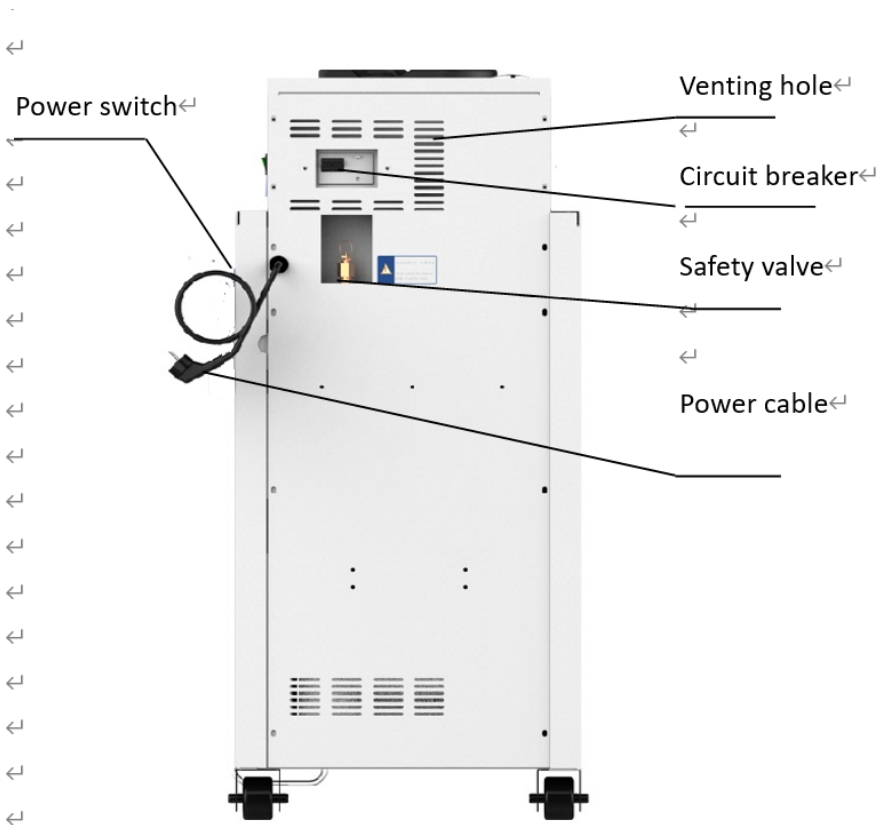


Figure 2

## 1.11 Parts Function

1. Display Panel Function:

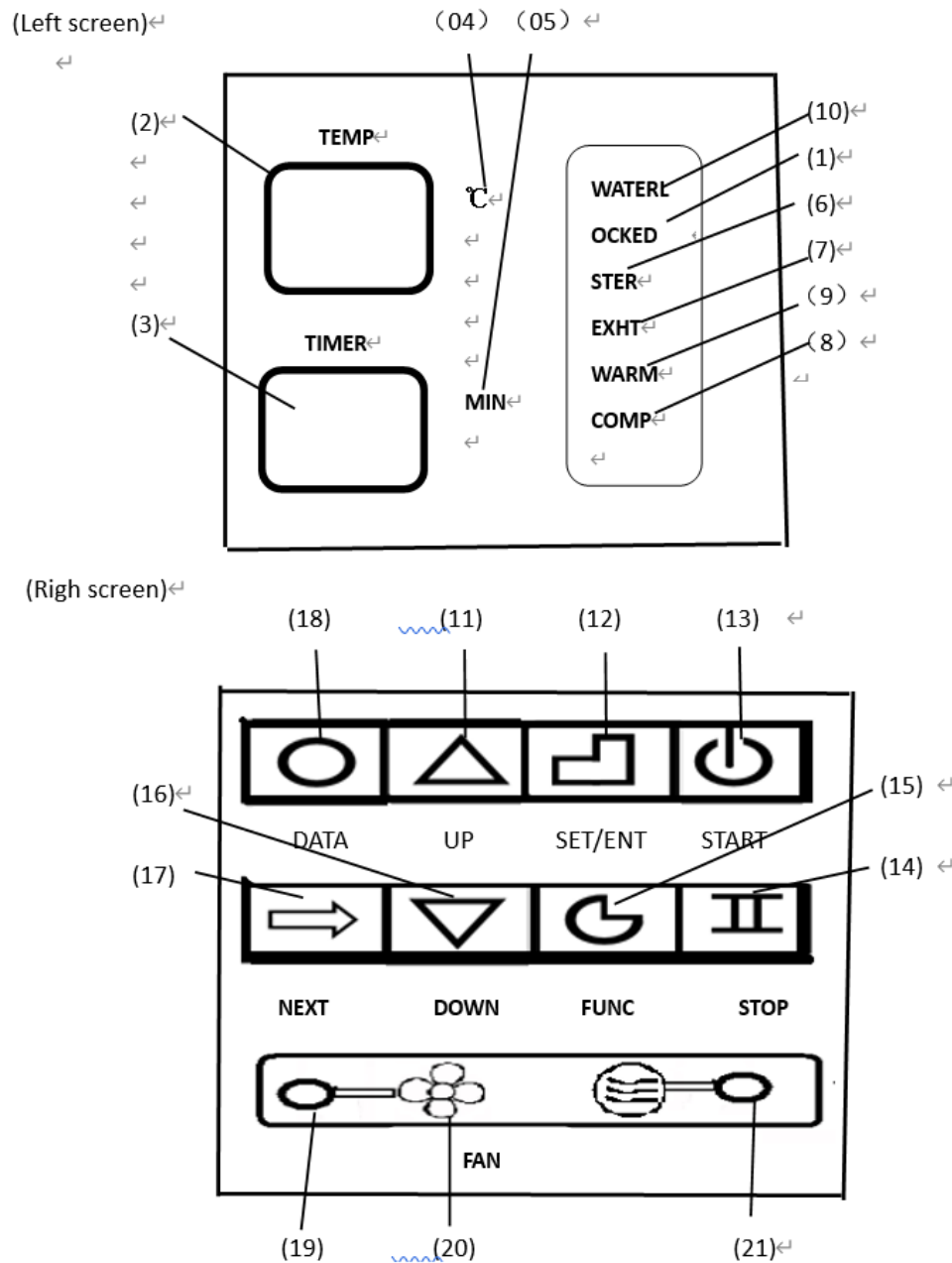


Figure 3

1. LOCKED: Interlocking indicator, which will be on during interlocking.
2. Screen A(left screen):display temperature value,will show menu code while in administrator menu
3. Screen B(right screen):display time,error code or software code
4. °C: The light indicates the current unit is °C
5. MIN: The light indicates the current unit is minute
6. STER. : \*STER.\* is light and sterilizing status indicator is blinking to indicate that the instrument is in sterilizing stage, the temperature of this stage shall be the set sterilizing temperature.
7. EXHT. : \*EXHT\* is light, and steam exhaust status indicator is blinking to indicate that the instrument is in steam exhaust stage. If \*EXHT.\* and steam exhaust status indicator in screen A blink together, it indicates entering the steam exhaust level can be modified.
8. COMP.: The letter blinking indicates that the running of program is finished
9. WARM: \*WARM\* is light, and drying/warming status indicator is blinking to indicate that the instrument is in warming stage. If \*WARM\* and drying/warming status indicator blink together, it indicates entering

the warming parameter can be modified.

10. Not function for this model

11. UP: Under standby status, you can press \*UP\* button to enter the immediate next program, i.e., the current program is U10, press \*UP\* button, it will enter U11, and display the detailed parameters of current program; When modifying the parameters of programs, you can press \*UP\* button to increase the set value, and press and hold the button to increase the display value by 10 units until the maximum value

12. SET/ENT: Setting and Entering button, press the \*SET/ENT\* button at the first time to enter the program parameters modification status, and press the button again to save the change.

13. START: Start button is used to start sterilization or melt; For the avoidance of misoperation, this button has delay response function so it could only work when pressed and held for over 2 seconds.

14. STOP: Stop button is used to stop sterilization or melt; For the avoidance of misoperation, this button has delay response function so it could only work when pressed and held for over 2 seconds.

15. FUNC: \*FUNC\* button must work with other buttons, press the \*FUNC\* + \*STOP\* button together to delete the current program, press the \*FUNC\* +

\*DATA\* together to enter the administrator menu. Press FUNC + UP together, can change the exhaust level, level 0 means no exhaust, level 5 means full exhaust.

16. DOWN: Under standby status, you can press \*DOWN\* button to enter the immediate previous program, i.e., the current program is U10, press \*DOWN\* button, it will enter U09, and display the detailed parameters of current program; When modifying the parameters of programs, you can press \*DOWN\* button to decrease the set value, and press and hold the button to decrease the display value by 10 units until the minimum value.

17. NEXT: to enter into next option

18. DATA: Under standby status, you can press \*DATA\* button to inquire the detailed parameters of current program; When setting the parameters of program, press \*DATA\* button to cancel the modification and exit, unless the \*SET/ENT\* button has been pressed to save the modification before pressing the \*DATA\* button.

19. Cooling fan status indicator: The light indicates the cooling fan is working.

20. FAN: Start/Stop button for cooling fan is used to control the start and stop of fan from the completion of sterilization stage or drying/warming stage to the temp lower than 40\*, while the cooling fan indicator will be on or off with this switching. The cooling fan may shorten the waiting time for sterilized articles cooling.

21. Object temp indicator: When it is on, it means the load thermometer is enabled, and the indicator off indicates the load thermometer is disabled.

2. Optional Spare Parts:

1) Load thermometer

3) Printer and printing set

## 2. Installation of Autoclave

### 2.1 Placement of Autoclave

1) This autoclave is precision instrument, during installation, place the autoclave on a flat ground and fix the wheels by pressing the breaker down. ( If the ground is not flat, we can provide special wheels before purchasing) Do not place the autoclave in an environment with high humidity, direct sunlight and temperature less than 5°C over 40°C.

2) Leave a certain space between the autoclave and the wall, it is suggested to keep 10cm between back and wall, and 20cm between sides and wall, to dissipate heat more fully.

3) Do not place the instrument under the fire alarm probe to prevent mis-alarms caused by the hot steam.

4) The exhaust port of the safety valve should not be close to the power supply outlet and should not be blocked.

### 2.2 Power Supply Connection

1) The instrument must be grounded reliably, if the power socket does not have the ground terminal, it is required to ground the instrument with independent ground wire before powered on.

2) Power supply: single-phase AC 220V $\pm$ 10%, 50Hz/60Hz

Requirement for current intensity:

AUT11-054A .....16A

If choose 2800W, the current intensity is 20A.

3) Connect the GI80/100 power cord to air switch with power pack, of which, the red/brown wire connecting to live wire, green/blue wire to zero wire, yellow/green wire to earth wire.

Note: The specification of power supply should comply with the requirement on nameplate of the machine. No heavy article is allowed to place on power cord and the damage or exposure of power cord or loosening output lead may cause fire or electric shock.

### 2.3 Checking Package

Check the package before opening, take a picture if there is any damage. Open the box from the bottom (do not open the top), take out like a hat (shaken by two people from two sides). After opening the package, check if there is any damage of the machine, report to distributor or manufacturer.

### 2.4 Cleaning

1) Switch on the leakage protection switch and turn on the power, and then open the cover of sterilizer chamber, and take out the protective foams from the chamber. Clean the chamber and put the water plate and stainless steel baskets in.

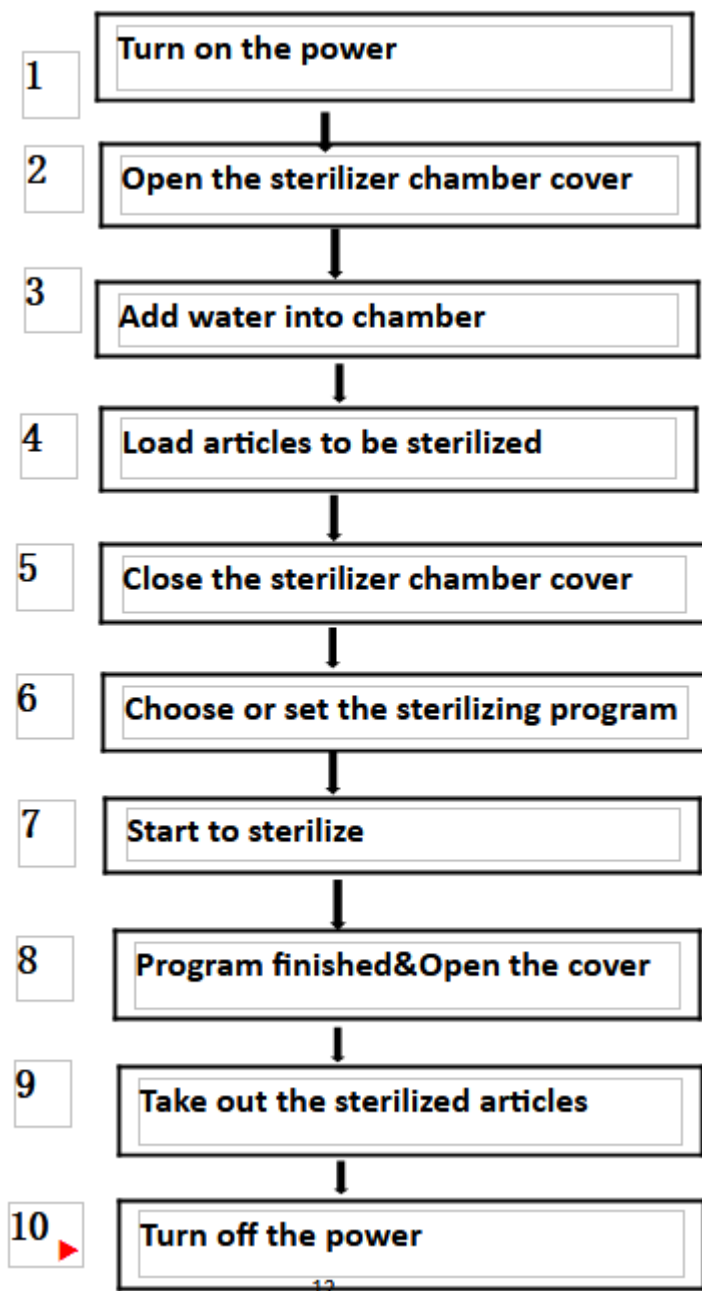
2) Clean the foam scraps inside the sterilizer chamber completely to avoid blocking the pipeline.

## 2.5 Setting of Local Altitude

Before shipping, the machine has been set for an elevation between 0-300m, if the local elevation is over 300m, please reset the altitude to make sure proper usage of the machine.

# 3. Operation Instruction

## 3.1 Basic Sterilization Illustration & Operation Instruction



1、 Turn on the power

●After turn on the power, the system will do the self-checking, screen A will show current temperature,

screen B will show the latest saved program.

●If the instrument is under standby condition, and no any operation within 30 minutes,the machine will enter into electricity-saving mode, and screen will go drak except for LOCKED light, press any button can restore the display.

## 2、 Open the sterilizer chamber cover

●Turn the handle wheel counter-clockwise until the lid is loosened, need to turn the handle wheel until the end, so to protect the sealing ring from dropping off.

●Push the handle rightward slightly to move the lid to one side

## 3、 Empty the front water tank and add water into chamber

1) Check the water tank of the instrument(Fig1),make sure the water level is under the high water level line, empty it if too high. If you don't empty it, the water will come out.Put the exhaust tube into this exhaust water tank.



Figure 4

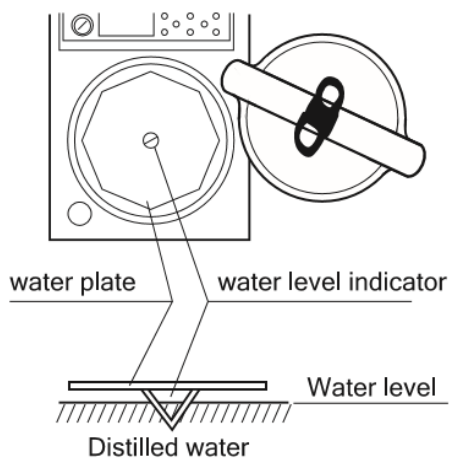


Figure 5

## 2) Add water into chamber manually

●Check the water level in the chamber, if you can not see water from the hole in the water plate, you should add water in, and the water should not be higher than the water plate. (fig 2)

●Change the water frequently, so as to protect the valves and pipes.

★Note:

○Do not open the drainage valve of chamber or darainage valve of inside steam collecting tank to avoid injury from the high temperature steam.

○The water level inside the chamber may decrease after each cycle, please add new water on time.Lack of water for a long time may cause damage to the heater.

○It is recommended to use distilled water with a electricity conductivity between 10~15us/cm,do not use well water, salt water or hard water,so as to prevent the chamber from corrosion,fouling and shortening the life of heater.

## 4、 Load articles to be sterilized

- Take the baskets out, and put the articles to be sterilized into the baskets
- Put the water plate first, then put the baskets on the waterplate, do not put the basket directly on the heater.

Notes: VERY IMPORTANT

1. Clean the articles to be put in thoroughly by cleaning agent and water
2. While putting the articles into the baskets, make sure the articles is placed well (overlap may cause inadequate sterilization). Put carbon steel devices and stainless steel device in different baskets and put several layer of Kapok paper under the carbon steel devices so as to protect the stainless baskets.
3. Sterile equipment should be packed with breathable packaging materials such as sterilization bags, sterile paper, gauze bags, etc.
4. When the sterilizer is loaded with plastic bags, the sterilization bags should be placed in the basket first and then in the sterilization chamber, otherwise the temperature control will be affected.
5. When the sterilizer is loaded with a cleaning bag, the opening of the cleaning bag shall be opened, and it shall be confirmed that the bag does not contact the inner wall of the sterilization chamber. During sterilization, if the bag mouth is sealed, the sterilization will be insufficient. If the bag is jammed into the sterilization chamber and the steam cannot fill every corner, the sterilization will be incomplete.
6. When sterilizing glassware such as beakers, conical bottles and test tubes, the glassware shall be placed upside down or horizontally. If the vessel can only be placed directly, a small amount of distilled water or purified water can be put into the sterilized vessel.
7. When sterilizing the liquid, such as chemical reagent or solvent, pay attention to the rationality of the liquid in the container (the volume of the flask shall not exceed 3 / 4, and the volume of the test tube shall not exceed 1 / 2), so as to avoid the liquid overflowing from the container during the process of heating or cooling. Before sterilizing, the cover of the container shall be loosened so as to ventilate, otherwise the container will be broken.
8. When agar is dissolved, the volume of the container should be less than 2 L, otherwise the dissolution will be insufficient. (Note: the Durham test tube with a diameter of more than 6mm shall be used as the sample tube. When the diameter of the sample tube is less than 6 mm, bubbles will remain in the tube, which will affect the sterilization effect).

5、 Close the sterilizer chamber cover

- Push the handle leftward slightly until the arm leans against the arm stopper
- Turn the handle until it is secured and at the same time the door lock icon is white and not blinking. The handle must end in a position either horizontally or vertically, you can even loosen it a little bit to make it positioned horizontally or vertically.

Note:

○ Before closing the cover, check if there are objects in or on the sealing ring, clean it to avoid damaging the sealing ring that may cause the steam leakage.

○ Only when the lid close icon on the screen changes to white and not blinking, the machine will start to work.

6、 Select or set the program

● Selecting the sterilizing program: Press the “UP” and “DOWN” button to choose the sterilizing program. The screen will show the U01 to U03, this is the set programs. If you want to sterilize under those programs. You just need to press the start for 3 seconds to start. If you want to create the new programs, you can press “SET/ENT” button to enter into the setting menu, press the “UP” and “DOWN” to set the temperature, then press the “NEXT” to enter into time setting. Then pressure “SET/ENT” again to save the new program, the new programs will be U04 to U20. Do not press STOP randomly during the process. Do not open chamber or water tank drainage valve during process.

● U01-U03 can not be deleted, but can be crated and saved as new programs, below is the detailed specification of U01-U03.

U01 Solid mode U02 Agar mode U03 Self-defined There are 5 levels of exhaust, level 0 is no exhaust, level 5 is full exhaust.

U01-Solid Mode

○Sterilizing flow: standby—heating—sterilizing—exhaust—complete

○Application: Solid sterilizing

○Press DATA button, the digital displayer A and B will display the detailed parameters once by three screens:

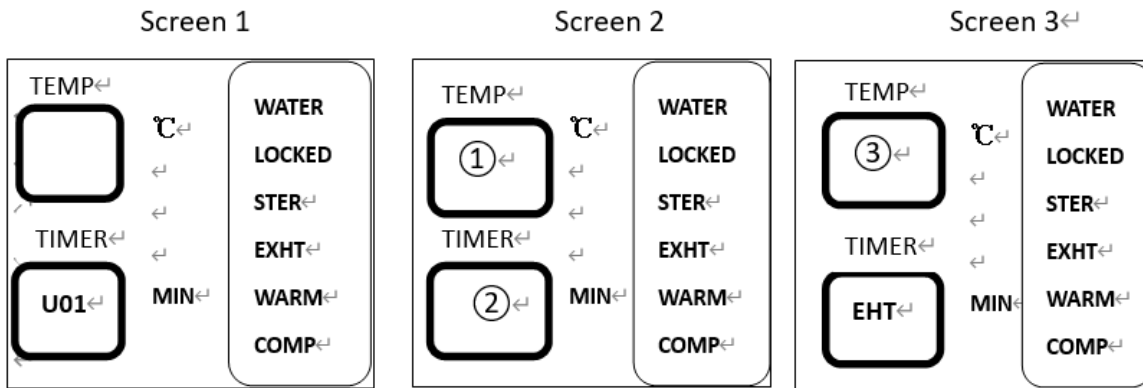


Figure 6

U01 default parameters and the parameters scope of its newly created program

Name	No.	Default Parameter	Parameters Range of New Program
Sterilizing Temp.	①	121 °C	105°C~135°C
Sterilizing Time	②	20 min	1~999min
Exhaust Level(EHT)	③	0	0~5 level

Table 2

U02—Agar Mode

○Sterilizing flow: standby—heating—melting—exhaust—warming—complete

○Application: Agar melting and warming

○Press DATA button, the digital displayer A and B will display the detailed parameters once by three screens

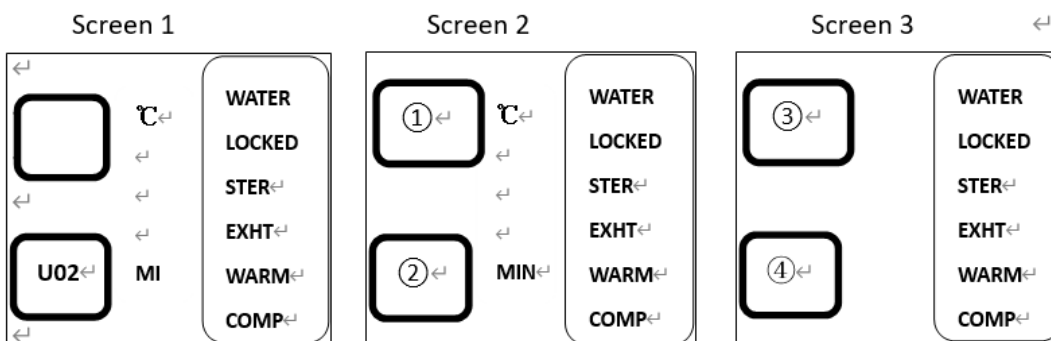


Figure 7

U02 default parameters and the parameters scope of its newly created program

Name	No.	Default Parameter	Parameters Range of New Program
Melting Temp.	①	100 °C	60°C~100°C

Melting Time	②	10min	1~999min
Warming Temp.	③	50°C	45°C~60°C
Warming Time	④	600min	1~9999min

Table 3

U03—Self Defined Mode

○Sterilizing flow: standby→(delay the time of purging cold air)

→heating→sterilizing→exhaust→warming→complete

○Application: according to customer

○Press DATA button, the digital displayer A and B will display the detailed parameters once by five screens

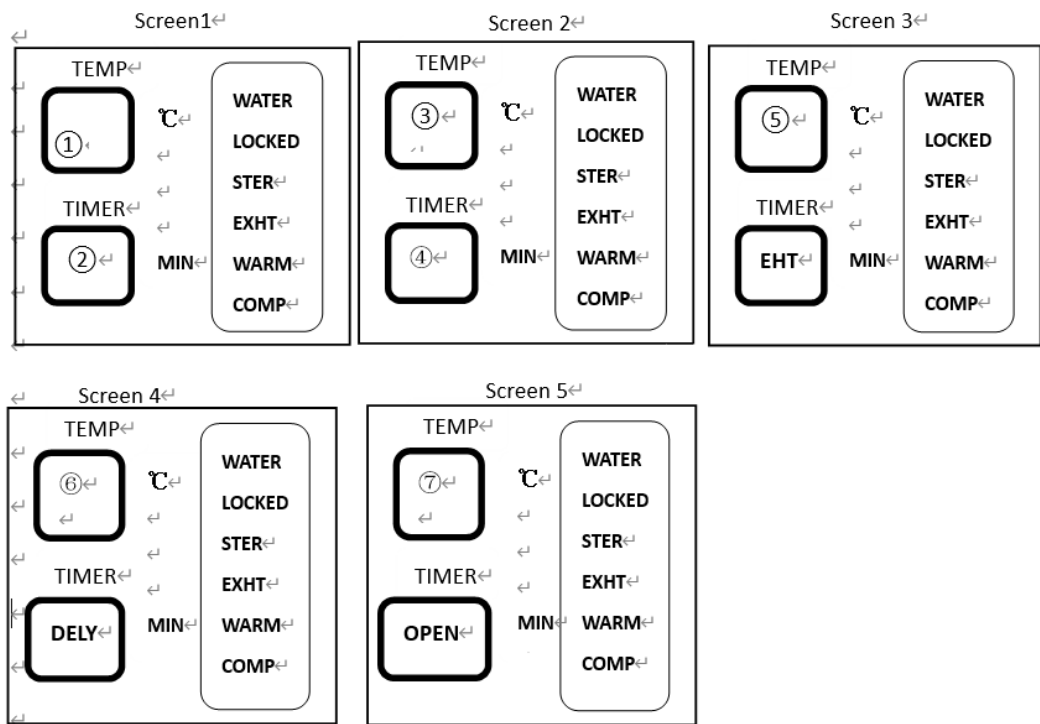


Figure 8

U03 default parameters and the parameters scope of its newly created program

Name	No.	Default Parameter	Parameters Range of New Program	Note
Sterilizing Temp.	①	Last cycle	105°C~135°C	
Sterilizing Time	②	Last cycle	1~999min	
Warming Temp.	③	Last cycle	45°C~60°C	
Warming Time	④	Last cycle	0, 1~9999min	0 means no warming
Exhaust Level (EHT)	⑤	Last cycle	0~5 level	
Delay Time (DELY)		Last cycle	1~15min	
Lid Open Temp. (OPEN)		Last cycle	40°C~99°C	

Table 4

Note: You can set a longer delay time to purge more cold air out, but make sure the water inside chamber is enough.

#### 7、 Start to sterilize

- 1) After power turned on, screen displays the latest saved program. If you continue to use the program, long press "START" to start the work directly.
- 2) Choose the saved program, use UP or DOWN to choose the program you want, long press START to start work directly.
- 3) Modify or create the new program and start: press the "SET/ENT" to enter the program setting interface, press the "UP" or "DOWN" to select the sterilization mode to be modified, and then press the "SET/ENT" to modify or delete the parameters; If you need to save the changes, press the "SET/ENT" key again, and then press the "START" key to start the work; if you do not save the changes, press the "DATA" key, and then long press the "START".
- 4) You can change the exhaust level by pressing FUNC+UP together to change,each press will increase one level.

#### 8、 Program finished&Open the cover

When the program is finished and the temperature is below 3 °C below the boiling point the system will send out long sound, indicating the end of sterilization. Loosen the handle to the end before push the lid to open, you should pay attention not to get burnt.

★Note: ○If the handle is turned by mistake during sterilization, the handle can not be continue turned due to locked, but there might be a little steam release.In this case, press STOP button to stop the instrument immediately. When open the lid,turn the handle slightly toward the opposite direction that it is wrongly operated, and then turn the handle in counter-clockwise until the cover is released.

○Never press STOP button casually to stop the running program during sterilizing of liquids to avoid the liquid overflowing into the sterilizer chamber and even blocking the valve and pipelines.

○Be careful not get burnt by the hot steam while open the lid

○When the temperature is lower than 40°C, system will go back to standby status.

#### 9、 Take out the sterilized articles

- 1) Always wear the heat insulation gloves when taking articles out after sterilization,and wait until the steam disappears before reaching into the sterilizer chamber.
- 2) When sterilize the liquids,make sure taking articles out with enough low temperature,due to slow cooling speed of liquid.

#### 10、 Turn off the power

- 1) The power switch should be turned off at the end of the day's sterilization work or when it is not in use for a long time.
- 2) At the end of the day's work, it is recommended to drain out all water in the sterilization chamber.

## 3.2 Creating,Modifying,Deleting the Program

### 1、 Creating and modifying the program

In the program interface, like under U01 condition. Press the "SET/ENT" to enter the program setting interface, press the "UP" or "DOWN" to select the sterilization mode to be modified, and then press the "SET/ENT" to modify or delete the parameters; If you need to save the changes, press the "SET/ENT" key again, and then press the "START" key to start the work; if you do not save the changes, press the "DATA" key to exit.

### 2、 Deleting Program

●If you need to delete the program, press FUNC+STOP to delete.

●Default U01-U03 programs can not be deleted

### 3、 Setting the sterilizing time

●Some items (such as liquid) have high thermal inertia, in order to obtain the ideal sterilization effect, it is recommended to use the load thermometer;if no,set a longer sterilization time.

For example, for 3L water in a flask,when the chamber temperature reaches set temperature after 20 minutes, but the liquid in the bottle hasn't reach yet, it needs 33 minutes more to reach. So, the sterilization time should set to be 53minute. Actual required sterilizing time(53min)=Normal sterilizing time(20min)+Delay time(33min)

●When installed with load thermometer, the system will begin sterilization process only when the liquids reaches the set temperature.

●When sterilize waste processing bags, 300-500ml water will help to shorten the delay time while heating up.

●A delay time is also needed for plastic products.

## 4. Maintain&Management

★Note: Turn off the power, make sure the chamber is cooled down before maintain or fix.

### 4.1 Cleaning

#### 1、 Water change and chamber cleaning

##### 1) Water change

●If the water in the chamber is not changed for a long time,the dirt inside will cause damage to solenoid valve.

●Connect the drainage to the chamber drain port, then open it counterclockwisely.

##### 2) Chamber cleaning

●Clean the chamber once a week

★Note: ○Make sure the water inside is not hot before draining out

○Drain the water completely when the machine is not used for a long time

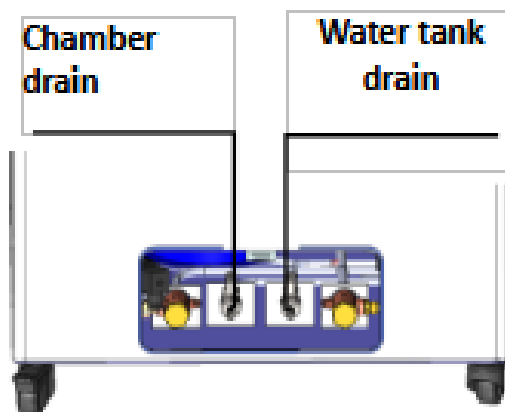


Figure 9

#### 2、 Heater cleaning

●Take out the water plate and check whether the surface of heater is clean or not.Otherwise,wash with soft brush, And then empty the dirty water

●Do not move or damage the temperature control switch on the heater

- Suggest to clean once a month



Figure 10

### 3、 Clean the instrument surface

- The surface of instrument may be cleaned slightly by using the soft cloth with little neutral detergent solution, and then dried with cloth
- Do not use phenol or oil thinner to clean the surface of the instrument to avoid damaging the surface of the instrument or causing the paint to fall off

## 4.2 Maintenance

### 1、 Check of Leakage Circuit Breaker

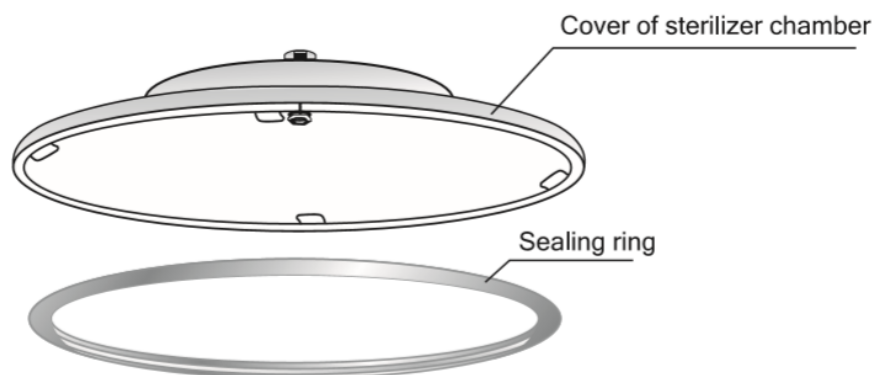
- Press the T button at the back of leakage circuit breaker, if it dumps off, means normal, if no, please turn off and contact the dealer
- Press the power switch, pull up the leakage circuit breaker, can connect the power again
- Check once half year

### 2、 Safety valve test

- Enter into the administer menu (Refer to Setting of Administer Menu), then press DOWN to choose the safety valve test, choose ENABLE, press SET/ENT to save and exit.
- The instrument will start to do safety valve test, you can press STOP to stop it.
- If the temperature goes over the max temperature and safety valve is not releasing, means there is problem with the safety valve, please stop the test and contact distributor.
- Press STOP can put an end to the testing, screen will show E03, this is normal, you can press STOP button after the temperature goes down to 105°C to return to standby condition.

### 3、 Cleaning & Replacement of Sealing ring

- 1) Wipe the surface of the sealing ring and its contact parts with soft and clean cloth at least once a week to avoid steam leakage resulted from damage by dirt
- 2) If the edge of the sealing ring of cover becomes white or hardened, it may lead to steam leakage, and must be changed.
- 3) Sealing ring change way: Pull one corner of the sealing ring to take off, when installing, press the sealing ring in part by part.



## 4.3 Setting of Administrator Menu

Under standby by condition, press FUNC+DATA together, enter into secret code:667788, press SET/ENT button to enter into the administrator menu. You will see P001 to P019.

### ●Administrator Menu:

P001 PRINTER switch: 0 means off, 1 means on

P002 Button sound, yes means on, no means off

P003 Setting of pressure unit: 1: Kpa; 2: bar; 3: psi; 4: no means no this optional accessory or pressure sensor disabled.

P004 Display of printing date: 0: DDMMYY; 1: YYMMDD

P005 Printing language: 0: English; 1: Chinese

P006 Safety valve test: yes for enabled; no for disabled

P007 Chamber temp sensor's temp compensation: the temp compensation scope is -5--+5; screen B will show temp compensation value and press of UP or DOWN button may adjust the value.

P008 Setting of max working temp: The temp range is 135-145°C and press of UP or DOWN button may adjust the max temp for safety valve test.

P009 Setting of local altitude: the UP or DOWN button may be used for adjusting the altitude and every press of this button will increase or decrease one unit and pressing and holding it will be 10 units increase or decrease until the upper limit of 3000m or lower limit of 0.

P010 Boiling point temp corresponding to altitude: after setting of altitude, press NEXT button and local boiling point will be shown, and the value of 99.8 on the screen represents the boiling point 99.8°C.

P011 Software version

P013 Load thermometer, yes means on, no means off

P014 Load temp sensor's temp compensation: the temp compensation scope is -5--+5; screen B will show temp compensation value and press of UP or DOWN button may adjust the value.

P015 Cooling fan, yes means on, no means off

P016 Do you need a password to create, modify and delete the program, yes means on, no means off, pass word is same to the administrator menu password

P018 Total cycle number, each press of START will increase one to this number

P019 Pressure sensor pressure value compensation, pressure compensation range is -5-5kPa, screen B will show compensation value, if the value is -0.3kPa, means the value to compensate is -0.3kPa.

## 5. Troubleshooting

●The automatic control system of the sterilizer monitors the real time operation of the instrument. Whenever any failure occurs, the system may send out alarm and display the error code, then please press STOP button to return standby status, and turn off the power, check the error code and handle on time.

●To make sure safety, only open the lid when there is no pressure inside and temperature is lower than boiling point. For liquid mode, do not press STOP before temperature is lower than the boiling point, so as to avoid liquid overflowing.

Error Code	Possible Causes	Suggested Solution
E-01	Lid not secured	Check the handle is secured well or not, make sure it is placed either vertically or horizontally
E-02	Local altitude not set	Set the local altitude
	Dirt in exhaust solenoid valve	Open the valve filter to check
E-03	Lack of water lead to heater dry heat	Add enough water in
	Safety valve or pressure switch is not working	Change safety valve or pressure switch
	Over temperature lead to over pressure	Check main board or temperature sensor
E-04	Abnormal temperature fluctuation caused by abnormal power supply fluctuation	Check pressure of power supply is between 198V-242V
E-06 5151	Chamber temperature sensor drop off from mainboard	Plug the temperature sensor well
	Chamber temperature sensor problem	Change temperature sensor
E-07	Short circuit in plug or wiring of chamber temperature sensor	Change the temperature sensor
E-10	Sudden power off during sterilization	Press STOP shortly, then restart again
E-16	Load thermometer drop off or short circuit	Plug the load thermometer well
	Load thermometer failure	Change load thermometer
E-18	Over pressure in chamber	Stop work and contact distributor
E-20	Safety valve test circuit faulty	Contact local dealer
E-24	Block of safety valve pipe	Clean safety valve pipe
	Safety valve failure	Change safety valve
E-26	Pressure sensor drop off from mainboard	Plug the pressure sensor well
	Pressure sensor failure	Change the pressure sensor
E-27	Short circuit in plug or wiring of chamber pressure sensor	Contact local dealer or change pressure sensor
5351	Press the white T button didn't pressed in	Press the white T button
	E-leakage or short circuit or over current	Contact local dealer

Table 5

●In liquid mode,press STOP, the exhaust valve will not open until the temperature goes down to the set exhaust temperature, so as to avoid liquid overflowing.

Below is note content, press STOP back to standby then follow below steps to deal with

Note no.	Meaning	Suggested Solution
N02	Chamber temp. is higher than the local boiling point	Wait until the temperature cooling down
N03	Incorrect system time	Reset timer
N04	Auto start up time is earlier than current time	Reset auto startup timer
N05	The safety valve test hasn't been done for too long!	Do the safety valve test
N06	The lid is not locked!	Secure the lid again

Table 6

The above table only covers the simple problem, if you can not deal with, please record the below information and report to the dealer:

- 1) Instrument model and serial No.
- 2)Error code
- 3) At what temperature it occurs, what articles sterilized, picture or video if have
- 4) How long you use the machine.

**LABSTAC**

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