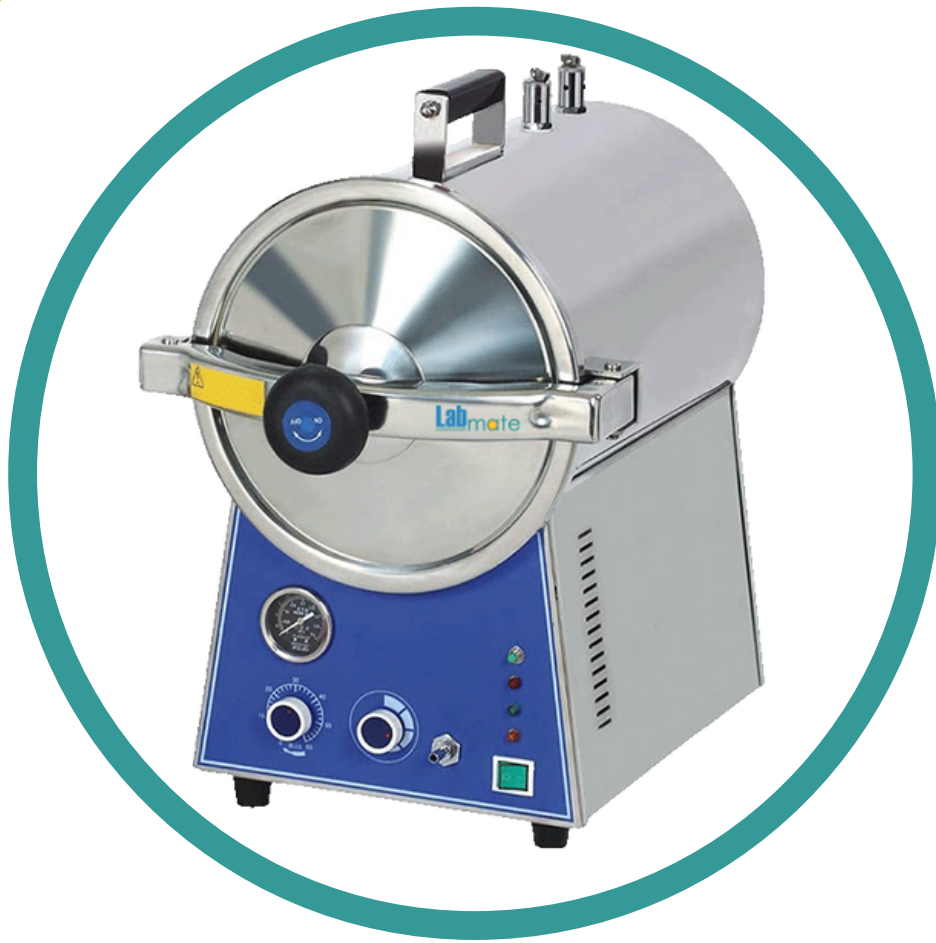




Tabletop Autoclave Class N LMTA-A100

Index

Sr. No	Title	Page no
1.	Safety Measures	2
2.	Introduction	3
3.	Features	3
4.	Specifications	4
5.	Applications	4
6.	Instrument Introduction	5
7.	Installation	6
8.	Operations	7
9.	Maintenance	12
10.	Troubleshooting	13
11.	Circuit Diagram	14

1. Safety Measures

Warning

- Ensure that the autoclave is placed in a well-ventilated area to prevent the buildup of heat and steam. This helps to maintain safe operation and prevent overheating.
- Always check the power supply and cables before use. Ensure that the autoclave is properly grounded to avoid electrical shocks and short circuits.
- Regularly monitor the pressure gauge to ensure it does not exceed the recommended levels. Operating the autoclave under excessive pressure can lead to equipment malfunction or danger.
- Ensure that the autoclave chamber is not overloaded. Items should be arranged correctly to allow for proper steam circulation and sterilization. Improper loading may compromise the sterilization process and pose a hazard.
- Always handle the autoclave with caution after the sterilization cycle. Wait for the pressure and temperature to drop before opening the door to avoid burns or exposure to hot steam.
- When the pressure exceeds 0.22Mpa (34 Psi), the sterilizer should automatically exhaust to drop the pressure.
- If the safety valve fails and the pressure keeps increasing, kindly cut off the power as soon as possible.
- The warning mark is on the rear panel of the apparatus.

2. Introduction

Tabletop Autoclave Class N LMTA-A100 is a new generation fully automatic autoclave that is convenient for sterilizing liquid fluid, media instruments, and glassware. Improved with a loading capacity of 24 L that works within sterilizing temperature 105 °C to 138 °C for convenient operation. Supplied with exterior drain for a simple cleaning solution for a better working environment.

3. Features

- Constructed with robust stainless steel ensures sample safety and long-term durability
- Equipped with a lockable self-closing door to allow the access of authorized users for sample safety
- Improved with auto-safety features that prevent protection against over-temperature and overloading
- Self-diagnostic includes power monitoring, sensor error alert, and door open alarm alert
- Configured with an alarm module that sounds an alert during automatic shut-off
- Improved with an auxiliary program that includes preheating and washing
- Simple Cleaning with safety and sanitation
- Effortless handling with minimal maintenance requirements

4. Specifications

Model	LMTA-A100
Capacity	24 L
Temperature Range	134 °C
Sterilizing Temperature	105 °C to 138 °C
Working Pressure	0.22 Mpa
Power	1.5 kW
Voltage	AC 220 V / 50 Hz
Time Range	0 to 60 min
Heat Average	$\leq \pm 1$ °C
Chamber Size	$\varnothing 270 \times 410$ mm
Dimension	$560 \times 530 \times 450$ mm
Net Weight	18 Kg
Gross Weight	20 Kg

5. Applications

It is extensively used to sterilize surgical equipment, laboratory instruments, pharmaceutical items, and other materials.

6. Instrument Introductions

6.1 Structure

This product buildup by sterilizing the chamber, instrument plate, water tank, and control system.



Figure-1

- | | |
|----------------------------------|---------------------|
| 1) Safety Valve | 6) Rotate Handle |
| 2) Exhaust Valve | 7) Opening Handle |
| 3) Handle | 8) Instrument Panel |
| 4) Sterilization Chamber | 9) Clip |
| 5) Door of Sterilization Chamber | 10) Pressure meter |
| | 11) Control System |

The sterilizer is designed by using the gravity-type pressurized steam sterilization principle. Put 0.6 liters of distilled water into a sterilization chamber and use an electric heater to heat directly to produce pressurized steam. The pressurized steam acts with microorganisms on the objects to be sterilized to destroy their structure and reach the purpose of sterilization.

7. Installation

7.1 Working Environment

- **Environment temperature:** 5~40°C
- **Relative humidity:** ≤80%
- **Atmospheric pressure range:** 86~106 Kpa
- **Power supply:** AC220V±22V, 50Hz±1Hz (should have ground lead)

7.2 Storage Environment

- **Environment temperature:** -10~50°C
- **Relative humidity:** 10%~90%
- **Atmospheric pressure range:** 50~106 KPa
- This product is equipped with a safety valve and will auto-release when steam pressure is over 0.22Mpa, when the temperature is over 140°C (284°F), the power auto be cut off with double safety protection. It is also equipped with water-off overheat protection, current overload power cut-off protection, and the sterilizer's door safety interlock device, which is a safe and reliable product.

7.3 Installation and Adjustment

- The Sterilizer should be put on a horizontal working table with all four supporting feet contacting the table surface evenly.
- Check to see whether the power supply condition conforms to the product specifications.

8. Operations

8.1 The preparation and inspection before use

- 1) **Inspection of the power supply**
Power supply data conform to product requirements: Single phase (AC220V, 60Hz).
- 2) **Connecting to the power supply.**
Ensure proper and secure connection to the power supply.
- 3) **Make a reliable Earth connection**
- 4) **Preparation of Distilled Water**
Prepare 0.2-0.3 liters of distilled water.
- 5) **Binding of Dressing and Textile**
The binding of dressing and textile cannot be too tight to avoid interference with the operation.
- 6) A certain amount of sterilization indicator (chemical indicating piece or biologic indicating piece).
- 7) The instruction of operating key, indicating lamps, switches, and relevant marks.

8.2 Operating Panel

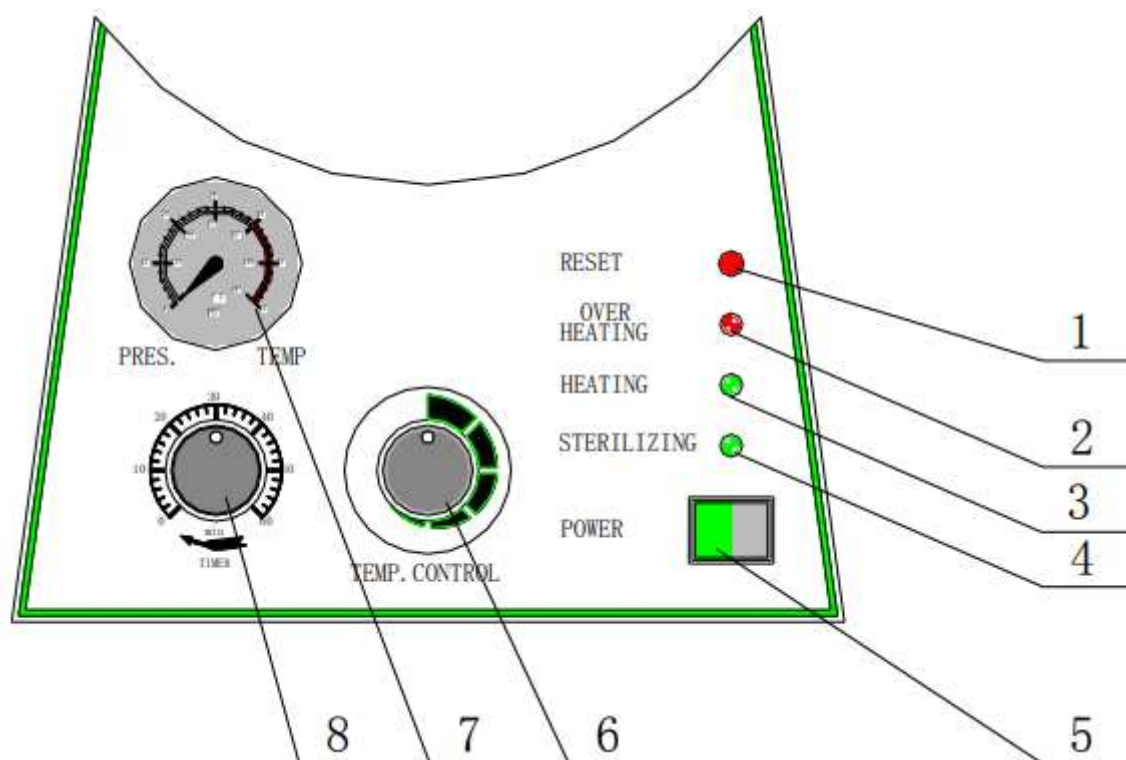


Figure-2

- | | |
|--------------------------|----------------------------------|
| 1) Reset Switch | 5) Power Switch (With Indicator) |
| 2) Water-lack Indicator | 6) Temp/Pressure Controller |
| 3) Heat Indicator | 7) Pressure meter |
| 4) Sterilizing Indicator | 8) Timer Switch |

1) Pressure gauge

Mpa (Psi) displays the inner pressure of the sterilizer, °C (°F) displays the inner temperature.

2) Knob

- **Temp.control:** Setting sterilizing pressure (temperature) Use for setting sterilizing pressure 0.07~0.2Mpa(10~30Psi), corresponding temperature 115~134°C (239~274°F)
- **Timer setting sterilizing time:** For setting sterilizing time, you can choose according to different sterilizing objects, the range 0~60min.
- **Indicating lamp**
- **Power:** Light when connected to a power source, indicating the sterilizer is powered on.
- **Heating:** Lighting. indicating the sterilizer is heating.

- **Overheating:** Lighting indicates that the sterilizer is over-heated trouble
- **Sterilizing:** 115~134°C (239-274°F) is a sterilized temperature, lightened means the temperature in the room is reached.
- **Reset:** When water is cut off and overheats in the sterilized room and the machine again, you must push this switch, renew the operation will be effective.
- **Power Switch:** It keeps light when the unit is turned on.

8.3 Sterilizing Operation

8.3.1 Fill water to the water Tank (See Figure 3)

Open the door of the sterilizer and fill 0.6 liters of distilled water into the tank. After the distilled water enters the sterilization chamber completely, kindly watch the water flow out at the water level mark.

8.3.2 Load the objects to be sterilized

Load the objects to be sterilized on the instrument plate. covering the cover then open the exhaust holes of the plate, after loading the objects to be sterilized, close the door of a sterilizer. (Closing the sterilizing door Kindly attention: first push the opening handle into the hole, then rotate the door's handle clockwise. (See Figure 4)



Figure-3



Figure-4

8.3.3 Set Sterilizing Temperature

Set the sterilize pressure 0.07~0.2 (10-30Psi), related temperature 115~134°C (239-274 °F) ([see Figure 5](#))

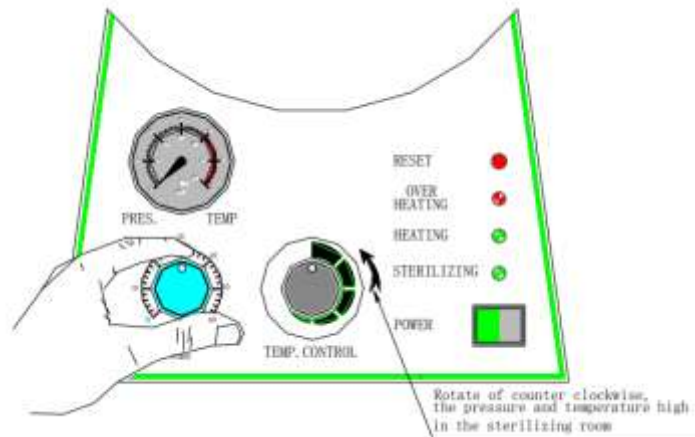


Figure-5

8.3.4 Start the Device

Turn on the power switch, the lamps of power lighten, and the machine enters the standby state. A buzzer alarm means you can preset sterilizing time.

8.3.5 Set Sterilization Time

Set sterilize time (according to different objects, you can choose the related time, the range is 0-60min.), then the buzzer alarm stops, the **Heating** lightens and starts heating automatically. (Meanwhile, kindly open the exhaust valve, make the cooling air in the container get out automatically until the cooling air is exhausted then close the exhaust valve, so that the temperature is equal inner, and make the pressure go up quickly).

8.3.6 Pressure Gauge

The data of the pressure gauge is for a user to reference.

8.3.7 Start to Sterilize

When the pressure, and temperature reach the setting demand, it enters the state of sterilizing, Sterilizing is lightened, meanwhile, it keeps the permanent pressure in the sterilizing room, the light **Heating** flashes, and the pressure and temperature meter displays real room temperature.

It Starts with back timing.

8.3.7.1 Sterilize

When it reaches the preset sterilizing time, and the back timing ends, the heating will be cut automatically, the light blanking, meanwhile the buzzer alarm. Means the sterilizing end. This time Kindly turn off the switch of the circuit breaker.

8.3.7.2 End Sterilization

Turn the control valve at the Exhaust, and watch the pressure meter, after the pressure turns to zero, it means the air and water are exhausted, then turn the handle counterclockwise, open the door, take out the object, and the operation ends.

8.3.8 Safety Protection Device

- 1) **Water-off & over-temperature protection:** When the heating element is heating without water, the power supply will be cut.
- 2) **Over-current protection:** If the current exceeds the rated value, the power broken circuit will cut power automatically.
- 3) **Safety valve:** When the pressure exceeds 0.22Mpa(34Psi), the sterilizer will automatically exhaust to drop the pressure.

9. Maintenance

- To ensure the reliability of the sterilization effect chemical indicating piece of biological piece must be put into the sterilization chamber; together with the objects to be sterilized. After sterilizing, the sterilization effect can be checked.
- The safety valve and the exhaust valve are on the top, The Safety valve must be checked once every year if it is malfunctioning, replace it. If the safety valve malfunctions during use and the pressure keeps increasing, the power supply must be cut to ensure safe use.
- The rubber seal ring is easily aged. If aging causes leakage, the seal ring should be replaced in time.
- The pressure meter must be standardized every year.
- The machine must be kept clean, and protect the incrustants that occur on the surface, often method is to wash it with distilled water once a week.
- If the overheat protector is damaged, you just take off the ground cover on the bottom and change the protector.

Note:

The different kinds of objects and the objects that will affect each other during the process of sterilization could not be sterilized in the same sterilization chamber at the same time.

Sterilization spare parts

Sterilizing plate with cover: Mainly to put instruments.

Drum: Used for putting dresses.

Claps: Used for moving the sterilization plate from the chamber. ([see Figure 6](#))

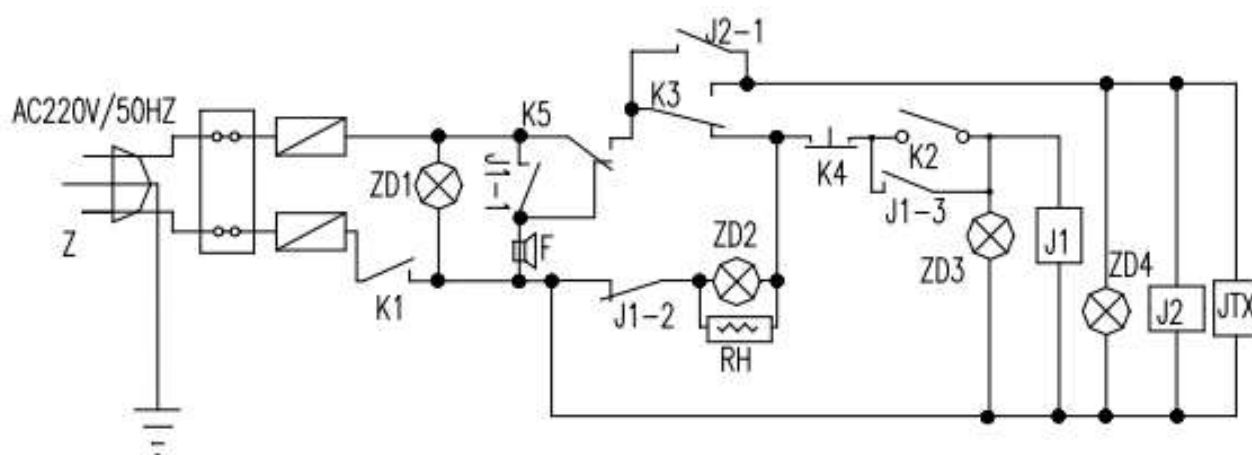


Figure-6

10. Troubleshooting

Trouble	Possible Cause	Solve Method
Buzzer alarm meantime heating flash.	The chamber's water is too little, and the heating element drying heating.	Turn the control valve to fill the water to chamber 1-1.2 L at least.
	The overheating protector is broken.	Replace the protector.
The circuit switch (power switch) suddenly cut off.	Over-current lash.	Inspect the source power net.
	Electric short circuit.	Inspect the sterilizer's circuit, if the burning smell occurs, replace the part that has been burned.

11. Circuit Diagram



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