

# INSTRUCTION MANUAL

---

Electric Sterilizer

---

## Model No.

Dragon 300 / 320

Instruction Video



# ROCKER

Please read this instruction manual before using this product.

## Important Notice

This instrument is designed for laboratory usage only. Please read this manual carefully before installing and operating. The instrument shall not be modified in any way. Any modification will void the warranty and may result in potential hazard. We are not responsible for any injury or damage caused by any non-intended purposes and modifying the instrument without authorization.

1. Check the voltage specified on the name plate and ensure it matches the line voltage in your location.
2. Install the instrument in a clean, dust-less and ventilated area under 40°C.
3. Ensure a minimum distance of 10 cm between the instrument and adjacent objects.
4. Do not operate the instrument near flammable, dangerous materials.
5. The temperature of the heating shield and entire sterilizer is very high after use or during work, please don't touch it to avoid being burnt.
6. The sterilizer is not designed to use with scalpels, forceps or any sharp objects which can cause malfunction of the instrument.
7. Please switch the instrument off and cool it down completely before cleaning, service, and transportation.
8. The sterilizing time should not be too long in case the lifespan of sterilized objects is shortened due to high temperature.
9. In case of any damage, please contact the manufacturer or your service agent for service to avoid hazard.
10. Please discard packing material according to local related regulations.
11. Operating condition
  - (a) Ambient temperature: 5~40°C
  - (b) Relative humidity: 80% RH Max.
  - (c) Power supply: 100-120V~, 50/60Hz or 200-240V~, 50/60Hz
  - (d) Fuse: T3A, 250V
  - (e) Altitude: up to 2000 m
  - (f) Pollution degree: II
  - (g) Indoor use



Caution: Hot surface



The equipment must be disconnected from the main supply before replacing the fuse.

## Unpacking

Please check if the package is complete without any damage before unpacking. When unpacking, please make sure you have all accessories that indicated on the list. If there is any problem, please keep the serial number along with packing case and contact your local distributor immediately for assistance.



**Dragon 300**



**Dragon 320**

Model	Standard Package Includes:
<b>Dragon 300 / 320</b>	Dragon 300 / 320, Electric Sterilizer
	Holding Rack
	Spare Fuse
	Instruction Manual

## Main Part Diagram

Dragon 300



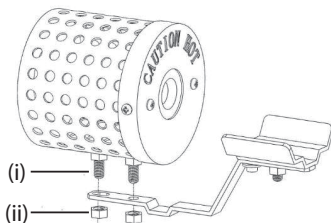
Dragon 320



Position	Designation	Position	Designation
1	Heating Shield	5	Indicator
2	Heating Antrum	6	Power Switch
3	Holding Rack	7	Power Plug
4	Temperature Control Knob	8	Angle Control Knob

## Installation and Operation

### Installation



- A. Unload the hex nut (ii) of 2 screws (i) under the heating shield (1).
- B. Pass the screws (i) through both holes of holding rack (3).
- C. Then lock the hex nut (ii) back by hex wrench.

## Operation

- A. Insert the power plug (7) into socket following the voltage specified on the name plate and make sure it has a ground wire.
- Green indicator (5) lights up when connected to appropriate power.
- B. Switch on the sterilizer, the red heating indicator (5) lights up and indicates heating process starts.
- If indicator fails to light up with correct power supply, please check whether the fuse is blown.
- C. Turn the temperature control knob (4) rightward to the end then the temperature of heating antrum can reach 850 °C around 10 mins if the input voltage is sufficient.
- The heating antrum (2) turns brightly coral and red when it reaches the max. temperature.
  - The temperature of heating antrum (2) can be regulated by temperature control knob (4).  
However, max. temperature 850°C is in common use.
- D. Place the object(s), such as inoculation loops, needles, and mouths of bottles, into heating antrum (2) for few seconds to finish the sterilization.
- Be cautious not to scrape of the inner surface of the heated antrum (2).
  - To avoid splash pollution, insert inoculation loops and needles deeply into the heated antrum (2) when sterilization.
- E. After finishing sterilization, please switch the instrument off to lower the temperature and extend the service life.

**\* Warning: Do NOT work the instrument for more than 3 hrs.**



## Maintenance

1. Avoid scraping with sharp objects on the inner surface of heating antrum.
2. Check whether there are scratches or accumulated dirt on the surface of the heating antrum periodically.
3. Please replace new heating antrum to make sure it's functional if scrapings or flaws are found in heating antrum.
4. Dampen a soft cloth with gentle detergents and wring out the excess to clean the surface or heating antrum. Do NOT clean with dripping wet cloth or water to avoid short circuiting of instrument.
5. Please check whether the fuse is blown when indicator fails to light up with correct power supply.
  - (a) If the fuse is blown, please replace a spare fuse and restart it again;
  - (b) If it's not a fuse problem, please contact the local distributor for assistance.

## Troubleshooting

Problem	Reason and Solution
Failed to start	<ul style="list-style-type: none"><li>● Loose plug → Reconnect plug to power supply.</li><li>● Switch is broken → Contact distributor for assistance.</li><li>● Power cord is damaged → Contact distributor for assistance.</li><li>● Blown fuse → Replace a new fuse.</li></ul>
Failed to heat	<ul style="list-style-type: none"><li>● Blown heater → Contact distributor for assistance.</li><li>● Transistor is damaged → Contact distributor for assistance.</li></ul>
Unlighted LED	<ul style="list-style-type: none"><li>● Broken LED → Replace a new LED</li></ul>

## Ordering Information

- 177300-11(22) Dragon 300, Electric Sterilizer, AC110V, 60Hz (AC220V, 50Hz)
- 177320-11(22) Dragon 320, Electric Sterilizer, AC110V, 60Hz (AC220V, 50Hz)
- 177300-01(02) Spare Heater for Dragon 300, AC110V, 60Hz (AC220V, 50Hz)
- 177320-01(02) Spare Heater for Dragon 320, AC110V, 60Hz (AC220V, 50Hz)
- 175330-01(02) Galaxy 330, Colony Counter with AC100-240V adaptor, US plug (EU plug)
- 175331-01(02) Galaxy 330, Colony Counter with software, AC100-240V adaptor, US plug (EU plug)