

UYUE 946-1010

User Manual



1. Product Overview & PID Control Principle

The UYUE 946-1010 utilises advanced PID (Proportional, Integral, Derivative) control strategies for highly precise on/off temperature regulation.

PID control is a widely adopted algorithm in process and motion control known for its exceptional stability and high reliability. It excels at resisting internal parameter uncertainties and external disturbances. The controller calculates an output based on the linear combination of the error's Proportional, Integral, and Derivative terms, which is then used to accurately manage the heating plate's temperature.



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|-----------------------------------|----------------------|------------------|
| ① Aviation Aluminum Heating Plate | ② Temperature Down | ③ Temperature Up |
| ④ LED Temperature Display | ⑤ Parameter Settings | ⑥ Cooling Vents |
| ⑦ Power Socket | ⑧ Power Switch | |

2. Key Features

- **Intelligent Temperature Control:** Equipped with an original PID intelligent digital display temperature controller for high precision, safety, and clear, user-friendly operation.
- **Enhanced Durability:** Adopts original high-quality relays, delivering a service life up to 20 times longer than standard contact relays.
- **Efficient Heating Elements:** Uses multiple high-quality, pure metal heating plates, ensuring a low failure rate and facilitating quick, convenient maintenance.
- **Premium Aluminum Panel:** The entire heating surface is constructed from pure aluminum, providing superior thermal conductivity, rapid heat-up times, and exceptionally uniform heat distribution.

3. Application Scope

This heating plate is an essential tool for various industrial, laboratory, and repair settings, including:

- **Electronics Industry:** Constant-temperature heating for glue sealing and dispensing.
- **LED Industry:** Soldering and repairing aluminum substrates.
- **Mold Manufacturing:** Preheating mold cores.
- **Device Repair:** Providing necessary heat for removing mobile phone LCD screens and other bonded displays.
- **Scientific & Medical:** Baking, drying, and temperature testing for biological, genetic, biochemical, medical, and environmental protection laboratories, as well as general teaching and research analysis.

4. Operating Instructions: Temperature Setting

Follow these precise steps to set your target temperature:

- **Power On:** Ensure the machine is plugged in and powered on.
- **Initiate Setting:** Press the SET key. The digital temperature display will begin flashing.
- **Adjust Values:** Use the UP and DOWN keys to adjust the value to your desired target temperature.
- **Confirm and Heat:** Press the SET key one more time. The display will stop flashing and return to the normal heating mode, and the plate will begin to heat.

5. Maintenance & Care

Proper upkeep is essential for maintaining even heat conduction and extending the lifespan of your machine.

- **Maintain a Clean Surface:** Regularly clean the heating plate to guarantee uniform heat transfer to your components.
- **Safe Cleaning Method:** Spray a suitable cleaning agent directly onto the surface. Allow it time to dissolve any residues, then gently wipe it clean with a soft cloth.
- **Final Polish:** Lightly dampen a soft cloth with a small amount of alcohol and wipe the surface to restore its brightness and ensure it is completely clean.
-  **Prohibited Materials:** Never use sharp tools, metal objects, scrapers, or sandpaper to remove stubborn residues, as this will permanently damage the aluminium surface.
- **Standby/Idle Mode:** If the machine will sit idle for an extended period, either turn off the power completely or lower the temperature to below 50°C to protect the internal components and extend its service life.

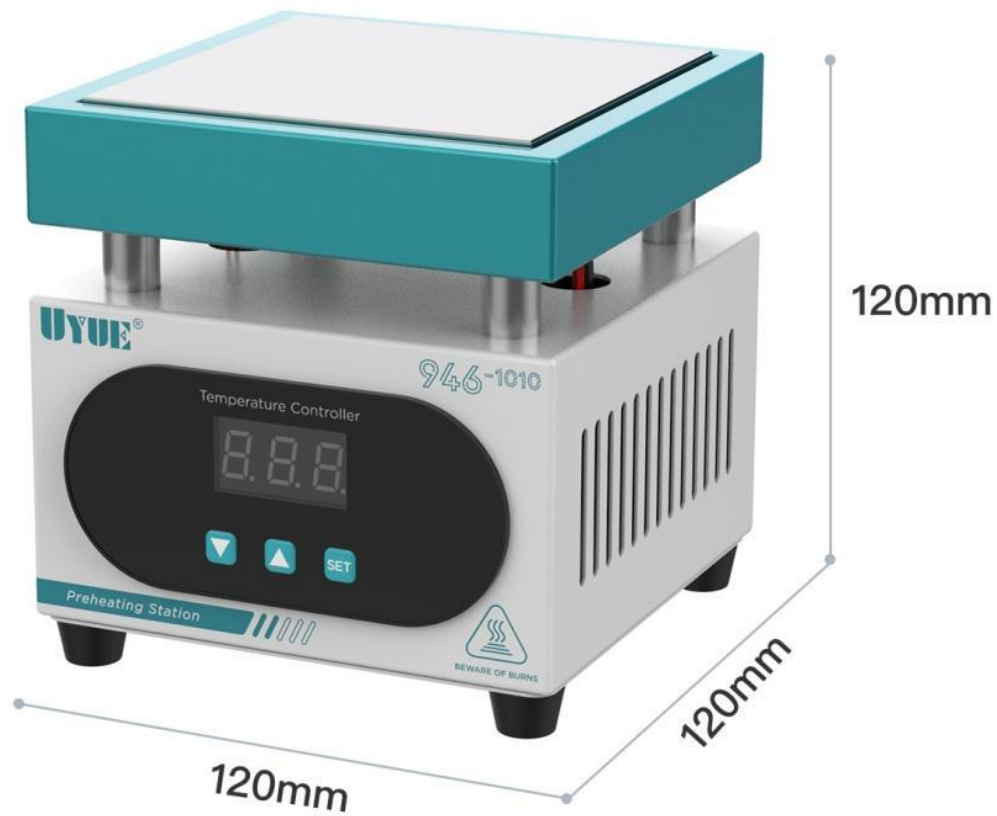
6. Important Safety Warnings

This is a high-temperature industrial device. Please strictly adhere to the following to prevent personal injury or property damage:

- **Proper Placement:** Always operate the separator on a flat, stable, and highly heat-resistant workbench.
- **High Burn Hazard:** The heating surface and its immediate surrounding areas become extremely hot during operation. Exercise extreme caution at all times to avoid severe burns or scalds.
- **Fire Prevention:** Never use or place this heating device near flammable liquids, gases, or combustible materials.
- **Protect Your Components:** Pay close attention to the thermal limits of the items you are heating. Setting excessive temperatures can severely damage sensitive electronics or components.
- **Power Off When Unattended:** Always disconnect the device from the power supply when not in active use to prevent accidents or electrical fires.

7. Operational Notes

- **Electrical Grounding:** For your safety, ensure the machine is plugged into a wall outlet with reliable, proper grounding.
- **Avoid Direct Airflow:** Keep the heating platform away from direct drafts, fans, or air conditioning vents. Direct airflow will disrupt temperature stability and reduce heating efficiency.
- **Handling and Relocation:** Always disconnect the power before attempting to handle or move the product. Do not move the machine until the heating platform has completely cooled down to room temperature.



Model	946-1010
Operating Voltage	AC220V
Device Power	400W
Temperature Range	Room Temp. ~ 450°C
Constant Temperature Stability	±2°C
Platform Dimensions	100*100mm
Outer Dimensions	120*120*120mm
Unit Weight	1.3kg
Packaging Dimensions	175*175*175mm
Gross Weight	1.5kg