

UYUE 946-3040

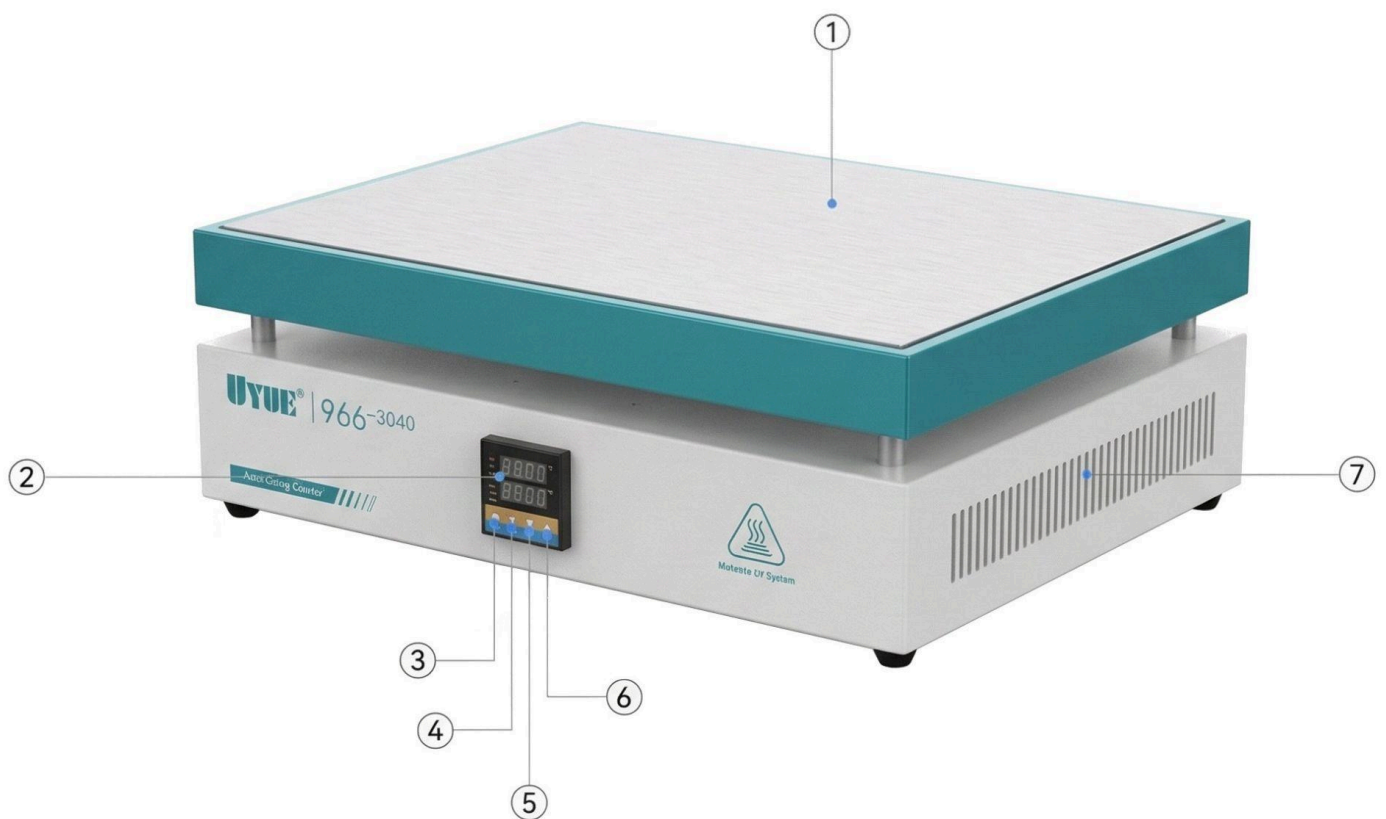
User Manual



1. Product Overview & PID Control Principle

The UYUE 946-3040 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.



① Aviation Aluminum Heating Plate

④ Shift Key

⑤ Decrease Temperature

② Dual-Temperature Digital Display

⑥ Increase Temperature

③ Parameter Setting

⑦ Venting Holes

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

Follow these steps for safe and effective operation:

1. **Power On:** Connect the device to a grounded power supply and turn on the main power switch.
2. **Initiate Setting:** Press the **SET** button once.
3. **Adjust Temperature:** Use the **Up** and **Down** arrow keys to select your desired target temperature.
4. **Confirm Setting:** Press the **SET** button again to lock in the target temperature.
5. **Heat and Use:** Wait for the digital display to indicate that the machine has reached the set temperature. You may now place your product on the plate to preheat.
6. **Power Off:** Once your task is complete, promptly turn off the machine and disconnect the power supply.

5. Important Safety & Operational Cautions

To prevent equipment damage or personal injury, please strictly adhere to the following warnings:

-  **DO NOT hold the SET button:** Pressing and holding the SET button for more than 2 seconds will force the device into the internal System Parameter Setting Mode.
-  **DO NOT modify internal parameters:** Never arbitrarily modify values within the system parameter mode. Incorrect adjustments can severely disrupt the machine's calibration and functionality, and are done at your own risk.
-  **Handling Misoperation:** If you accidentally enter the system parameter mode, **do not change any settings**. Immediately turn off the machine using the main switch and restart it to clear the mode.
-  **Shock Hazard:** Non-professionals must never open the outer casing of the machine. Doing so exposes the user to dangerous electrical components and a high risk of electric shock.