

Introduction

Thank you for your purchase of the PACE[®] PH 100 (120 VAC, 50/60 Hz) P/N 8007-0572 or PH 100E (230VAC, 50/60 Hz) P/N 8007-0573 Low Profile Preheater. The PH 100 is a high powered (1600W), non-contact infrared heating system with an ergonomic, low-profile design which allows operators to safely pre-heat PCB's for fast, efficient soldering, rework or repair, even on the highest mass, thermally challenging, lead-free assemblies.



To ensure the long-term reliable operation of your PH 100 Preheater, read this Quick-Start Guide carefully before use, and keep it handy to answer any questions that may arise.

NOTE: You should download the Full Operations Manual available online at: www.paceworldwide.com/PH100-PH100E-manual

Rear Connector Panel

1. **Main Power Switch:** Turn on/off PH 100
2. **Fuse Socket:** 6,3x32mm 15A use slow-blo fuse (120VAC), or 6,3x32mm 10A use slow-blo fuse (230VAC)
3. **USB Connector:** Allows for software/firmware upgrades via USB 2.0 Flash Drive
4. **Top Sensor Thermocouple Connector:** Plug-in K-Type Thermocouple, and secure to *top* of PCB
5. **Bottom Sensor Thermocouple Connector:** Plug-in K-Type Thermocouple, and secure to *bottom* of PCB
6. **Power Cord Input:** Connect power cord here



Safety Instructions

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1. NEVER touch the display with a hot soldering iron or other hot tools.
2. After unpacking the device wait one hour to allow any condensation built up during transport to dissipate.

3. Do not expose the device to water or other moisture.
4. The PH 100 Preheater must only be used indoors near to a suitable power source. Avoid using extension cords. When not in use, store unit in a clean, dry place.
5. Place the PH 100 Preheater device on a solid, hard, dry, stable surface with good ventilation. Do not place the device on a damaged or heat-sensitive surface. Leave proper clearance around the device and air gap at bottom (min. 20 cm) for proper ventilation.
6. **WARNING:** ALWAYS let the PCB cool down before touching it after heating. After Power Off, the device will take up to 30 minutes to cool down. Wait for the device to cool down before touching the glass-ceramic heating plate. Always turn off the system and verify it has cooled down before leaving it unattended. The heating plate is hot and may cause burn injuries. ALWAYS use heat-insulated gloves.
7. The PH 100 MUST ONLY be used for preheating PCBs for soldering and rework operations.
8. DO NOT use the device if the glass-ceramic heating plate is cracked, or otherwise damaged or broken.
9. DO NOT place PCB's (or anything else) directly onto the glass-ceramic heating plate.
10. ALWAYS mount the PCB to be preheated onto the PCB holder.
11. PH 100 Preheater MUST ONLY be used by trained personnel.
12. DO NOT use the device near flammable materials. DO NOT store flammable materials near the device. ALWAYS consult the MSDS (Material Safety Data Sheet) of nearby materials to check their flammability.
13. DO NOT attempt to modify or repair the device yourself. If a fault develops, contact us at support@paceworldwide.com (USA) or sales@paceworldwide.com (Europe). The case is sealed by a hologram label. If this is damaged, the warranty is automatically voided.
14. ALWAYS check that the power cable is not damaged before every use.
15. PH 100 Preheater MUST ONLY be connected to a properly grounded (earthed) power supply of the proper voltage and frequency (PH 100 120VAC, 50/60 Hz; PH 100E 230VAC 50/60 Hz). Always check that the ground (earth) is working correctly.
16. Minimum/Maximum ambient temperatures: Min = +5°C (41°F); Max = +40°C (104°F)
17. Humidity Limits: Up to 80% relative humidity at 31°C, which decreases linearly between 31°C and 40°C, to a maximum of 50% relative humidity. Maximum operating altitude above sea-level 2000m (6562 ft.).
18. During soldering and rework processes, toxic/noxious fume emissions may be released. ALWAYS use Fume Extraction or exhaust ventilation as specified in the MSDS of the solder, flux and solvent materials being used. As with all soldering devices, particularly in industrial use, it may be necessary to measure the emissions, which should be done by an expert.
19. DO NOT place the magnetic PCB holder rails or magnetic feet on a hot surface as they may become demagnetized.
20. The power outlet MUST be easily reachable to cut off the power in case of emergency. The power can only be cut by unplugging the device from the power outlet or unplugging the cord from the unit. Even after you have turned off the device using the ON/OFF switch, it is still connected to live power.

Set-Up and Quick-Start of Your PH 100

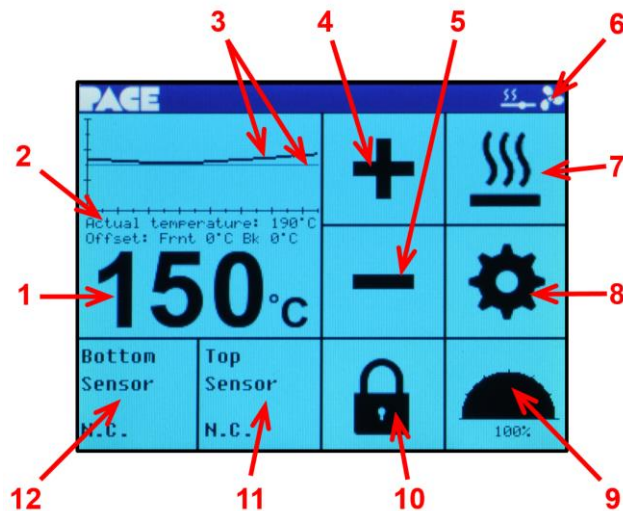
1. Unpack the PH 100 unit and place on a solid, hard, dry, stable surface. Leave proper clearance around the device (min. 20cm). Wait one hour to allow any condensation built up during transport to dissipate.

- Insert line cord into the rear panel Power Cord Input and plug into a properly grounded (earthed) receptacle. Verify that the power supply is properly rated to the power requirement of your PH 100 system.
- Set up the adjustable Magnetic Board Holder according to preferred height (using rails and magnetic feet) and place the PCB onto the holder:



- Turn on power by using the Main Power Switch on the back panel of the PH 100.
- Set the Preheater to the desired temperature by tapping the "+" (plus) "Increase Temperature" or "-" (minus) "Decrease Temperature" buttons.
- Wait for temperature to stabilize and start soldering/repair/rework operations using a soldering iron or other rework tools.

Main Menu Screen



- Set Temperature:** Set the temperature by tapping the number. A numeric keyboard will appear that will allow you to set the temperature from 20 - 200°C (68 - 392°F). Temperature

- can also be set by tapping the "+" (plus) "Increase Temperature" or "-" (minus) "Decrease Temperature" buttons.
- Actual Temperature:** Shows actual temperature of the internal heater if the device is set to Internal Sensor Control. If the temperature is being controlled by one of the two external thermocouples (Top Sensor or Bottom Sensor), no value is shown here. (Offset Values are only available when PH 100 is set to Internal Sensor Control).
- Temperature Curve:** The thinner line indicates the Set Temperature. The bold line shows the Actual Temperature Curve.
- Increase (+) Temperature Button:** Tap button to increase set temperature (hold for quick-set).
- Decrease (-) Temperature Button:** Tap button to decrease set temperature (hold for quick-set).
- Icon Bar:** Displays key operational information icons during use. See *Full Operations Manual* for icon explanations.
- Heater Settings Menu Button:** Tap this button to open the Heater Settings Menu screen. See *Full Operations Manual* for Heater Settings Menu explanations.
- Device Settings Menu Button:** Tap this button to open main Device Settings Menu screen. See *Full Operations Manual* for Device Settings Menu explanations.
- Power Meter Button:** Tap the button to set the power level of the preheater. Options are 1600W or 800W. The meter shows the duty cycle or power level at which the heater is currently operating.
- Password/Screen Lock Button:** Tap this button to lock the screen. On the Icon Bar a lock appears. Tap the button again and enter password to unlock.
- Top Sensor:** Shows the Top Sensor temperature when a thermocouple is in use. When not in use, will display "N.C." (Not Connected).
- Bottom Sensor:** Shows the Bottom Sensor temperature when a thermocouple is in use. When not in use, will display "N.C." (Not Connected).

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