



## **PAGE**<sup>®</sup> **worldwide**

### SMR Manual

P/N 5050-0582 (Rev A)



**SMR Power supply**  
(Shown with three optional handpieces and the connected TS-15 StripTweez)



**1. Packing Contents (P/Ns Domestic and Export):**

1	1121-0960-P1	BLADE, STRIPPER, 24 - 18 Ga
2	1332-0094-P1	POWER CORD, DETACHABLE, 115 VOLTS
3	1332-0280-P1	POWER CORD, DETACHABLE, UK Style Plug 220 VOLTS
4	1332-0093-P1	POWER CORD DETACHABLE 220 VOLTS 2 PRONG STD
5	6008-0115-P1	FOOT PEDAL, TREADLITE
6	6019-0085-P1	KIT, REDI-RAK, HANDPIECE, SMR
7	6019-0086-P1	CUBBY KIT, SMR
8	7000-0024-P1	POWER CORD, UNIVERSAL, SMR
9	8007-0565	SMR POWER SOURCE, 120 VOLTS)
9	8007-0566	SMR POWER SOURCE, (230 VOLTS)
9	7012-0002-P1	TS-15 STRIPTWEEZ
10	1121-0003-P1	THERMAL STRIPPER TIPS.
	1121-0960-P1	(FLAT BLADE STRIPPER)

**2. Specifications:**

SMR (120Volts)	Part number 8007-0565
SMR (230Volts)	Part number 8007-0566

Dimensions	104mm (4.1") H x 130mm (5.1") W x 152mm (6") D
Weight	6.3lbs., 2.8 Kg
Power Requirements	60Hz, 80 Watts maximum at 115 VAC
	50Hz, 40 watts at 230 VAC
Control	LED Digital Display & Keypad
RoHs Compliant	Yes
Calibration Required	No
Power Range	1 to 20

**3. Safety Information:**

- a. Do not contact the Heater or its peripheral metal parts during operation.
- b. Once turned off, let the unit cool completely before contacting.
- c. When using Fluxes, use fume extraction equipment, or use in a well ventilated area to minimize operator exposure to fumes.
- d. Repair procedures on this equipment should only be performed by qualified individuals as energized parts may be exposed when the unit is disassembled.
- e. Be sure to place the handpiece in its proper holder after use and allow it to cool before storing.
- f. Always follow proper handling procedures when using solder, solder paste, and fluxes. Always consult the Material Safety Data Sheet (MSDS) provided by the supplier.

**4. Features:**

- a. The SMR features a Pulse Heat power output which provides controlled temperature ramp-up to reflow temperatures, reducing thermal shock risk and unwanted heating of adjacent solder joints. The system can be used for the removal and installation of small SMD's, thermal wire stripping, resistance soldering of wires to connector cups, lap repairs for conductors and traces and removal of conformal coatings.
- b. 4 SMR Pulse Heat Compatible Handpieces.
- c. Adjustable power level from 1-20 (20 being maximum power).
- d. An approved operating range can be programmed allowing operators flexibility to do their work.
- e. Clear LED display with functional soft-keys to perform operations.
- f. ESD safe metal housing.



- g. Can be Password protected.

## 5. Optional Handpieces

PACE's StripTweez Handpiece (TS-15) (Supplied) has one application and one only, thermal stripping of wires. Offering a range of tips for specific gauged wires, the StripTweez comes standard with the SMR System. Part Number: 7012-0002-P1

PACE's LapFlo Tool (LF-15) has two primary applications, conductor/trace/ pad repairs and thermal parting e.g. controlled heat and abrasion for removal of conformal coating and laminate repairs. Part Number: 7013-0004-02-P1

PACE's ResisTweez Handpiece (TW-15) has two main applications, wire to terminal/lug soldering & desoldering and PLCC removal. Part Number: 7009-0005-P1

PACE's ConductTweez (CT-15) applications are focused on the installation and removal of chips, SOTs and SOICs. Part Number: 7020-0001-P1

## 6. Set-Up:

- a. Carefully unpack the SMR Power source and inventory contents.
- b. Contents will include:
  - i. One each handpiece and Universal Power Cord Assembly, (TS-15).
  - ii. One each hot cubby with screws and nuts.
  - iii. One each Redi-Rack, with screws and nuts.
  - iv. SMR Power supply.
  - v. One each foot switch.
  - vi. 5050-0044 TS-15 Operation instructions.
  - vii. 5050-0582 SMR manual.
  - viii. 1121-0003-P1 Thermal stripper tips.
  - ix. 1121-0960-P1
  - x. Refer to page 2 for packout items.
- c. Place the SMR with the left side facing down, (Refer to figure one). Insert one ¼ inch nut into the slot on the side of the power source. Start the first flat head screw into the nut through the first hole in the hot cubby and leave loose. Insert the second ¼ inch nut into the slot and insert the second flathead screw through the hot cubby and into the nut. (Refer to figure 2). Slide the hot cubby forward to within one inch from the front of the SMR. Tighten the screws.

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Figure One



Figure Two

- d. Place the SMR right side up into the normal operating position. Slide the two ¼ inch nuts into the top two slots in the SMR. (Refer to figure three). Install the washers on both screws on the Redi-Rack, and install the Redi-Rack onto the top of the SMR. (Refer to figure four). Tighten the screws.



Figure Three

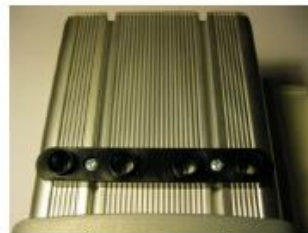


Figure Four

- e. Plug in the TS-15 Plug in the Universal Power Cord into the keyed port on the back of the SMR Plug the other end into the TS-15 Handpiece.  
f. The Handpiece receptacle shown in figure five is the Universal Power Cord (Slowly turn the connector until it drops into place in the receptable. Push the locking ring into position.  
g. Plug in the foot switch into the back of the SMR. (Refer to figure 5).  
h. Plug the power cord into the back of the SMR. (Refer to figure 5).  
i. Plug the power cord into AC power.

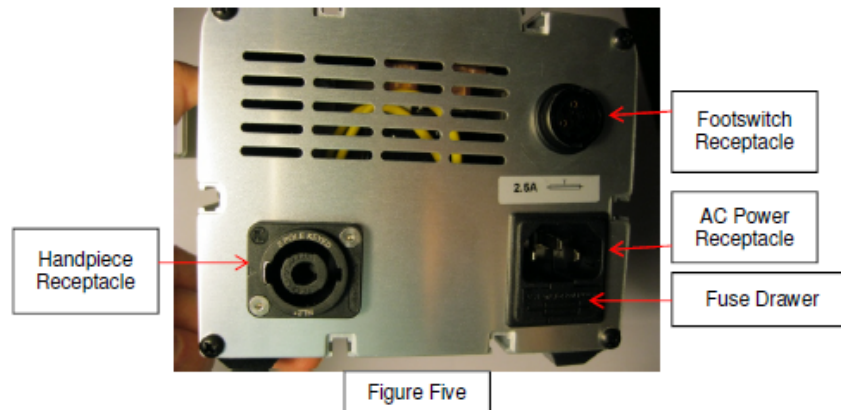


Figure Five

## 7. Operation:

- a. Review 5050-0044 TS-15 operation instructions. Set up the TS-15 for required strip depth and wire thickness.
- b. When the wire strip depth and the correct wire strip tip are set up, turn AC power switch on.
- c. Note: Some insulation will require a higher or lower power level than other insulation. Insulation types vary greatly in the melt temperatures, so care must be exercised when defining the power level required.
- d. Do not contact the tips or their peripheral metal parts during operation, serious burns could result.
- e.
- f. Insert the female end of the power cord into the AC Power Receptacle on the on the rear panel of the power source
- g. Plug the prong end (Male end) of the power cord into an appropriate 3 wire grounded AC supply receptacle.
- h. Place a representative piece of scrap wire in the appropriate gage slot of the tips. Grasp the wire firmly with the TS-15, press and hold the foot-pedal. Insulation melt (not burn) should occur within about one second. If it does not, increase the power level by one and repeat. Continue increasing until melt is observed within about one second. If insulation melt occurs faster than about one second, or if insulation burn is observed, reduce the power level by one and repeat. Continue decreasing until proper melt, and no burning, is observed within about one second. Upon achieving proper insulation melt, turn the wire, or the TS-15 handpiece a ¼ turn and gently pull the insulation off the end of the wire allowing the detached portion of insulation to turn with the natural lay of the wire strands
- i. Set the power level to 5 on the display with the up/down arrows on the front of the SMR.
- j. Using a scrap piece of the wire that will be used, place the appropriate size slotted portion of the tip around the wire. Squeeze and hold the TS-15, press the foot switch and hold for approximately one second. Turn the TS-15 ¼ turn on the wire, and pull the insulation off of the wire. If the insulation has not melted, increase the power level to 6. Continue to increase the power level until the insulation melts and the wire is stripped.

## 8. Programming

The menu driven LED Display of the SMR allows you to easily customize your system.

In Set-Up Mode, you can:

- a. Enter, move or change a Password.
- b. Change the Upper and Lower Power limits.





## 9. Entering the Set-Up Menu

The following instructions should be performed to familiarize the operator with the system.

- a. Place Power Switch in the "OFF" ("0") position.
- b. Press and hold the up (Red) arrow while turning on the Power Switch
- c. The LED Display will display the version of the microprocessor and flash from 000 to PS.
- d. If the display reads "EP", a Password has been stored in system memory. The password must be entered to access the menu. If the wrong password is entered, a "no" will appear on the display and the system will return to normal operation. If this occurs, repeat steps a. and b. then enter the correct Password.
- e. To enter a password, select a 3 digit number as the password using the keypad. (1 to 999). Make a note of the entered Password.
- f. Each time you Press the foot pedal, it will cycle to the next step in the programming menu.
- g. Press the foot pedal. S-L will be displayed, Set the lowest power limit that you want to operate at. (The factory Default is 5).
- h. Press the foot pedal. S-H will be displayed, Set the highest power limit that you want to operate at. (The factory Default is 20).
- i. Press the foot pedal. End will be displayed, Press the up arrow. The power level will go to the last programmed level.

## 10. Tips/Accessory Replacements:

a.

1	7012-0002-P1	StripTweez Handpiece (TS-15)
2	1121-0960-P1	BLADE, STRIPPER, 24 through 18 Gauge
3	1121-0003-P1	Thermal Stripper Tips
4	1121-0961-P1	18 Gauge Tip
5	1121-0962-P1	20 Gauge Tip
6	1121-0963-P1	22 Gauge Tip
7	1121-0964-P1	24 Gauge Tip

## 11. Major Replacement Parts:

1	1121-0960-P1	BLADE, STRIPPER, 24 - 18 Ga
2	1332-0094-P1	POWER CORD, DETACHABLE, 115 VOLTS
3	1332-0280-P1	POWER CORD, DETACHABLE, UK Style Plug 220 VOLTS
4	1332-0093-P1	POWER CORD DETACHABLE 220 VOLTS 2 PRONG STD
5	6008-0115-P1	FOOT PEDAL, TREADLITE
6	6019-0085-P1	KIT, REDI-RAK, HANDPIECE, SMR
7	6019-0086-P1	CUBBY KIT, SMR
8	7000-0024-P1	POWER CORD, UNIVERSAL, SMR
9	7012-0002-P1	TS-15 STRIPTWEEZ
10	1159-0275-04-P5	FUSE, 2.5 AMP TIME LAG, (120 Volts)
11	1159-0275-01-P5	FUSE 2.0 AMP TIME LAG, (230 Volts)
12	1121-0003-P1	FLAT BLADE THERMAL STRIPPER TIPS

## 12. Maintenance & Troubleshooting:

Maintenance should only be completed by qualified personnel designated by your company.

- a. The only user function that can be checked on the SMR is the fuse. (Refer to figure 5 on Page 4).
- b. Remove the power plug from the back of the SMR.
- c. Using a small flathead screwdriver, open the tray under the power connections.

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- d. The fuse in the front of the drawer (Towards the front of the SMR) is the active fuse. The fuse in the back of the drawer (Towards the rear of the SMR) is a spare.
- e. Test fuse with an ohm meter. It should be 0 (Zero) Ohms. If it is bad (Open or Infinity) replace it with the spare and order part number 1159-0275-04-P5 for 120 Volt systems, and part number 1159-0275-01-P5 for 230 Volt systems

**13. Service:**

Please contact PACE or your local distributor for service and repair.

**14. Warranty Information:**

**PACE WORLDWIDE LIMITED WARRANTY**

Set up Steps are listed here include unpacking (if necessary), all required connections, and energizing the system. In some cases, set-up menus/programming may be required.

PACE warrants to the first user that products manufactured by it and supplied hereunder are free of defects in materials and workmanship for a period of one (1) year from the date of receipt by such user. This Warranty as applied to blowers and motor pumps is limited to a period of one (1) year. Monitors, computers and other brand equipment supplied, but not manufactured by PACE, are covered under their respective manufacturer's warranty in lieu of this Warranty.

This warranty does not cover wear and tear under normal use, repair or replacement required as a result of misuse, improper application, mishandling or improper storage. Consumable items such as tips, heaters, filters, etc., which wear out under normal use are excluded. Failure to perform recommended routine maintenance, alterations or repairs made other than in accordance with PACE's directions, or removal or alteration of identification markings in any way will void this warranty. This warranty is available only to the first user, but the exclusions and limitations herein apply to all persons and entities.

PACE MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

**PACE will, at PACE's option**, repair or replace any defective products at its facility or other location approved by it at no charge to user, or provide parts without charge for installation by the user in the field at user's expense and risk. User will be responsible for all costs of shipping equipment to PACE or other location for warranty service.

EXCEPT FOR THE REMEDY ABOVE DESCRIBED, UNLESS OTHERWISE REQUIRED BY APPLICABLE LAW, PACE WILL HAVE NO OTHER OBLIGATION WITH REGARD TO ANY BREACH OF WARRANTY OR OTHER CLAIM WITH RESPECT TO THE PRODUCTS, OR LIABILITY FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, OR INCIDENTAL LOSS OR DAMAGE CAUSED BY OR OCCURRING IN CONNECTION WITH ANY OF THE PRODUCTS.

Warranty service may be obtained by contacting the appropriate PACE Company or local Authorized PACE distributor as set forth below to determine if return of any item is required, or if repairs can be made by the user in the field.

Defective products may not be returned to PACE without a Service Authorization ("SA") Number.

Any warranty or other claim with respect to the products must be made in writing delivered to PACE (or local Authorized PACE distributor for Buyers outside the USA and the United Kingdom) within a reasonable time of the expiration date of this warranty with sufficient evidence of purchase and date of receipt, otherwise user's rights under this warranty shall be deemed waived.

PACE, Incorporated retains the right to make changes to specifications contained herein at any time, without notice.

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