

# Therm-O-Trac Soldering Stations



Therm-O-Trac Soldering Stations are the best available for high reliability applications. They exceed all industry standards and MIL specs including the performance requirements of MIL-STD-200A and ANSI/J-STD-001; the ESD requirements of MIL-STD-1686; and the EMI and RFI emission criteria of MIL-STD-461A/462A. With outstanding performance,

Therm-O-Trac is also the leading station for commercial applications requiring high reliability and accurate temperature control.

## FEATURES:

- **Temperature Control**  
Therm-O-Trac is designed to give the industry's most stable temperature control during the workcycle and less than  $\pm 10^{\circ}\text{F}$  variance at idle temperature. Temperature is controlled by a thermistor positioned at the working end of the tip. It continually senses temperature and corrects for temperature variations immediately by adjusting the power through a closed loop, zero voltage switching circuit.
- **Temperature Range**  
Variable temperature models ( $525^{\circ}\text{F}$  to  $850^{\circ}\text{F}$ ) can be set for any temperature in range. Select-O-Trac and Magnum 2300B can be set to any of three specific temperatures. All units can be easily calibrated in the field without any special components or tools to ensure certification compliance with industry standards and MIL Specs.
- **Detrimental Energy**  
Therm-O-Trac does not produce levels of EMI, RFI, ESD, electrical or any other energy forms detrimental to sensitive devices during soldering. The station design and construction eliminates any possibility of ESD damage.
- **Voltage Leakage**  
Steady state voltage leakage is a potential risk in many irons after prolonged use. In the Therm-O-Trac, "Posi-Ground", a positive tip grounding technique developed by Hexacon, prevents leakage potentials greater than two millivolts - well below the damage level for voltage **sensitive** components. The power supply for the low voltage element is fully isolated.
- **Magnetic Fields**  
Therm-O-Trac's solid state, electronic switching does not produce a magnetic field. (Soldering stations that use Curie-point alloys and strong permanent magnets for control produce a strong magnetic field that damages sensitive circuits.)
- **Made in USA - to Survive the Harshest Soldering Environments**  
Therm-O-Trac Stations are durable and built to last. Entirely manufactured and assembled in the United States of America with independently replaceable component parts and tips. All models are available in either 110/120V, 60 HZ or 220/240V, 50 HZ.

## Six Models - To Cover the Widest Application Range

### Therm-O-Trac Model 1002

The Therm-O-Trac 1002 is continuously adjustable from  $525^{\circ}\text{F}$  to  $850^{\circ}\text{F}$  and is the most popular station in the Therm-O-Trac family.

### Power Boost Model 1002PBS

Power Boost Model 1002PBS delivers high quality solder joints on multi-layer boards with ease and without damaging the board or components. It has the high heat capacity necessary to provide a completely filled hole. Soldering dwell time is reduced to a minimum and there are no lifted pads, measling or extra high tip temperatures. Hexacon's Power Boost System solders up to 4.5 times faster than conventional stations on multi layer boards. The Power Boost System includes a Therm-O-Trac 1002PBS station with PB5, 6 & 7 cases and six tips in a variety of point shapes and thermal capacity ratings.

Selectable temperature Therm-O-Trac models are available in custom temperature selections and configured for heavier thermal loads.

**Select-O-Trac1006A & 1006B**

Select-O-Trac Model 1006A has selectable settings of 600°F, 700°F and 800°F. Choose Select-O-Trac 1006B for 650°F, 750°F and 850°F. Select-O-Trac is the only soldering station that can be calibrated exactly at each set point, low, high and intermediate.

**PBK-6 Kit**

The PBK-6 Kit upgrades models 1002, 1006A and 1006B to Power Boost capability. It includes PB5, 6 & 7 cases and 2 ea. Series 5, 6 & 7 tips.

**Magnum 2300 and 2300B**

Model 2300 may be adjusted for any soldering temperature between 525°F and 850°F. Model 2300B has selectable temperatures and settings of 650°F, 750°F and 850°F.

Using the largest element and tips in the Therm-O-Trac family, Magnum has the highest heat capacity of any temperature-controlled soldering station. The hand tool includes a heavy duty element and a larger diameter case to accommodate heavier longer tips. Magnum tips are approximately 22 grams compared with 3.5 grams for a typical standard Therm-O-Trac tip. This means that the a Magnum tip provides over 6 times the thermal mass enabling it to solder extra heavy loads in less than five seconds, as required by MIL Specs.

**All Therm-O-Tracs are also available in 220/240V, 50 Hz.**

**Therm-O-Trac Soldering Tips**

A wide variety of Xtradur Long Life iron plated J Series tips are available for Therm-O-Trac Soldering Stations. Each J-Tip has a heavy iron plating over copper alloy. All J-Tips are tinned and immunized with nickel and chrome.

The entire tip surface of the J-tip is protected against scaling. Additionally, the inside of the soldering tip is coated using an exclusive surface alloy diffusion process which guarantees that the tip will never freeze to the sensor or element.

The sensing device for Therm-O-Trac stations is critically positioned near the end of the tip for maximum sensitivity and response time. The close tolerances, including hole depth, are essential for proper tool performance. Use of tips other than Hexacon J-Tips will void the warranty and cause unnecessary maintenance problems.

**SPECIFICATIONS:**

Part ID	Wattage	Standard Tip	Tip Point Size & Reach
TOT-1002	Variable	J202X	3/32" x 5/8"
TOT-1006A/B	Variable	J202X	3/32" x 5/8"
TOT-1002PBS	Variable	J523X, J524X, J601X,J603X, J704X, J705X	3/32", 1/16" x 7/8" 1/8", 1/8" bevel x 9/16" 3/64", 1/8" x 9/16"
TOT-2300/B	Variable	J802X	1/4" x 1/2"

