

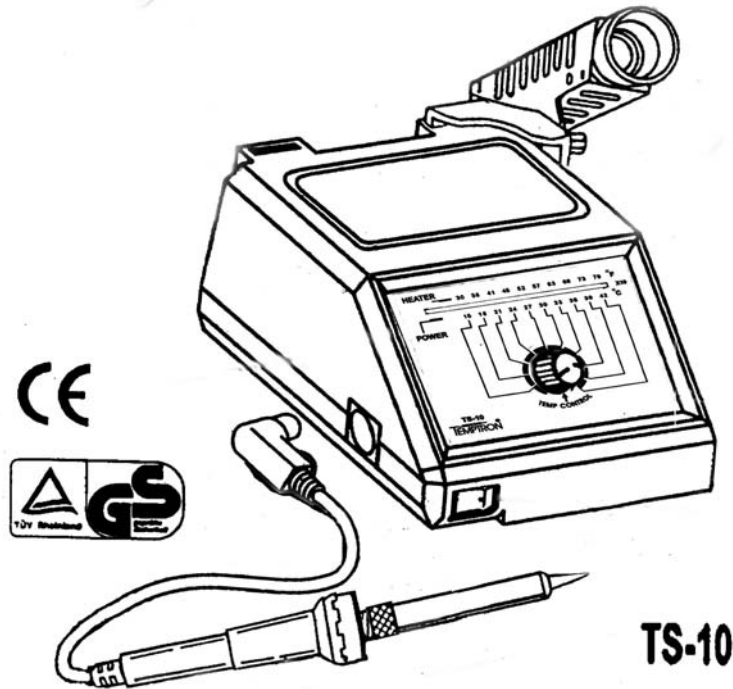
TEMPERATURE CONTROL SOLDER STATION

PRODUCT DESCRIPTION:

The electronic temperature control soldering station has been developed to meet the present & future needs of the electronics industry. It incorporates a sophisticated electronic circuit that enables the user to change the tip temperature from 300°F (150°C) to 790°F (420°C) without the need to change the tip or heating element. The temperature is maintained within $\pm 10^\circ\text{F}$ of its preset temperature. This is made possible by a unique sensor that is located near the tip, resulting in rapid response & little temperature variation. The tip of the unit is isolated from the AC line by a transformer. Low voltage (24V) is utilized to power the heating element. Completely electronic switching protects voltage & current sensitive components against transient spikes sometimes caused by other units utilizing mechanical switching circuits. This unit incorporates a linear LED array readout that accurately indicates the temperature of the tip.

TEMPTRON[®]

**Temperature Control
Soldering Station**



WORKING TEMPERATURE:

Soldering at the correct temperature is very important to insure perfect solder connection. If the temperature is too low the solder will not flow correctly & will cause cold solder joints. If the temperature is too high the flux will be burned & not allow the solder to flow. High temperature can also cause damage to the PC board & other sensitive components. When tip-working temperature is set within the correct parameters suited to the particular solder being used a good joint is assured. The most common solder alloys used in the electronics industry is 60% tin. 40% lead (60/40). A common tip working temperature of 60/40 solder is detailed below (this may vary from manufacturer to manufacturer).

Melting point	419°F (215°C)
Normal operation	518°F-572°F (270°C-300°C)
Production line operation	608°F-716°F (320°C-380°C)
Desoldering operation for small joint	599°F (315°C)
Desoldering operation for big joint	752°F (400°C)

CARE OF THE TIP:

The tip supplied is iron plated copper. If used properly it will last a long time.

1. Always keep tips tinned before switching off or storing for any period of time: wipe only before use.
2. Do not keep the iron set at high temperature for along time as this will break down the surface of the tip.
3. Never clean the tip with coarse abrasive material or files.
4. If an oxide film does form it can be cleaned by lightly rubbing with a 600-800 grit emery cloth, isopropyl alcohol or equivalent & then immediately reheat & retin the tip to prevent oxidation of the wettable surface.
5. Remove the tip & clean every twenty hours of use, or at least once a week, & remove any loose build up in the barrel.
6. Do not use fluxes containing chloride or acid. Use only activated resin fluxes.
7. Do not use any compound or anti-seize material on the wettable surface.

MAINTENANCE:

Tip replacement & dressing

Note: Tip replacement or cleaning should be done only when the iron is at room temperature. The tip can be changed or replaced simply by unscrewing the knurled nut barrel assembly. The station must be switched off & allowed to cool before & during this operation, as damage may result if the system is left on without the tip inserted. After removing tip, blow out any oxide dust that may have formed in the tip retaining area of the barrel. Be careful to avoid getting dust in your eyes. Replace the tip & screw the retaining knurled nut barrel assembly using only hand pressure to tighten. Pliers should only be used to tighten the nut if loosening should occur when the iron is hot to avoid burning your fingers. Care should be taken not to over tighten as this would damage the element.