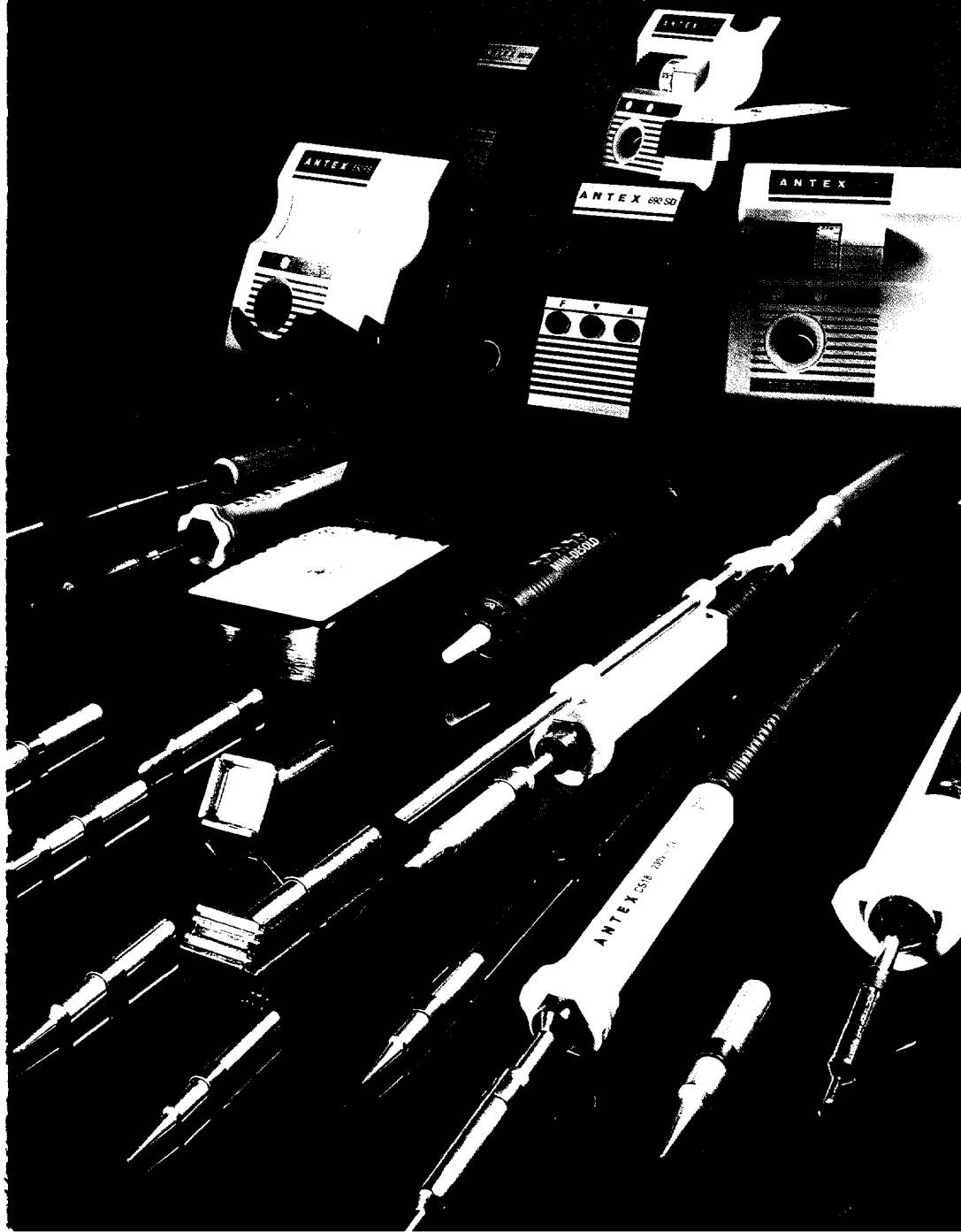


628-992 to 629-042

GE



**ANTEX**

**CE**



Antex (Electronics) Ltd manufacture entirely in the UK. For the manufacture of their range of soldering irons, stations and bits they hold BS5750 pt 2 (ISO 9002) certification.

As part of the company's growth they are continually adding new products to the range. Literature is regularly updated to include new products as they enter production.

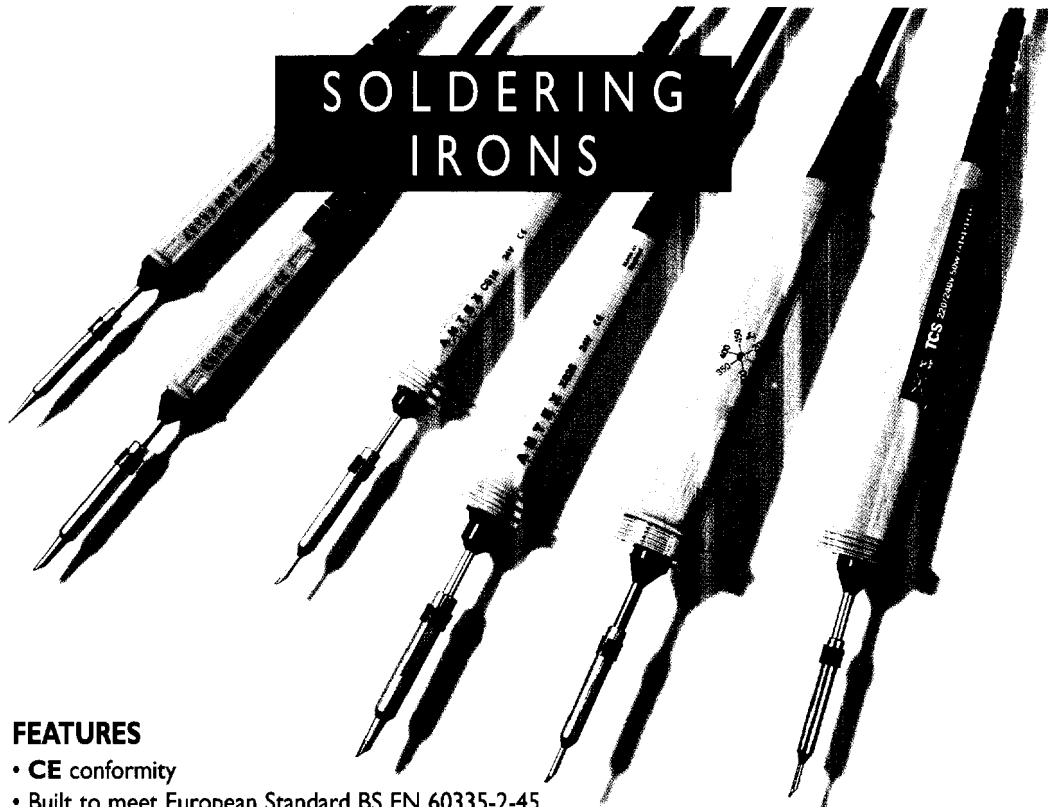
Antex export to most countries in the world, and have a network of agents and distributors servicing export markets locally. Please contact Antex should you have any difficulty in obtaining products or information.

Antex product policy is to provide its customers with a product that is ideal for its purposes, keeping pace with rapid technology advances. As applications, working practices, health and safety issues change and develop, it is essential for the company to maintain close links with all its customers so that the product continues to fulfil its intended purpose in all ways. We welcome feedback on all aspects of the product range, including information on user applications.

## C O N T E N T S

|                              |     |
|------------------------------|-----|
| Soldering Irons              | 2   |
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# SOLDERING IRONS



## FEATURES

- CE conformity
- Built to meet European Standard BS EN 60335-2-45
- Full power range from 12 to 50 watt
- Wide choice of input voltages
- "Thermally balanced" fixed setting and "In Handle" adjustable temperature models
- Wide range of soldering and desoldering-bit profiles
- Light, compact and well balanced for operator satisfaction

## OPTIONS

- Moulded mains voltage plugs for most countries of the world
- Power supply compatible connectors on 24v fixed setting irons
- Burnproof Silicone/rubber leads

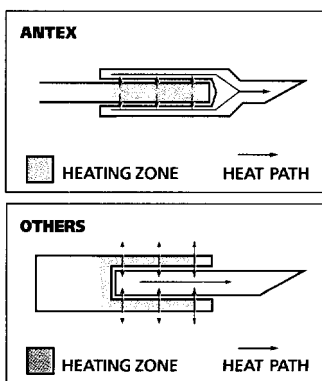
## REPLACEMENT PARTS (see also current price list)

- Soldering bits - see tables on back page
- Replacement elements - order by soldering iron type and voltage with suffix E e.g. XS 230E
- PVC or silicone/rubber lead sets
- Handles, hooks etc.

| SPECIFICATION          | M          | C          | CS         | XS            | TCS       | A545      |
|------------------------|------------|------------|------------|---------------|-----------|-----------|
| NOMINAL POWER (WATTS)  | 12         | 15         | 18         | 25            | 50        | 45        |
| STANDARD VOLTAGES      | 230,115,24 | 230,115,24 | 230,115,24 | 230,115,24,12 | 230,115   | 24        |
| OPTIONAL VOLTAGES      | 100        | 100,50     | 100,50,12  | 100,50        | 100       | -         |
| TIP TEMP (°C)          | 370        | 370        | 390        | 420           | 200 - 450 | 200 - 450 |
| FACTORY FITTED BIT     | 10         | 820        | 1100       | 51            | 1100      | 1100      |
| CABLE LENGTH (m)       | 1.5        | 1.5        | 1.5        | 1.5           | 1.5       | 1.5       |
| STANDARD CABLE         | PVC        | PVC        | PVC        | PVC           | PVC       | SILICONE  |
| LEAK CURRENT (µA)      | 1.5        | 3.5        | 1.5        | 2.0           | 5.0       | 1.5       |
| LENGTH TIP/HANDLE (mm) | 147        | 147        | 182        | 200           | 222       | 222       |



By designing the bit to wrap around the heating element, Antex ensure maximum heat transfer into the bit, and minimum heat loss to the ambient. Such is the efficiency that tests prove that an Antex 25 watt iron has equivalent soldering power to many other manufacturers' 40 watt irons.



# SOLDERING KITS



Various Antex Soldering Irons are available packed with accessories to make soldering kits ideal for the first time buyer of a soldering iron. The Antex **SK2**, **SK5**, or **SK6** kits offer a high quality soldering iron, **ST6** bench stand, length of solder and booklet "How to Solder" all in one package. The three kits differ only by the soldering iron contained therein.

The **TCK - 50** kit (above, centre) comprises the essential tools for the serious hobbyist or service/repair shop. The adjustable 50 watt temperature controlled TCS iron can be set precisely to match the job in hand, recognising that various components may require protecting against overheating. The **ST6** bench stand accommodates the iron when not in use.

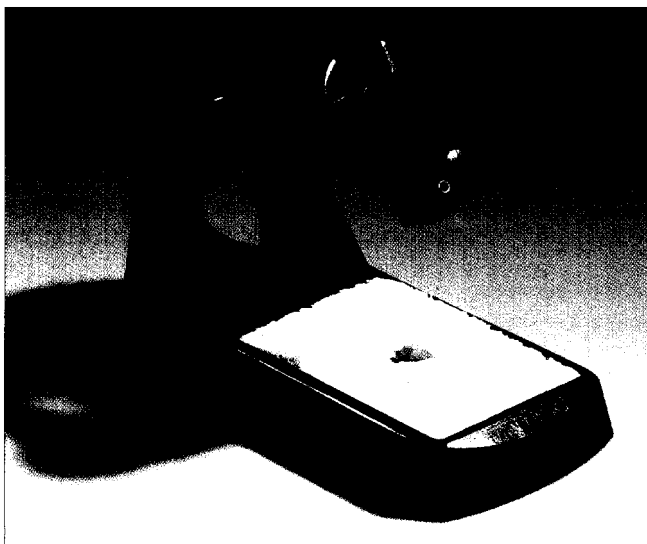
For solder removal from p.c.b.'s a "mini" desolder pump is included and a 2 metre length of 60/40 22 s.w.g. solder wire.

Soldering irons within the above kits are available with options of UK or Europlug, or silicone rubber cable.

The **MLXS** (right) is a 25 watt 12 volt soldering iron equipped with a 4.5 metre twin cable furnished with giant 'croc-clips' for use on vehicle batteries. Ideal for emergency use in the car, boat or caravan, the package is also a must for outdoor hobbyists such as model aircraft or boat enthusiasts where urgent repairs may be needed and mains power is not available.

| SPECIFICATION                       | SK2 | SK5  | SK6  | MLXS | TCK - 50 |
|-------------------------------------|-----|------|------|------|----------|
| MODEL OF IRON IN KIT (See page 2)   | C   | CS18 | XS25 | XS25 | TCS      |
| VOLTAGE (V)                         | 230 | 230  | 230  | 12   | 230      |
| WATTS (W) (NOMINAL)                 | 15  | 18   | 25   | 25   | 50       |
| STAND INCLUDED (See below)          | ST6 | ST6  | ST6  | -    | ST6      |
| DESOLDER PUMP INCLUDED (See page 7) | -   | -    | -    | -    | MINI     |
| SOLDER INCLUDED                     | YES | YES  | YES  | YES  | YES      |

## BENCH STAND ST6



The **ST6** is an industrially styled bench stand for all ANTEX and most competitive soldering irons.

The iron holder is adjustable according to model used.

It is manufactured from high grade, high temperature phenolic suitable for use with soldering iron tip temperatures. It incorporates slip-resistant feet (plus 2 screw holes if permanent positioning is required), and a ballast weight for added stability.

The innovative design ensures that the soldering iron handle temperature is kept to a minimum when the iron is placed in the stand for long periods.

The **ST6** replaces the **ST4**, **ST5**, **ST7** and **ST11** Antex stands.

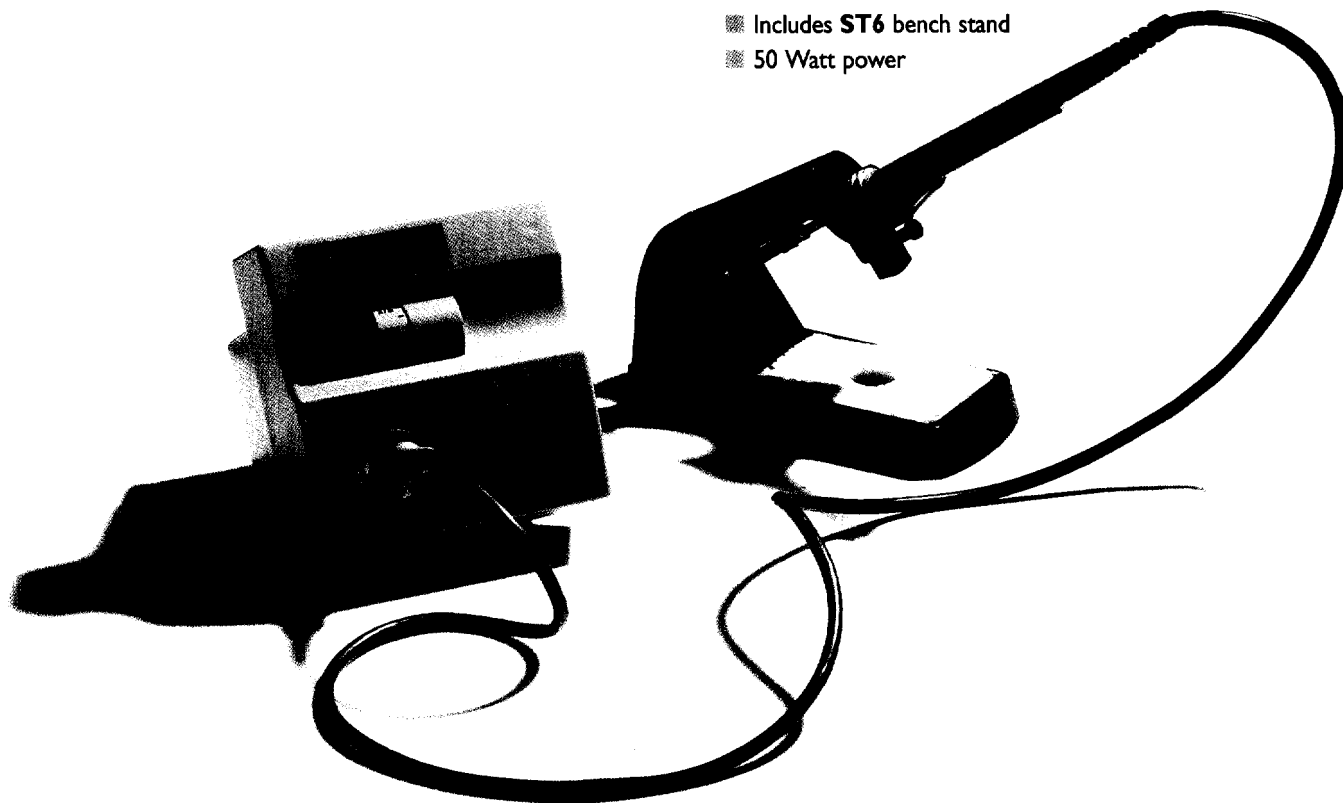
# SOLDERING STATIONS

## 600 SERIES

The **600** series of Soldering Stations comprises three models. Two temperature controlled stations are described here. (The third, a power supply unit is to be found on page 7).

Features common to all three stations are:

- Fully compatible with European **EMC** and **CE** regulations
- Bench or Wall mounted
- Includes **ST6** bench stand
- 50 Watt power



## 660TC - STANDARD SOLDERING STATION

The **660TC** soldering station incorporates:

- 660TC** Soldering Unit
- TC50** Temperature Controlled Soldering Iron
- ST6** Bench Stand

The unit, designed for wall or bench mounting, has a temperature range of 65 to 450°C, selected using the thumbwheel potentiometer. Indicator LED's show "power-on" and "power to iron". The **TC50** included is an ergonomically designed 50 watt cool handled soldering iron which will take any of the Antex 1100 series of soldering bits or **DST** range of SMT desoldering bits (see back page). A 25 watt iron **TC25** can be used as an option where finer soldering and low wattage is required.

| SPECIFICATION                   | 660TC         | SPECIFICATION             | 660TC         |
|---------------------------------|---------------|---------------------------|---------------|
| AVAILABLE INPUT (VOLTS)         | 230, 100/115  | "POWER-ON" INDICATION     | GREEN LED     |
| OUTPUT TO IRON (VOLTS, WATTS)   | 24V, 50W      | POWER TO IRON INDICATION  | RED LED       |
| SOLDERING IRON INCLUDED         | TC50          | UNIT CABLE LENGTH         | 1.5m PVC      |
| FACTORY FITTED BIT (See page 8) | 1100          | BENCH STAND INCLUDED      | ST6           |
| TEMPERATURE RANGE (°C)          | 65 TO 450     | CONNECTION TO IRON        | 5 PIN DIN     |
| READ-OUT                        | NONE          | IRON CABLE LENGTH         | 1.2m SILICONE |
| SETTING MEANS                   | ROTARY POT    | LEAK CURRENT (MAX µA)     | 2.0           |
| ON/OFF SWITCH                   | YES           | SENSOR                    | THERMOCOUPLE  |
| MAINS PLUG                      | BP, EP, OTHER | MULTILINGUAL INSTRUCTIONS | YES           |
| TIP TO EARTH CONTINUITY         | YES           | ALTERNATIVE IRON          | TC25          |

# SOLDERING STATIONS

## 600 SERIES



### 690-SD DIGITAL READ-OUT, MULTIPROGRAMME STATION

The **690-SD** is a multi-programme, digital read-out, static dissipative temperature controlled soldering station. The station comprises:

- 690-SD** Static Dissipative Soldering Unit
- SD-50** Static Dissipative Temperature Controlled Iron
- ST6** Bench Stand

Built to meet the US MiL Std 2000A and EN 100015-1, the temperature range is 65 to 450°C and repeatability to 2°C. Programme selection and settings are made using three buttons. Each station is shipped with easy to use multi-lingual instructions. Examples of read-out are shown above. It is multi-programmed with the following functions:

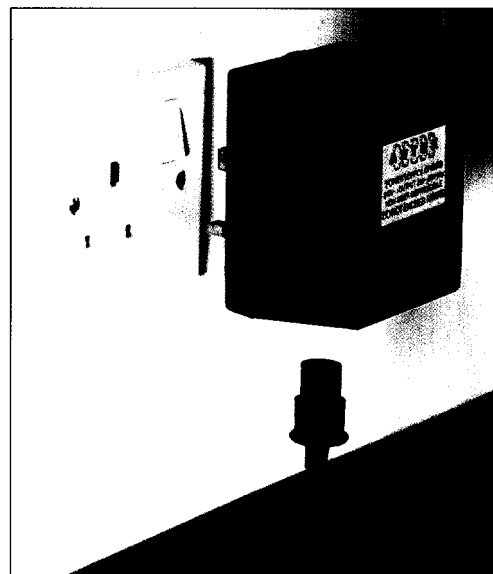
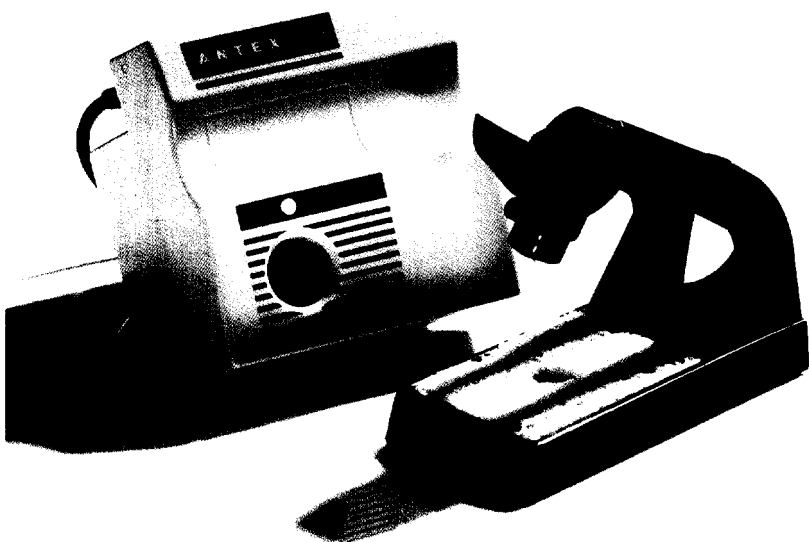
- 2 memory settings
- °C or °F read-out
- Dial-in bit selection for accurate offset
- Lockable with PIN security
- Choice of many languages (English, French, German, Dutch etc)
- Basic self diagnostics

| SPECIFICATION                   | 690-SD       | SPECIFICATION            | 690-SD             |
|---------------------------------|--------------|--------------------------|--------------------|
| AVAILABLE INPUT (VOLTS)         | 230, 100/115 | TIP TO EARTH CONTINUITY  | YES                |
| OUTPUT TO IRON (VOLTS, WATTS)   | 24V, 50W     | ON/OFF SWITCH            | YES                |
| SOLDERING IRON INCLUDED         | SD50         | MAINS PLUG               | BP, EP OR OTHER    |
| FACTORY FITTED BIT (See page 8) | 1100         | UNIT LEAD LENGTH         | 1.5m PVC           |
| TEMPERATURE RANGE (°C)          | 65 TO 450    | BENCH STAND INCLUDED     | ST6                |
| READ-OUT                        | 4 x LED      | CONNECTION TO IRON       | 5 PIN DIN          |
| SETTING MEANS                   | PUSH BUTTON  | IRON CABLE LENGTH        | 1.2m SILICONE      |
| ACCURACY                        | ± 5°C        | LEAK CURRENT (MAX µA)    | 1.5                |
| REPEATABILITY                   | ± 2°C        | ELEMENT/SENSOR           | CERAMIC/THICK FILM |
| PROGRAMME CHANGE                | PUSH BUTTON  | SETTING LOCK MEANS       | P.I.N.             |
| FUNCTIONS AVAILABLE             | SEE ABOVE    | POWER TO IRON INDICATION | RED LED            |
| STATIC DISSIPATIVE              | YES          | ALTERNATIVE IRON         | NONE               |

# POWER SUPPLY UNITS

## 650-PS POWER SUPPLY

This power supply is part of the new **600** series of soldering stations (see also pages 4/5). The **650-PS** can be bench or wall mounted and used with any 24 volt, 50 watt max. soldering iron. This unit meets fully the requirements of **EMC** regulations and carries the **CE** mark. Included is the **ST6** bench stand. An LED shows power on. Soldering irons for use with the **650-PS** should be ordered "complete with PSU plug".



## PLUG-IN P.S.U.

Many users of soldering irons require 24 volt supply to ensure operator safety. The plug-in 24 volt Power Supply offers a lower cost solution for providing 24 volts for soldering.

Plugging directly into a standard mains socket, the power supply unit frees up valuable bench space. Furthermore, trailing leads from plug to transformer are eradicated. The output socket to the 24 volt soldering iron is underneath the unit avoiding the likelihood of ingress of foreign matter.

The Plug-in 24 volt power supply has a maximum power rating of 25 watts making it suitable for use with the 24 volt versions of Antex irons C, M, CS or XS.

The power supply is fitted with a male 3 pin Bulgin Socket. When ordering the Antex 24 volt soldering iron, always specify "with PSU plug". Alternatively plugs are available through leading component distributors.

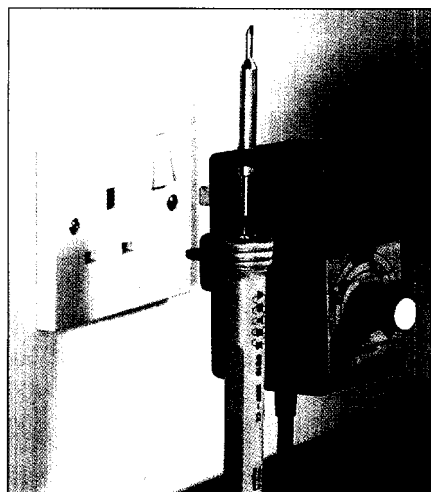
Any competitive 24 volt iron with maximum power rating of 25 watts can also be used.

## ENERGY REGULATOR (plug-in)

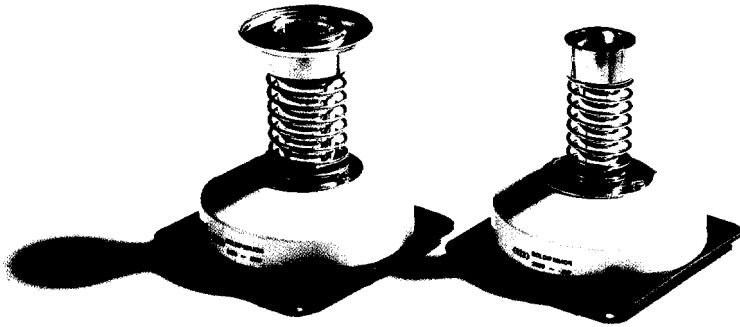
Standard soldering irons normally operate with a tip temperature in the range 370 to 420°C (according to model and bit profile). However, there is a growing use of soldering irons as hot tools in non-soldering applications requiring lower temperatures, e.g. wax painting, dental moulding, plastics etching, document preservation. The Energy Regulator permits a standard soldering iron (up to 25 watts) to be used for these applications or indeed for soldering applications where lower temperatures are required for component safety. According to model of iron, the Energy Regulator will control down to approximately 100°C.

The Antex Energy Regulator is designed for use with any 230 volt Antex soldering iron with a maximum of 25 watts, (i.e. models C, M, CS or XS).

The soldering iron is connected to the Energy Regulator in place of a normal mains plug.



# SOLDERING ACCESSORIES



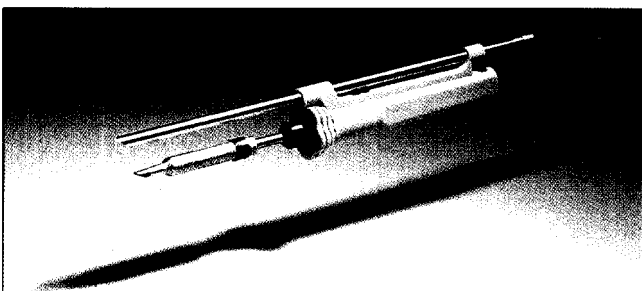
## 'SOLDIP' SOLDER POTS

The 'Soldip' family comprises a choice of two sizes of solder pots. The 'Major' has a larger capacity and is furnished with a dross tray. The 'Minor' has a smaller capacity and lower power. Both models run at a stabilised temperature of 310°C. (Typically the melting point of solders used in electronics is around 185°C). The solder pots are of sturdy construction with a wide base giving excellent stability on the work bench. Holes are provided in the base for installations where permanent fixing is required. The removable dross tray on the 'Major' retains excess dross when cleaning the solder surface.

### SPECIFICATIONS

| FEATURE                                 | MAJOR          | MINOR       |
|-----------------------------------------|----------------|-------------|
| INPUT POWER SUPPLY (VOLTS)              | 115 OR 230     | 115 OR 230  |
| WATTAGE (WATTS)                         | 60             | 45          |
| STABILISED RUNNING TEMPERATURE (°C)     | 310 NOMINAL    | 310 NOMINAL |
| FULL SOLDER CAPACITY (cm <sup>3</sup> ) | 17             | 9.5         |
| NORMAL SOLDER DEPTH (mm)                | 17             | 14          |
| MAXIMUM DEPTH AT CENTRE (mm)            | 57             | 14          |
| MAINS LEAD LENGTH (m)                   | 1.5            | 1.5         |
| TILTING ABILITY WITH STABILITY (°)      | 45             | 45          |
| WEIGHT (WITHOUT SOLDER) (gms)           | 960            | 770         |
| HEATING ELEMENTS                        | 2 (3 FOR 115V) | 2           |
| ELECTRICAL LEAKAGE AT 1250V a.c. (mA)   | 0.15           | 0.15        |

## FUME EXTRACTION UPGRADE KIT



The Fume Extraction upgrade kit can be used to convert any of the following Antex (or Antex built brand-named) irons to fume extraction models: CS, XS, XSD, CSTC, XSTC, TC25, TC50, SD50.

The extraction tube is then connected to a suitable pump/filter unit.

The kit comprises: tube carrier and screw, stainless steel fume extraction tube, flexible tubing and 'S' clips, cleaning brush.

## CROSS REFERENCE

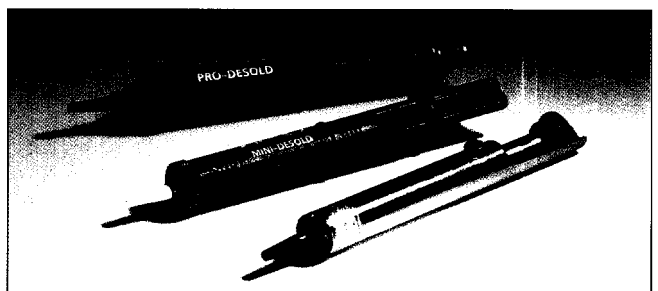
Some of the new products in this catalogue replace prior Antex models. The following chart shows the nearest functional equivalent to the old models.

| EARLIER MODEL                          | REPLACE WITH                                                 |
|----------------------------------------|--------------------------------------------------------------|
| TCSU-1/XSTC (Standard Station)         | 660TC                                                        |
| TCSU-1/CSTC (Standard Station)         | 660TC (2)                                                    |
| TCSU-D2 (Digital Station)              | 690SD                                                        |
| PSU-24 (Power Supply)                  | 650PS                                                        |
| U100/A245 (Standard Station)           | 660TC                                                        |
| U100SD/A245SD (Standard Station)       | either 660TC (non-digital)<br>or 690SD (if -SD is essential) |
| U200/A245 (Digital Station)            | 690SD                                                        |
| U200SD/A245SD (Digital Station)        | 690SD                                                        |
| U500 (Power Supply)                    | 650PS                                                        |
| U500/A545 (Power Supply / Iron)        | 660TC                                                        |
| U500SD/A545SD (Power Supply / Iron)    | either 660TC<br>or 690SD (if -SD is essential)               |
| XSTC (40 watt) (Temp. Controlled Iron) | TC50 (50 watt)                                               |
| CSTC (30 watt) (Temp. Controlled Iron) | TC25 (25 watt)                                               |
| A718 (Soldering Iron)                  | CS18                                                         |
| TCS 24 (Temp. Controlled Iron 24V)     | A545                                                         |
| X 25 (Soldering Iron)                  | XS25                                                         |

### Notes:

- 1) XSD, A245 and A545 soldering irons for use with TCSU-D2, U100, U200 and U500 will remain in production for replacement purposes.
- 2) The TC25 can be used with 660TC station if lower wattage iron is essential. (Order separately).
- 3) The 660TC is packed with TC50 iron, 690TC is packed with SD50 iron.

## DESOLDER PUMPS



The Antex range consists of three desoldering pumps designed for amateur, professional and production users. Desoldering pumps are used in conjunction with a soldering iron for the removal of solder from printed circuit boards.

The basic 'Mini-Desold' covers the needs of most electronics hobbyists. The 'Pro-Desold' has a larger capacity and conductive teflon tip. The 'Conductive', made of nickel plated aluminium with conductive tip has an overall resistance of 10<sup>5</sup> Ohms.

# REPLACEMENT BITS

## (A) SOLDERING

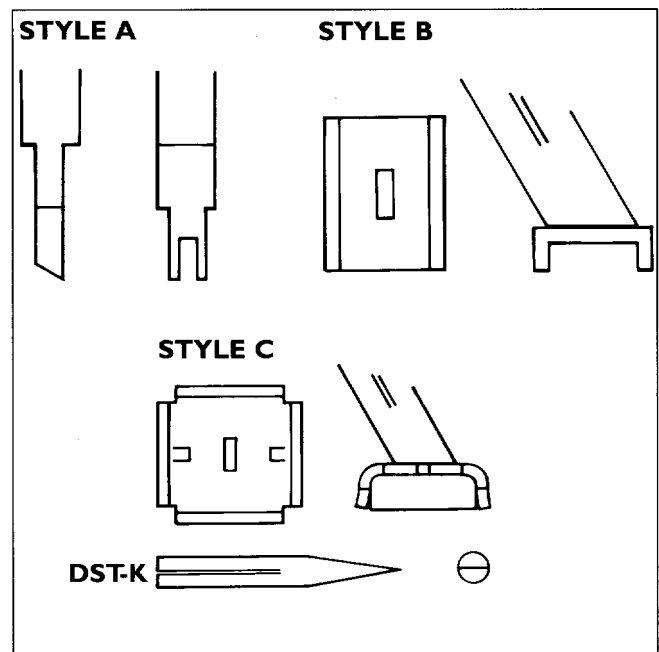
| REF.  | PROFILE | TIP<br>Ø mm | USE ON                                                                  |                                  |
|-------|---------|-------------|-------------------------------------------------------------------------|----------------------------------|
| 14A   |         | 19          | <b>XS</b>                                                               |                                  |
| 14B   |         | 19          |                                                                         |                                  |
| 50    |         | 2.3         |                                                                         |                                  |
| 51    |         | 3.0         |                                                                         |                                  |
| 52    |         | 4.7         |                                                                         |                                  |
| 53    |         | 2.3         |                                                                         |                                  |
| 54    |         | 3.0         |                                                                         |                                  |
| 55    |         | 0.5         |                                                                         |                                  |
| 56    |         | 1.0         |                                                                         |                                  |
| *57   |         | 0.12        |                                                                         |                                  |
| 10    |         | 0.5         |                                                                         | <b>C<br/>M<br/>CSTC<br/>TC25</b> |
| 102   |         | 2.3         |                                                                         |                                  |
| 103   |         | 4.0         |                                                                         |                                  |
| 104   |         | 4.7         |                                                                         |                                  |
| 106   |         | 1.0         |                                                                         |                                  |
| *107  |         | 0.12        |                                                                         |                                  |
| 202   |         | 2.3         |                                                                         |                                  |
| 302   |         | 2.3         | <b>As Above<br/>plus<br/>G</b>                                          |                                  |
| 820   |         | 2.3         |                                                                         |                                  |
| 821   |         | 3.0         |                                                                         |                                  |
| 822   |         | 4.7         | <b>CS<br/>TC5<br/>TC50<br/>SD50<br/>XSTC<br/>A245<br/>A545<br/>A718</b> |                                  |
| 1100  |         | 2.3         |                                                                         |                                  |
| 1101  |         | 3.0         |                                                                         |                                  |
| 1102  |         | 4.7         |                                                                         |                                  |
| 1103  |         | 6.0         |                                                                         |                                  |
| 1105  |         | 0.5         |                                                                         |                                  |
| 1106  |         | 1.0         |                                                                         |                                  |
| *1107 |         | 0.12        |                                                                         |                                  |
| 1108  |         | 3.0         |                                                                         |                                  |
| 1109  |         | 5.0         |                                                                         |                                  |

\* Unplated Mallory

Only Antex bits should be used on Antex soldering irons. They have been specifically designed to match the power output of the heating elements. (Never apply power to a soldering iron without a bit fitted).  
Antex Replacement Bits are manufactured from highgrade copper, plated first with iron and then chrome to give long working life.

## (B) SMT DESOLDERING

| BIT TYPE      | STYLE                                                                                 | TO SUIT COMPONENT                  |
|---------------|---------------------------------------------------------------------------------------|------------------------------------|
| DST - A       | A                                                                                     | CHIPS 1206/1210                    |
| - B           | A                                                                                     | CHIPS 1812                         |
| - C           | A                                                                                     | CHIPS 0805                         |
| - D           | A                                                                                     | MELF, SOD 80/87                    |
| - E           | A                                                                                     | TRANSISTORS, SOT 23/143            |
| - F           | A                                                                                     | TRANSISTORS, SOT 89                |
| - G           | A                                                                                     | I.C S08                            |
| - H           | B                                                                                     | I.C S014/16                        |
| - J           | B                                                                                     | D-PAK                              |
| - K           | K                                                                                     | VARIOUS (Also use for resoldering) |
| 1105          | 1105                                                                                  | VARIOUS (Also use for resoldering) |
| 1107*         | 1107                                                                                  | VARIOUS (Also use for resoldering) |
| <b>D-PACK</b> | <b>This pack contains the 12 desoldering bits (above) together with bit tray ST18</b> |                                    |
| DST - P       | B                                                                                     | I.C S018                           |
| - Q           | B                                                                                     | I.C S020                           |
| - R           | B                                                                                     | I.C S024                           |
| - S           | B                                                                                     | I.C S028                           |
| - T           | C                                                                                     | PACKAGE PLCC18                     |
| - V           | C                                                                                     | PACKAGE PLCC20                     |
| - W           | C                                                                                     | PACKAGE PLCC28                     |
| - X           | C                                                                                     | PACKAGE PLCC44                     |
| - Y           | C                                                                                     | PACKAGE PLCC52                     |
| - Z           | C                                                                                     | PACKAGE PLCC68                     |



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