

# Soldering & Rework Station



## Features:

- Advanced integrated computer provides outstanding thermo-control and thermo-stability for precise temperature control
- Dual LCD displays the working and parameter temperatures
- Quick-to-temp power up
- High flow diaphragm pump is suitable for a variety of nozzles to desolder SMD components
- Automatic shut-off and sleep mode for safety and energy savings
- Convenient buttons on the hand piece allow instant adjustment of temperature and air volume
- Memory stores up to three air and temperature presets

## Apply

Industrial production  
 Research department  
 Maintenance industry  
 Students  
 Electronic assembly  
 All enterprises and institutions

An intelligent, lead-free, and space-saving rework station which combines a rework station and soldering station. It is suitable for advanced hobbyists, repair, rework, and educational use. It is user friendly and a welcome addition to every work bench

## Specifications

Model	21-10130	Intelligent lead-free rework station
Total power	About 900 W (maximum)	Heating : 800 (maximum) pump (diaphragh) : 40 W
Range for temperature controlling	Hot air rework station	100°C to 500°C
	Soldering station	200°C to 480°C
Temperature unit	°C/°F	Convertible
Temperature controlling stability	Static	2°C
Temperature controlling accuracy	Static	10°C
Calibration range	Celsius	-50°C to 50°C
	Fahrenheit	-58°F to 122°F
Setting storage (3 groups)	Rework station	1.2°C, 40 2.3°C 60 3.4°C 80
	Soldering station	1.2°C 2.3°C 3.4°C
Range of air volume	Rework station	020 - 100 level
Dormancy and standby	Rework station	Stopping heating, air-blowing delay and then be in the condition of dormancy
Cold air	Rework station	Air-blowing made by the machine
Malfunction alert	Heating elements	Displaying H-E
	Sensor	Displaying S-E
Shutdown	Shutdown in the normal condition	Cold air delay shutdown, power off

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## Specification for Soldering Iron:

Input voltage	: 220V AC / 110V AC
Power consumption	: 50W
Measurement	: 240mm × 40mm × 60mm
Gross weight	: 0.125Kg
Compatible for	: AT936B,21-10130 (AT8502D)

## Safety and Caution

The temperature of the hot-air nozzle is 400°C so it may lead to injury, fire and other accident because of improper usage. Please abide the following terms:

1. Don't make the rework station be against people or animals. And never use it as a hair drier and touch the heating element or blow the skin directly
2. Never operate it near the flammable gas or substance and put it beside them after use
3. After use, the power should be off and it will be automatically off when the hot air temperature is lowered, (There is fuse inside, so great attention must be paid to superheat in case of accident)
4. Please care for using hot-air gun, never make it fall or shake heavily and put the heavy things on it or press the buttons improperly
5. Don't operate with wet hands or wet wire in order not to result in short circuit or electronic shock
6. Keep away from children
7. Please use the nozzle offered by manufacture and don't replace the original nozzle
8. Temperature will vary from the models of the nozzles, which is normal
9. Don't touch the iron tip or surrounding metals
10. Change the components or tip after cutting off power and waiting to cool it
11. Don't use this device do other work except soldering
12. Don't rap the handle to remove the doss of tip, which is bad for it
13. Don't pull the cable but hold tightly the plug when you take out of plug
14. Please keep good ventilation because there is smoke when solder
15. Don't play with other people or would be easy to hurt others or yourself

## Characteristics

1. MCU computer offers PID advanced algorithms industrial control with thermo-control and thermo-stability, which makes more exactly control temperature
2. Dual LCD screen respectively and separately display the working state and parameter, which is very directly. So customer can understand the output state at a glance
3. Temperature rapidly rises with large output power
4. High flow diaphragm pump suitable for varies of nozzles to desolder SMD components
5. Dormancy, automatic shut down and other power-saving features
6. Shortcut keys on the handle make it more convenient for the user to adjust temperature and air volume
7. Three groups of storage functions can bring very fast mode of switching different groups of temperature and hot-air volume to the customers
8. All units are equipped with temperature compensation, which ensure stable state of operation
9. Indicator for malfunction alert

# Soldering & Rework Station



## Installation

The brackets for the handles must be installed when operating for the first time. Please see the following illustration:

1. Please fix the bracket by tightening the four screws according to the illustration and your personal habit
2. According to your selection, dismantle the two screws on the left or the right, which fix the bracket of the handle
3. Place the two installation hole of the bracket to the two fixed screw holes of the machine, and then tighten the dismantled two screws. Put the components of the handle on the bracket to check if it is suitable

## Warning

This tool be placed on its stand when not in use. The instructions for heat guns and hand-held paint strippers shall include the substance of following: A fire may result if the appliance is not used with care, therefore be careful when using the appliance in places where there are combustible materials: Do not apply to the same place for a long time; Do not use in presence of an explosive atmosphere; Be aware that heat may be conducted to combustible materials that are out of sight ; Place the appliance on its stand after use and allow it to cool down before storage; Do not leave the appliance unattended when it is switched on.

## Part Number Table

Description	Part Number
Soldering Iron, 60W, 220V/110V	AT907-936B
Soldering & Rework Station, ESD, UK+EU	21-10130 UK+EU

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# No-Clean Flux



## Lead Free Tin / Silver / Copper Alloy



### Features:

- Halide free version-Type 400
- Mild odour
- Fast soldering-range of activities to suit all applications
- Clear residues
- Good spread on copper, brass and nickel
- Heat stable-low spitting

Multicomp Type 400, 505 and 511 solid fluxes for cored solder wires have been specially formulated to complement no clean wave and reflow soldering processes. They are also applicable to repair operations carried out after a cleaning process, eliminating the need for further cleaning

### Product Range:

Multicomp Type 400 is designed for users who require a halide free formulation. The remaining products in the range contain higher halide levels to maximise soldering power

Multicomp Type 400, 505 and 511 cored wires are manufactured with a range of flux contents. Although users will normally be using products with a nominal flux content of 3%, the superior performance of the Multicomp Type 400, 505 and 511 products may allow a lower flux content to be specified e.g. 2.2%. This will further improve residue appearance by reducing the quantity. All are available in alloys conforming to national and international standards, including lead free alloys

### Recommended Operating Conditions:

#### Soldering Iron:

Good results should be obtained using a range of tip temperatures. However, the optimum tip temperature and heat capacity required for a hand soldering process is a function of both soldering iron design and the nature of the task and care should be exercised to avoid unnecessarily high tip temperatures for excessive times. A high tip temperature will increase any tendency to flux spitting and it may produce some residue darkening

The soldering iron tip should be properly tinned and this may be achieved using Multicomp Type 400, 505 and 511 cored wire. Severely contaminated soldering iron tips should first be cleaned and pre-tinned using a soldering iron tip tinner, then wiped on a clean, damp sponge before re-tinning with Multicomp cored wire

#### Soldering process:

Flux cored wires Type 400, 505 and 511 contain a careful balance of resins and activators to provide clear residues, maximum activity and high residue reliability, without cleaning in most situations. To achieve the best results from solder wires, recommended working practices for hand soldering should be observed as follows:

- Apply the soldering iron tip to the work surface, ensuring that it simultaneously contacts the base material and the component termination to heat both surfaces adequately. This process should only take a fraction of a second
- Apply flux cored solder wire to a part of the joint surface away from the soldering iron and allow to flow sufficiently to form a sound joint fillet - this should be virtually instantaneous. Do not apply excessive solder or heat to the joint as this may result in dull, gritty fillets and excessive or darkened flux residues
- Remove solder wire from the workpiece and then remove the iron tip

The total process will be very rapid, depending upon thermal mass, tip temperature and configuration and the solderability of the surfaces to be joined

Multicomp flux cored solder wires provide fast soldering on copper and brass surfaces as well as solder coated materials. Activity of the halide activated versions on nickel is also good depending on the state of oxidation of the nickel finish. The good thermal stability of fluxes Type 400, 505 and 511 means, they are also well suited to soldering applications requiring high melting temperature alloys. The resin and flux systems are designed to leave relatively low residues and to minimise residual activity. This is achieved by ensuring some decomposition and volatilisation takes place during the soldering process. In some situations, this may generate visible fuming but in all cases, rosin fumes must be removed from the breathing zone of operators

# No-Clean Flux



## Lead Free Tin / Silver / Copper Alloy

**Cleaning:** In most industrial and consumer electronics applications cleaning will not be required and the product may therefore be used to complement a no clean wave soldering or reflow process or to allow repairs to cleaned boards without the need for a second cleaning process

Should cleaning be required, this is best achieved using a special solvent cleaner. Cleaning through saponification is not recommended

### Technical Specification:

#### Alloys:

The alloys used for Multicomp Type 400, 505 and 511 cored solder wires conform to the purity requirements of the common national and international standards. A wide range of wire diameters is available manufactured to close dimensional tolerances

#### Flux:

The solid fluxes are based on modified rosins and carefully selected activators. In use they exhibit a mild rosin odour and leave a small quantity of clear residue

Kristall Flux Properties			
Test	400	505	511
Acid value mg / KOH / g	215	170	170
Halide content %	0	0.5	1.1
J-STD-004 -solder spread mm <sup>2</sup> -corrosion test	210 Pass	315 Pass	340 Pass
SIR test (without cleaning) -IPC-SF-818 Class3 -Bellcore TR-NWT-000078	Pass Pass	Pass Pass	Pass Pass
Electromigration-test SIR test (without cleaning) Bellcore TR-NWT-000078	Pass	Pass	Pass
Classification -EN 29454-1 -J-STD-004 -IPC-SF-818	1.2.3 RO L0 LR3CN	1.2.2 RO M1 MR3CN	1.2.2 RO M1 MR3CN

#### Cored wire:

Multicomp Type 400, 505 and 511 cored solder wires are designed to give fast and sustained wetting on both copper and brass. This can be demonstrated using spreading tests on both substrates under standard conditions for the Multicomp products and comparable competitor products. After 5 seconds, area of spread is measured to form a comparative index indicating total flux efficacy. Multicomp Type 400, 505 and 511 flux cored solder wires out-perform competitor products, which required a higher flux content and leave more residues whilst achieving poorer spread

Relative Wetting Performance of Multicomp Solder Wire and Halide Free Competitor Products*			
Product	Flux Content (%)	Area of Spread (mm <sup>2</sup> )	
		Oxidised Copper	Oxidised Brass
Type 400	2.2	222	209
Competitor A	3.5	191	140
Competitor B		202	

\*Oxidised for 1 hour at 205°C

# No-Clean Flux



## Lead Free Tin / Silver / Copper Alloy

Relative Wetting Performance of Multicomp Solder Wire and Halide Free Competitor Products*				
Product	Flux Content (%)	Halide Content (%)	Area of Spread (mm <sup>2</sup> )	
			Oxidised Copper	Oxidised Brass
Competitor E	2	0.4	200	150
Competitor F	2.4		190	180
Competitor G	3.5		150	120
Competitor H	2.7	0.5	230	150
Type 505	3		220	240

\*Oxidised for 1 hour at 205°C

Relative Wetting Performance of Multicomp Solder Wire and Halide Free Competitor Products*				
Product	Flux Content (%)	Halide Content (%)	Area of Spread (mm <sup>2</sup> )	
			Oxidised Copper	Oxidised Brass
Type 511	3	1.1	270	390
Competitor J	2.2	1.2	260	190
Competitor K	2	1.6	210	230

\*Oxidised for 1 hour at 205°C

Multicomp Solder Wires Type 400, 505 and 511 are available in

Lead-free alloys : S-Sn99.3Cu0.7 (is equivalent to DIN-EN-alloy S-Sn99Cu1) S-Sn96.1Ag2.6Cu0.3

### Part Number Table

Description	Part Number
Solder Wire, Lead-free, 0.5 mm, 250 g	812000
Solder Wire, Lead-free, 0.7 mm, 250 g	812001
Solder Wire, Lead-free, 1 mm, 250 g	812002
Solder Wire, Lead-free, 1.2 mm, 250 g	812003
Solder Wire, Lead-free, 0.7 mm, 500 g	812004
Solder Wire, Lead-free, 1 mm, 500 g	812005
Solder Wire, Lead-free, 1.2 mm, 500 g	812006

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# ESD Black Coating Tweezers

**DURATOOL**

## Feature:

- Made of anti-magnetic anti-acid stainless steel with ESDpolyester epoxy coating ( $10^5 - 10^6 \Omega$ )

### D00830



Flat Round Tweezers (2A.SA ESD)  
120 mm

### D00831



Flat Round Tweezers (3.SA ESD)  
120 mm

### D00832



Sharp Tweezers (3C.SA ESD)  
110 mm

### D00833



Flat Round Tweezers (2A.SA ESD)  
120 mm

### D00834



Fine Curved Tweezers (7A.SA ESD)  
115 mm

### D00835



Straight Fine Tweezers (AA.SA ESD)  
130 mm

**DURATOOL**

# ESD Black Coating Tweezers



**D00836**



SMD Tweezers for handling and positioning 2 and 3 lead SOT (12.SA.SMD) 120 mm / 45° bent

**D00837**



SMD Tweezers for handling and positioning 1 mm components (13.SA SMD) 120 mm

**D00838**



Tweezers Kit with D00831,  
D00832, D00834, D00836,  
D00837  
(3, 7A, 12SMD, 13SMD)

**D00839**



Tweezers Kit with D00831,  
D00833, D00834, D00836,  
D00837 (3, 5, 7A, 12SMD,  
13SMD)

**D00840**



Tweezers Kit with D00831,  
D00833, D00834, D00836,  
D00837  
(3, 3C, 5, 7A, 12SMD, 13SMD)





# ESD Black Coating Tweezers



## Part Number Table

Description	Part Number
Tweezers Type 2A SA ESD 120 MM	D00830
Tweezers Type 3 SA ESD 120 MM	D00831
Tweezers Type 3C SA ESD 110 MM	D00832
Tweezers Type 5 SA ESD 115 MM	D00833
Tweezers Type 7A SA ESD 115 MM	D00834
Tweezers Type AA SA ESD 130 MM	D00835
Tweezers Type 12 SMD SA ESD 120 MM	D00836
Tweezers Type 13 SMD SA ESD 120 MM	D00837
Tweezers Set, ESD Safe, 4PC	D00838
Tweezers Set, ESD Safe, 5PC	D00839
Tweezers Set, ESD Safe, 6PC	D00840

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# Desoldering Pumps



## 8PK-366D-F



### Features:

#### 8PK-366D-F

- Rugged metal construction
- Anti-static tip
- Compact size

#### 908-366A-F

- Anti-static desoldering
- Rugged metal construction
- Anti-static tip

## 908-366A-F



### Part Number Table

Description	Part Number
Desoldering Gun	8PK-366D-F
Desoldering Gun	908-366A-F

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### 5" (125mm) Micro Cutter



**DURATOOL**

**New**

- An exceptionally clean smooth cut
- Lightweight and easy to handle
- Suitable for copper wire, not for use with steel wire
- Length: 5" (125mm)

Jaw Length 20mm Cutting Angle 23° Cutting Capacity 1.2mm  
454577.427439.423850

Order Code	Price Each
115-6001	