

## GENERAL SAFETY RULES

Soldering can be dangerous if safe and proper operating procedures are not followed. As with all tools, there are certain hazards involved with the operation of this product. Using the tool with respect and caution will considerably reduce the possibility of personal injury. Please note that if normal safety precautions are overlooked or ignored personal injury to the operator may result:

Safety equipment may reduce your potential for injury, but even this will not make up for poor judgment, carelessness or inattention. Always exercise caution in the workshop.

**REMEMBER: your personal safety is your responsibility.**

This tool was designed for soldering applications only. We strongly recommend that it is neither modified nor used for any applications other than those for which it was designed.

### WARNING

Failure to follow these rules may result in serious personal injury

- 1. For your own safety, read these instructions before operating this soldering iron.** Get to know the tool's applications and limitations.
- 2. Make sure this appliance is earthed.** This tool comes with an approved and fitted 3-pin plug. The green and yellow conductor in the core is the earth wire; never connect this wire to a live terminal.
- 3. Do not use in a dangerous environment.** Do not use the iron in the vicinity of flammable liquids or materials. Never use an electrical appliance in the rain, wet areas or when your hands are wet with water or other liquids. Using an electrical appliance under these conditions seriously increases the possibility of electric shock.
- 4. Unauthorised people especially children** should be kept clear of the work area. Never leave a soldering tool unattended.
- 5. Do not use this tool** for work beyond its prescribed capacity. Do not apply excessive pressure or otherwise force the tool. Do not drop or treat it roughly. Mishandling can weaken insulation and other safety features.
- 6. Never lift the iron or hang the iron on hooks or nails by its cable** as this may cause a short or damage the cable.
- 7. Always use the right tool for the job and only for the purpose for which it was designed.** Do not attempt to adapt or modify a tool for an alternative purpose or to gain a greater working capacity than that for which it was intended.
- 8. Dress appropriately.** Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
- 9. Wear safety glasses.** Everyday glasses only have impact resistant lenses; they are not safety glasses.

- 10. Always maintain a good firm foothold.** Keep well balanced and keep the work and floor areas clean.
- 11. Prior to operation,** carefully inspect the tool for abnormalities and damage. Check damaged parts. Before using the tool, any part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function. Any part that is damaged, including the casing or the cord, should be properly and safely repaired or replaced.
- 12. Turn off the power supply switch and unplug the iron** if you are leaving the tool unattended, vacating the work area or in the event of an electrical failure.
- 13. Drugs, alcohol, medication.** Do not operate the machine while under the influence of drugs, alcohol or any medication.
- 14. Warning:** Always operate machinery in well-ventilated areas.

## SAFE USE OF POWER SUPPLY

### Voltage

The standard voltage throughout all European Union countries is now 230 volts. Safety and performance will not be affected on equipment currently rated at 240 volts. Ensure that the applied voltage is the same as that specified on the nameplate of the machine.

### Plugs

Under CE regulations, all new domestic appliances, which include DIY power tools, must be sold with a plug already pre-fitted to the machine. Currently, industrial power tools do not have the same requirement, and some 230 volt industrial power tools may not have a plug fitted.

Ensure that any plug is fitted correctly. If in doubt, ask a qualified electrician to do it for you. Ensure that the correctly rated fuse is fitted to the plug to suit the appliance being used.

### Use of RCD

When using an electrical tool (particularly outdoors), we recommend the use of a residual current device (circuit breaker or RCD, Product Code FPP RCD) for enhanced protection. To check that the socket is correctly wired, we recommend the use of a 13 amp socket tester.

## GENERAL ELECTRICAL CONNECTIONS

### Connecting Your Soldering Iron To The Power Supply: (230 Volt Only)

To eliminate the possibility of an electric shock your soldering iron has been fitted with a BS approved plug which incorporates a fuse, the value of which is indicated on the pin face of the plug.

Should the fuse need to be replaced, an approved BS1362 fuse of the same rating must be used. If the fitted plug is not suitable, it should be cut off and destroyed. The end of the cable should now be suitably prepared and the correct type of plug fitted.


### WARNING

A plug with bare flexible wires exposed is hazardous if plugged into a live power socket.

### WARNING: THIS APPLIANCE MUST BE EARTHED

Green & Yellow	-	Earth
Blue	-	Neutral
Brown	-	Live

If these colours do not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is, coloured green and yellow must be connected to the terminal in the plug which is marked with the letter 'E' or by the earth symbol  or coloured green and yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter 'N' or coloured black or blue.

The wire which is coloured brown must be connected to the terminal which is marked with the letter 'L' or coloured red or brown.

### Extension Lead Chart:

Extension lead sizes shown assure a voltage drop of not more than 5% at rated load of the machine.

AMPERE RATING	3	6	10	13
Extension cable length (Metres)	Wire size mm <sup>2</sup>			
7.5	0.75	0.75	1.0	1.25
15	0.75	0.75	1.0	1.5
22.5	0.75	0.75	1.0	1.5
30	0.75	0.75	1.25	1.5
45	0.75	1.25	1.5	2.5

## OPERATING INSTRUCTIONS

Before using the soldering iron please carry out the following checks:

- Check that voltage given on the nameplate is the same as the source of current.
- Before switching on make sure the soldering tip is properly in position and that the clamp screw is tight.
- Connect to an appropriate 240v mains outlet socket and switch the socket on (if applicable).
- Soldering tips must only be removed when the soldering iron is cool and disconnected from the mains supply. Loosen the clamping screw and remove the soldering tip carefully, without using unnecessary force. Insert the new bit fully into the iron and tighten the retaining screw.

5. Do not heat up the soldering iron without the soldering tip fitted.
6. After use let the soldering iron cool down in the air (do not attempt to cool down using water or any other liquid).
7. When in use always place the soldering iron on its metal holder for safe storage.
8. The cable of the soldering irons is a special high quality cable. It is resistant against short-time contacts with hot metal parts. In case of damage the cable cannot be exchanged due to the special construction of the soldering iron. The iron can then no longer be used according to the safety prescriptions.

### CAUTION

1. Always use an appropriate soldering stand and any other soldering aids that help to avoid burns to users or property.
2. Always check that the soldering tip is secured firmly in place before switching on. The soldering tip must be pushed fully into the heating unit, and its clamping screw tightly fastened.
3. Always allow the soldering iron to cool down naturally after use.

## SOLDER AND FLUXES

### 1. FLUXES

Soldering alloys (soft soldering) are produced in a wire form only for the D.I.Y. market.

There are two types of soldering wire:

- Soldering wire without flux
- Soldering wire with flux core

Flux is used to remove the oxide coat from the surfaces prior to soldering, as well as preventing the formation of oxide during soldering.

Fluxes are available in paste and liquid form.

After soldering remove excess paste and liquid fluxes with a brush or cloth. Resin fluxes (rosin) should not be removed.

### 2. ALLOYS

**Electronics:** Melting point 185°C.  
Low melting point alloy. Used in electronics.

**Radio:** Melting point approx. 230°C.  
Used for thin soldering and model making.

**General purpose:** Melting point approx. 255°C.  
For general soldering.

**Tin solder paste:** Cold material to be spread on surfaces to be jointed.

**Tin paste:** Replaces tin wire and flux.

**Tip cleaning blocks:** Used for cleaning soldering tips.

**Paste flux:** Flux supplied in paste form.

**Liquid flux:** For use on delicate-to-reach points.

### 3. SOLDERING

Soldering is a process for joining two metals by the application of molten material. Nearly all metals and metal alloys, brass, copper, iron etc; can be soldered.

There are two types of soldering, hard soldering and soft soldering.

**Hard soldering** is a process where you intend soldering at a temperature over 450°C. The hard soldering alloys (for hard soldering, brazing and silver soldering) are made of metal alloys that are first melted at temperatures that cannot be achieved by a soldering iron.

**Soft soldering** is a process carried out at temperatures below 400°C, and it is soft soldering for which this appliance is designed.

The surfaces to be soldered should be kept clean and free from oil and dirt. Never use household detergents since they often contain silicon. The oxide coating can be removed by either using the corrosion method or mechanically with emery paper, filing or scraping. If the corrosion method is used, avoid using hydrochloric, sulphuric or nitric acid. Citric acid, at a 10% dilution ratio, is recommended. When cleaning is finished, do not touch surfaces to be soldered.

The correct temperature is attained when tin deposited on the tips forms a coat. The formation of small clots means the correct temperature has not been attained. If tin 'pearls' are formed, the tip is not properly clean.

Replacement tips are available from  
your local Faithfull stockist  
or online from [www.toolbank.com](http://www.toolbank.com)

**FPP SITIP25W** Replacement tip for the 'FPP SI25' 25 watt soldering iron.  
**FPP SITIP40W** Replacement tip for the 'FPP SI40' 40 watt soldering iron.  
**FPP SITIP80W** Replacement tip for the 'FPP SI80' 80 watt soldering iron.

Please keep for future reference.



# 25, 40 & 80watt Soldering Irons



Instruction Manual

For your own safety, please ensure  
you have read these instructions before use  
and have understood all safety guidelines carefully.