

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.

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 stockiest or online from www.faithfulltools.com

Replacement tip FPP SITIP is available.

Solder and 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.

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.

FAITHFULL[®]
QUALITY TOOLS

100watt Soldering Gun Kit



Instruction Manual

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

GENERAL SOLDERING

General safety rules

Soldering can be dangerous if safe operating procedures are not followed. As with all tools there are certain hazards involved with the use of this product. Treating the soldering gun with respect and caution will considerably reduce the possibility of personal injury. If normal safety precautions are overlooked or ignored injury to the operator may result.

Safety equipment may reduce the potential for injury but this will not make up for poor judgment, carelessness or inattention. Read these instructions before operating this soldering gun as they explain the tool's applications and limitations.

Remember: your personal safety is your responsibility.

Warning: Failure to follow these rules may result in serious personal injury.

Personal safety general rules

Select and wear the correct personal protection equipment for the task at hand. We would always recommend the use of safety glasses or goggles and protective hair covering to contain long hair when using soldering tools, always observe the following rules.

1. Do not use in a dangerous environment, in the vicinity of flammable liquids or materials. Never use a soldering gun 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.

2. Do not operate the gun while under the influence of drugs, alcohol or any medication.

3. Keep all work surfaces and floor areas clean.

4. Always solder in well-ventilated areas.

5. Children should always be kept clear

of the work area.

6. Never leave a soldering gun unattended, unless it has been unplugged and allowed to cool down.

Safe use of power supply voltage

To eliminate the possibility of electric shock your soldering gun 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 a plug needs to be replaced you must ensure that it is fitted appropriately with the correctly rated fuse. The gun must be earthed, if you are in any doubt you should ask a qualified electrician to fit it for you.

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 gun.

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.

Gun safety

1. This gun must be earthed and fitted with an approved 3-pin plug.

2. Prior to operation, carefully inspect the gun for any sign of damage. If any part of the gun is broken or showing any sign of damage, including the casing and the cable the gun should not be used and should be replaced. There are no user serviceable parts other than replacement soldering tips.

3. Only use a soldering gun if it is of the correct capacity and wattage for the job in hand. Do not attempt to adapt or modify a soldering gun for an alternative purpose or to gain a greater working capacity than that for which it was intended.

4. Never lift or hang the gun by its cable as this may cause a short or damage the cable.

5. Do not drop or treat roughly, mishandling can weaken insulation and other safety features.

6. Turn off the power supply switch and unplug the gun if you are leaving the tool unattended, vacating the work area or in the event of an electrical failure.

7. The soldering gun is fitted with a special high quality cable that is resistant against short-time contacts with hot metal parts. If the power cable is damaged the gun should not be used, the cable should be cut as close to the handle as possible and the gun disposed of in line with local recycling guidelines. The power cable cannot be replaced due to the internal construction of the soldering gun.

Operating instructions

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

1. Check that voltage given on the nameplate is the same as the power source.

2. Before plugging in make sure the soldering tip is properly in position and that the clamping nuts are tight.

3. Do not attempt to heat up the soldering gun without the soldering tip fitted.

4. Connect to an appropriate 240v mains outlet socket and switch the socket on (if applicable).

5. Press the trigger and the operating light will illuminate indicating that the gun is heating. The temperature will rise to 300 degrees in approximately 20 seconds, the gun is now at its operating temperature.

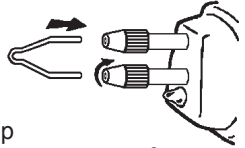
6. Never lock the trigger in the on position as this will cause overheating, burning out the tip and resulting in permanent damage to

the internal transformer and heating element.

7. Always place the gun on heat resistant surface when not in use.

8. After use let the soldering gun cool down in the air (do not attempt to cool down using water or any other liquid).

9. Soldering tips should only be removed when the soldering gun is cool and disconnected from the mains supply. Loosen the clamping nuts and remove the soldering tip carefully, without using unnecessary force. Insert the new tip fully into the gun and tighten the clamping nuts.



Operating limitations: Soldering gun

This product is designed for soldering operations only and should not be modified for use in any other application.

This soldering gun is designed for domestic use and is not suitable for continuous use in industrial environments.

Soldering gun triggers should not be locked or held in the on position for prolonged periods of time as overheating will cause damage to the guns internal transformer and heating element.

