

 English (EN)

Product: TW158 Thermocouple Attachment Unit

Product Code: GHT 4004

DESCRIPTION

The TW158 is a capacitance-discharge welding unit used for the attachment of thermocouple wires to a work piece. It is a more compact alternative to larger, heavier units but has the same energy output. The only difference with a compact unit such as this is a slightly longer charging time.

FEATURES

- Manual and Auto (Hands Off) operation
- Variable energy level from 20 to 50 joules
- Runs on 4 x AA Alkaline Batteries
- Low Battery LED indicator
- Auto switch-off after 3 minutes to conserve battery
- Output voltage maximum is a safe 60 Volts at 50 Joules
- Lightweight padded carry case (includes shoulder strap, belt loop and tool storage)



FRONT PANEL CONTROLS

- **On/Off Switch:** Turn Off when not in use to conserve battery
- **Auto/Manual Switch:** To select Auto (Hands-free) or Manual (Push Weld) operation
- **Energy Control:** Set to required weld energy (example 25 joules for 0.7mm wire)
- **Weld Button:** For discharging energy in Manual mode.
- **LED indicators:** Show Wait (While charging), Ready and Low Battery conditions.

OPERATION

To weld a wire to a steel body, the magnet is used to make a return contact.

The thermocouple wire is stripped back and the pliers are used to grip this wire about 15mm from the cut end.

The 'charge' button is pushed and released. After a short time the LEDs change from 'charging' to 'ready'.

The thermocouple wire is held firmly against the steel surface and the 'weld' button is pushed. This welds the wire to the steel body (Auto Mode: Weld is made automatically 1.5 seconds after contact).

The energy setting knob is used to set the required energy for different wire diameters.

SAFETY PRECAUTIONS

Eye protection is recommended to guard against molten metal spatter when weld occurs.

The weld spark could be a source of ignition for flammable liquids or gases so ensure the TW158 is only used in safe areas.

Avoid looking directly at bright spark when making the welded joint.

Ensure the thermocouple wire is not connected to any control equipment as these might be damaged during energy discharge.

INSTRUMENT CARE

Ensure batteries are fitted correctly according to polarity markings on compartment. Internal damage may result from wrong fitting.

The TW158 is NOT waterproof so avoid water ingress to front panel.

Clean unit using slightly damp cloth or, for tough stains, use cloth impregnated with WD40 cleaner.

SPECIFICATION

Size: 137mm x 190mm x 45mm

Weight: 1.2kg

Unit of Sale: Each

Battery Type: 4 x AA (Alkaline, 1.5V recommended for best performance)

Weld Voltage: 37 to 60V (20 to 50 joules output)

Charging Time: Approx. 15 seconds at 30 joules (fresh batteries)

EMC: EN61000-6-1:2001, EN61000-6-3:2001

LVD: EN61010-1:2001

Product is WEEE compliant