SPOT-WELD_210624 v5.5

This spot welder is designed for welding lithium batteries including 18650, 26650, 32650 and other cylindrical lithium battery cells. It boasts the advantages of portability, high stability, reliability and durability.

The unit is powered by a user-supplied 12V battery, with a welding current ranging approximately from 90A to 150A. It handles spot welding of commonly used nickel-plated strips with a thickness of 0.1mm to 0.12mm with ease. Following several generations of product upgrades and optimizations, it now features an **auto-trigger welding function**, eliminating the need to hold the welding button and reducing operator fatigue.

System Voltage: 12V – 14.6V

Operating Current: 90A – 150A

Recommended Power Supply Batteries:

1. Lead-acid batteries with a capacity of 20–45Ah, featuring excellent performance and low internal resistance.
2. 3S RC lithium battery packs with a capacity of 3.5–5.5Ah and a discharge rate of around 45C.
3. High-capacity 18650 lithium battery packs with a capacity of 30–35Ah.

Battery packs capable of starting a car can generally meet the power supply requirements of this circuit.

Switch Functions: (DEFAULT: POWER ON LOW)

There are 5 levels of strength LOW to MAX then OFF. Hold the switch down for 1.5 ~ 2 seconds to move to the next level. The LED and the Buzzer will flash and beep 1 to 5 times depending the level being selected. Auto Sensing: The spot welder pulses approximately every seconds when the probes are in contact with the metal conductive material.

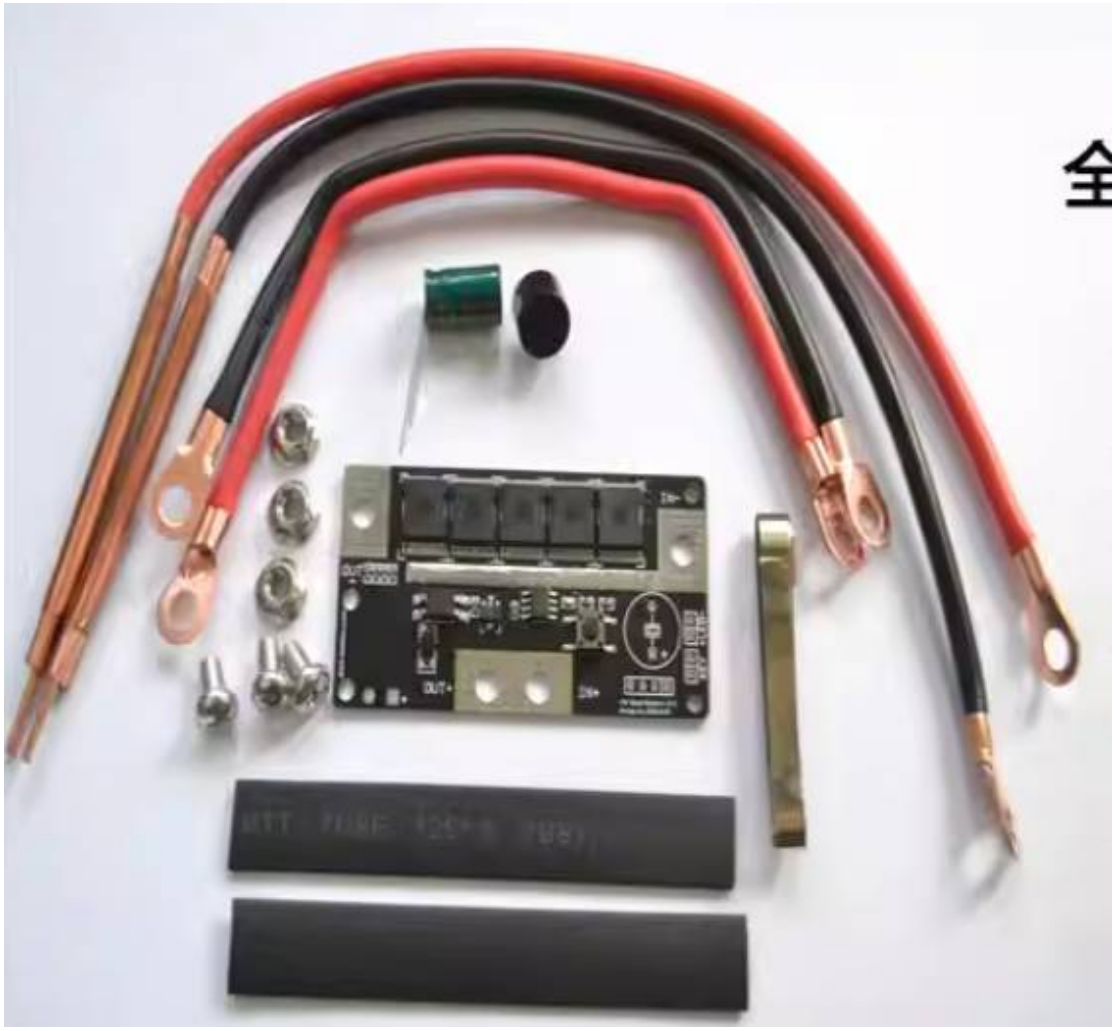
Power Requirements:

Spot welding relies on the principle of rapid local heating and cooling by high current, which requires sufficient current supply. For welding commonly used 0.1–0.15mm nickel-plated strips (Tabbing wire), the current is approximately 90–150A. IF the

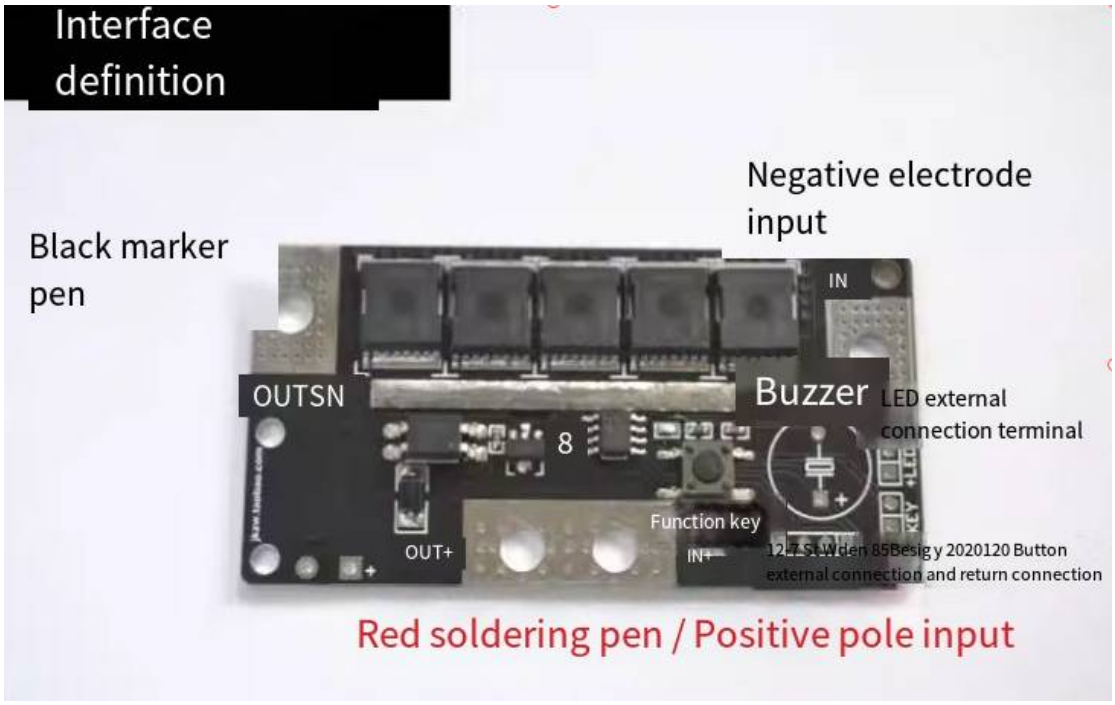
working power is operating at max care should be taken the extra cooling is required.

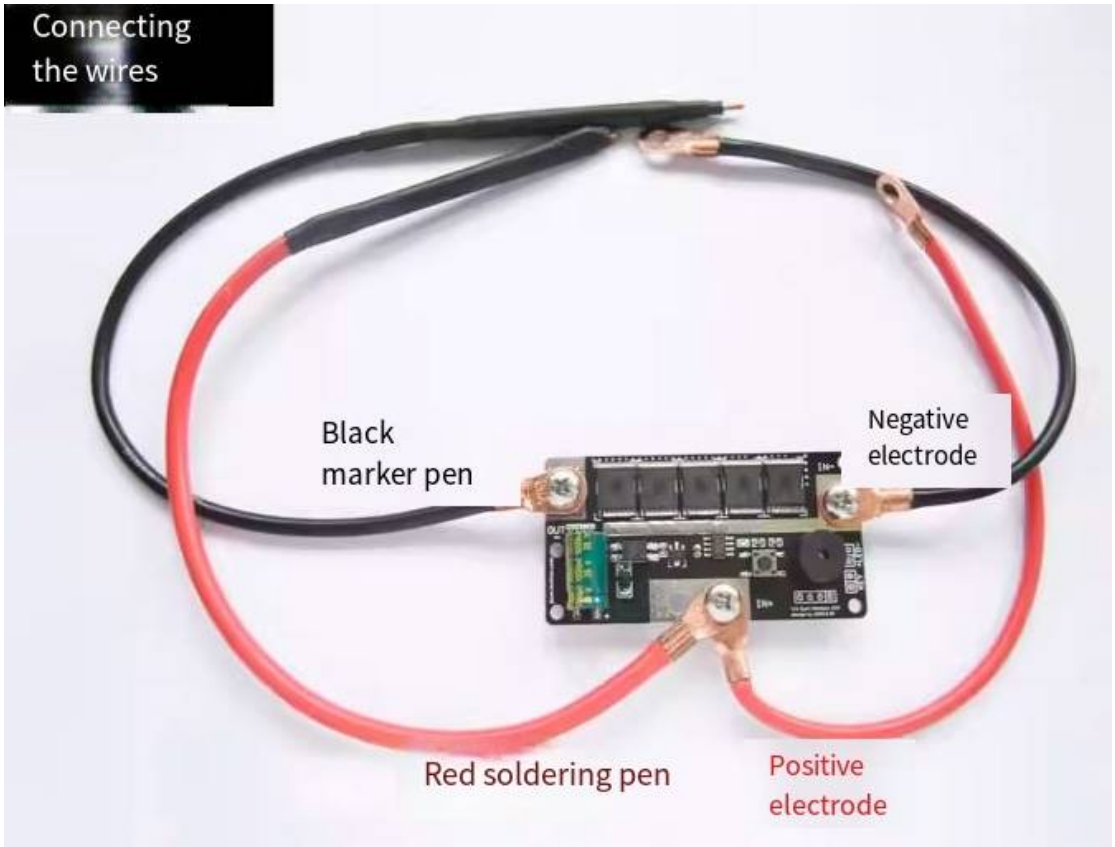
Package Includes:

1. 1 Circuit Board (V5.5)
2. 2 Welding probe
3. 2 Input Wires to be Crimped with ring lugs
4. 3 Sets of Screws
5. 1 Buzzer to be soldered
6. 1 Capacitor to be soldered
7. 1 Meter of Nickel Strip



PCB Layout:


Interface definition
Negative electrode input
Black marker pen
IN
OUTSN
Buzzer
LED external connection terminal
8
Function key
OUT+
IN+
Red soldering pen / Positive pole input


Connecting the wires
Black marker pen
Negative electrode
Red soldering pen
Positive electrode