

# Battery Spot Welder with Charging Function

Thank you for choosing Sunkko 737U battery spot welder, let's now make the

building of mobile power bank more convenient and efficient.



# Manual

# Summary

Functionally speaking, 737U is a combination of 737B and 788H-USB. It is specifically designed for battery welding (18650, 14500 and any other lithium batteries, etc) and can be used to weld nickel strips with thickness between 0.05 and 0.2 mm for nickel plated steel or between 0.05 and 0.15 mm for pure nickel strip. With the built-in LED light, you can even work at night.

We understand that after the **power bank** is done, the next step would be charging and testing, which is why 737U is equipped with three USB fast charging ports whose voltage and current are 5V and 2A.



# • Now let's talk about the welding part.

- The 737U welder can weld nickel strip with thickness under 0.2mm for nickel plated steel, or 0.05 - 0.15 mm for pure nickel strip.
   (Attention: The welding thickness also depends on the material of batteries' poles, some batteries' poles are made of iron or iron alloy, and some are made of stainless steel, generally, stainless steel is easier to weld than iron.)
- The only welding method: fixed welding head.
  You can build your battery pack with the fixed welding head, in this case, you need to adjust the pressure adjustor to make the spots more reliable and elegant.

In general, there are two methods to improve the output power of spot welding: adjusting welding current level, adjusting pulse quantity. You may need to play with them a bit to get the best combination for your specific use.

(Attention: This spot welder can be used to weld pure nickel, nickel plated steel, nickel plated iron, iron and other alloys. It CANNOT weld metal like copper and aluminum.)

#### Specification for the welding part:

Input voltage: AC 110 V/220 V±10%

Primary current:  $2 \sim 15$  A Welding current:  $50 \sim 800$  A Single pulse time: 5msMax. pulse quantity: 2 Max. power output: 2.88 KW (instantaneous) Welding thickness for nickel plated steel:  $0.05 \sim 0.2$  mm Welding thickness for pure nickel:  $0.05 \sim 0.15$  mm Product dimension: 9.1x5.5x7.9" Product weight: 9.6 lbs

#### Preparation steps before welding:

- 1. Fit the fixed welding head with copper welding rods before the machine powers on.
- 2. Turn on the welding power switch.
- 3. Adjust the pulse quantity, welding current level and pressure knob to make the spots more reliable and elegant.

#### How is the pressure knob works?

The pressure knob regulates the pressure between copper welding rods and nickel strip. Generally speaking, the thinner the nickel strip, the smaller the pressure. A proper pressure between nickel strip and welding rods can also make the spots more elegant.

### Battery charging part:

#### **Specification:**

Standard of cable charging ports: 4.2 V, 3A Standard of USB charging ports: 5 V, 2A

Precision of constant current: ±2.5%

Voltage stability:  $\pm 1.5\%$ 

Measurement error:  $\pm 1.5\%$ 

(Attention: This model is **only** suitable for charging **5V power bank** and **single battery** whose **rated voltage** is **4.2 volts**.)

**Charge with cables:** in this mode, you can charge your single rechargeable battery whose rated voltage is 4.2 volts.

Plug in the charging cables and connect them to your battery. Once the displayed charging current decreases to 0, your charging process is done.

**Charge with USB ports:** in this mode, three power banks can be charged at the same time, the charging current of each USB port is 3 amps, when the power banks getting full, the charging current in the LCD display will approach to 0.

(Attention: 1: During charging process, the displayed charging current is the sum of three USB ports; 2: Do not use the two modes at the same time.)



## • Packing List:

737U main machine: 1 pc Copper welding rods: 2 pairs Battery fixture: 1 pc Charging cables: 1 pair Fuse: 2 pcs Hexagon wrench: 1 pc 0.1 x 4 x 100 mm (nickel plated) 30 pcs 0.15 x 5 x 100 mm (nickel plated) 30 pcs Manual: 1pc

## Notice

- 1. When building battery pack with Sunkko welders, if the home circuit system keeps tripping, please replace your Circuit Air Breaker. For 110V version machine, the Circuit Air Breaker in your circuit system should be higher than 40 A. For 220V version machine, the Circuit Air Breaker in your circuit system should be higher than 30 A.
- 2. Please put on gloves and mask during your battery pack welding process to protect yourself(Sparks may occur during welding process).
- 3. Unplug the welder when you are not using the welder.
- 4. During your welding process, the instantaneous large current generated by the welder may cause the lighting equipment under the same power system flash and it is considered normal.
- 5. Do not short circuits during spot welding or charging.
- 6. Do not use Sunkko welders with a voltage transformer as Sunkko welders are not compatible with the common voltage transformers in the market.
- 7. Continuously spot weld too fast will speed up the loss of internal components of the spot welder. We recommend that the time between each spot welding should be 3 seconds or longer.

### Warranty!

If you still have questions on sunkko products, please go to the <u>blog</u> category on https://www.sunkko.net/ or email <u>service@sunkko.net</u>. We are happy to assist you.