

GLITTER® 801D

Super Energy-Gathered Pulse Technology

Capacitor Energy-Storage Precision Pulse Spot Welder

User Manual



Thank you for choosing GLITTER series products, it will bring you convenience and efficiency for spot welding work. For optimal user experience, please read the manual carefully before using and keep it for future reference. Glitter has the rights to upgrade the machine and modify the manual with no more notices, thanks for understanding.

Product Features

1. Compared to the traditional AC spot welding machine, the new-designed 801D capacitor energy-storage spot welder has no interfere to the electric circuit, no more tripping problems.
2. The 801D adopts the latest energy-gathered pulse welding technology, it has a great welding power, the welding spot is nice and elegant, ensuring you a reliable welding effect .
3. The maximum welding power of the machine can be up to 14.5KW , meeting the needs for large-batteries welding.
4. The welding power can be adjusted conveniently via two buttons according to the thickness of welding objects, the LED screen will display the welding parameters.
5. The machine is equipped with two super capacitors which have long working -life and large capacity, ensuring the low power-consumption and high output welding work.
6. 'AT' (automatic welding) and 'MT' (foot pedal controlling) two welding modes help you finish the welding work easily and efficiently.
7. Compatible with 7 series mobile welding pen.
8. The compact aluminum alloy shell can effectively dissipate heat.
9. The LED screen will display the instantaneous current value during welding work.

Applications

Widely used in battery pack building&maintenance and common metal welding:

1. Fast welding & maintenance of lithium iron phosphate battery packs or ternary lithium battery packs for electric bicycle, hoverboard, swing car, electric tool, home appliance, robot, etc.
2. Fast welding of NI-MH battery(nickel-metal hydride battery).
3. Fast welding & maintenance of small battery packs for mobile power supply, flashlight, etc.
4. Fast welding of polymer batteries for model airplane, bluetooth earphone, cellphone, laptop, automobile data recorder, bluetooth tire pressure monitor, etc.
5. Fast welding of circuit board, battery connecting strip(nickel/nickel plated), electronic components, hardware parts, lead wires, etc.
6. Suitable for nickel, stainless steel, iron, brass, titanium, molybdenum, etc.

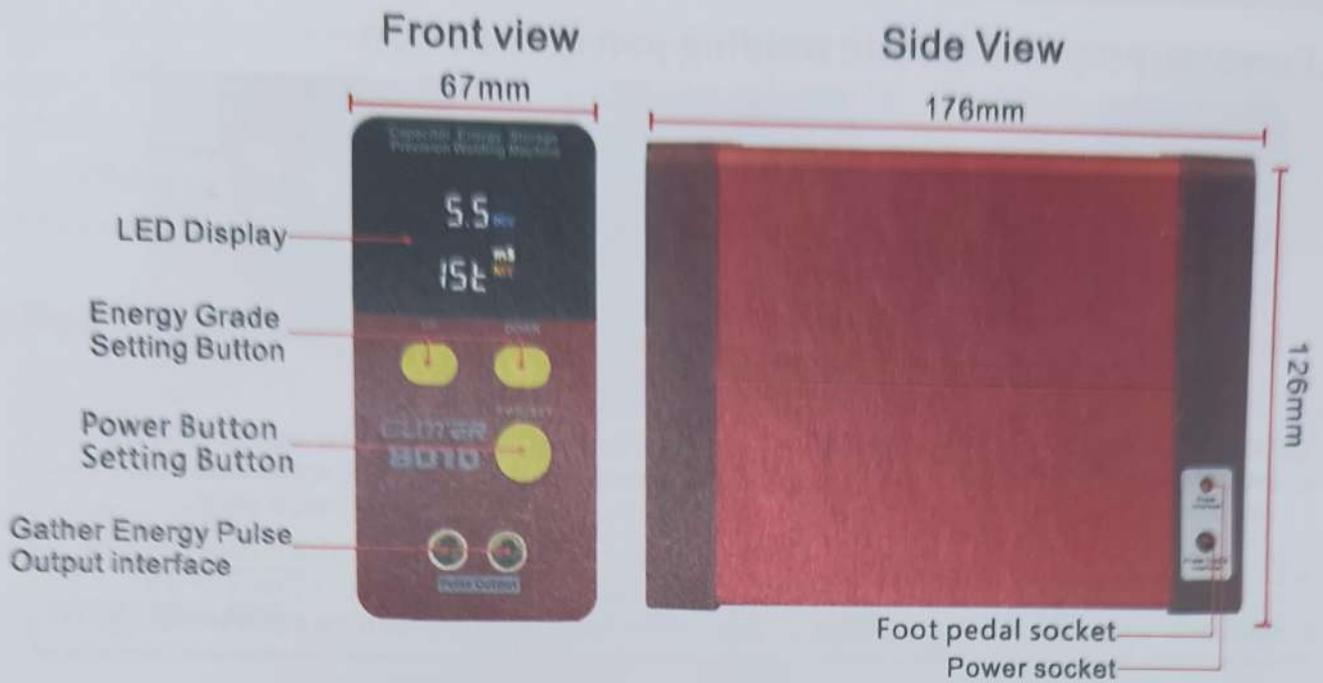
Parameters

Model	GLITTER 801D	Voltage Output	5.8V(Max.)
Voltage Input	AC 100-240V 50/60HZ	Peak Welding Energy	290J
Pulse Power	14.5KW(Max.)	Trigger Mode	AT/MT
Energy Grade	0-99T	Welding Mode	Push down spot welding Mobile pen spot welding
Pulse Time	0~20mS	Preload Delay	200~500ms
Adapter Parameter	15V2A~3A(Peak)	Charging Time	20~30mins
Dimension	67(L)x176(W)x126(H)mm	Weight	2KG

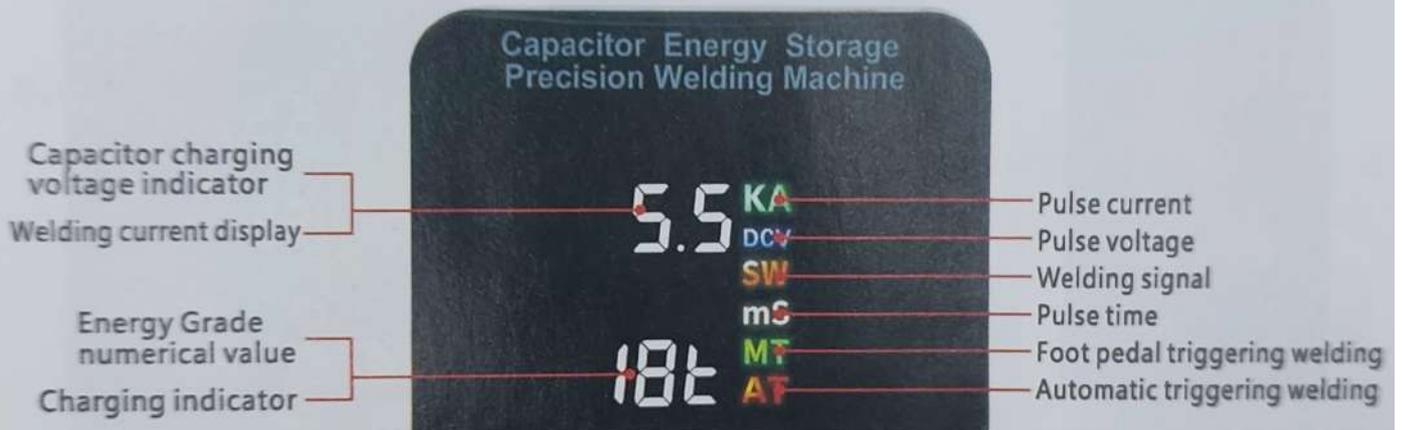
Packing List

- | | |
|-------------------------------------|--|
| ① Main machine×1pc | ⑥ Hexagon spanner×1pc |
| ② Power adapter×1pc | ⑦ Base×1pc |
| ③ Foot pedal×1pc | ⑧ Welding pin on the welding arm(73SA)×2pairs |
| ④ Mobile welding pen(HB-73B)×1 pair | ⑨ Welding pin on the welding pen (HB-73B)×1 pair |
| ⑤ Welding arm(73SA)×1pc | ⑩ Manual & Warranty Card×1pc |

Product Diagram



Control panel sketch map



5.5 DCV

The charging voltage of the spot welder is 5.2~5.8.

0.8 KA SW

The output welding current is 0.8KA.
The SW will light up during welding instantly.

25t mS AT

This means the energy release is (25t).
The release energy grade for AT mode can be adjusted from 00 to 99.

25t mS MT

MT is the foot control triggering mode.

E01 mS MT

E01 is spot welding fault indicator.

Annotation of unit symbols on the Control panel

KA: 1 KA equals to 1000 amps, 0.8KA=800A
DCV: Direct voltage
SW: Welding signal light

ms: Millisecond
MT: Foot pedal control welding method
AT: Automatic welding method

General introduction of 801D spot welder

1. Power supply and mobile welding pen installation



① Plug the power output plug into 801D spot welder power connection port.



② Plug the adapter into an AC 100-240 volt wall socket to charge the machine.



③ Insert the mobile welding pen and make sure the connection is solid.

*Power inside the capacitor is released for safe transportation before leaving the factory. When you receive the machine, please turn it on, charge it for 20~30 minutes, and wait for the voltage to rise between 5.2~5.8V before spot welding.

2. Introduction of the LED display



1. Press the "⏻" button, Turn on the welding machine.



2. After the machine is powered on for the first time, the LED will show "CH" intermittently and the real-time voltage value of the internal capacitor. The spot welder is being charged.



3. When the voltage is between 5.4~5.8V, the machine is ready for use.



4. Set energy grade—— To customize the energy grade, you need to press the power button when the machine is on. The current number will flash, you can adjust the number through "▲/▼" buttons.



5. Press the power and the "▲/▼" buttons to change your spot welding mode, such as AT/MT switch.



6. When the machine is not in use, please press and hold the power button for 2 seconds and unplug the power adapter from the wall socket.

3.Charging time of different models

Model	801A	801A+	801B	801B+	801D
Charging Time	40min	40min	30min	20min	20min

4.Spot welding thickness reference table

Thickness	0.1mm	0.12mm	0.15mm	0.2mm	0.3mm
Pure nickel	06-08t	10-11t	12-15t	20-25t	60-70t
Nickel plated steel	03-04t	07-08t	10-12t	15-18t	40-50t

Please choose the proper energy grade and pulse current according to different object materials and thicknesses.

5.Operation steps

MT mode--control with foot pedal(Convenient for parameter adjustment and welding debugging to achieve the best spot welding effect).



1.Choose the MT mode



2.Install foot pedal



3.Hold the welding pen and apply a certain pressure to the object's surface (e.g. nickel strip) simultaneously. Release energy by controlling the foot pedal.



4.Check the spots' reliability. Finish spot welding.

AT mode--automatic welding(no foot pedal control, suitable for welding a large number of batteries for a long time)



1.Choose the AT mode



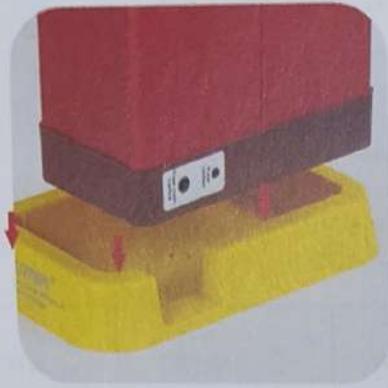
2.Hold the welding pen and apply a certain pressure to the object's surface (e.g. nickel strip) simultaneously. Automatic welding begins after about 20ms.



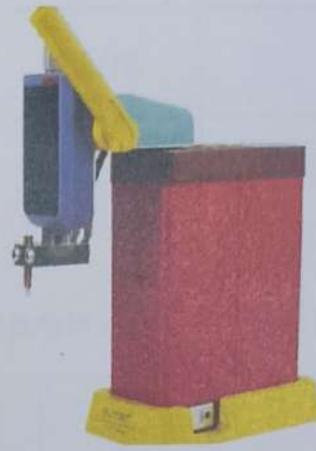
3.Check the spots' reliability. Finish spot welding.

Main Machine and Base Display

Installation mode:

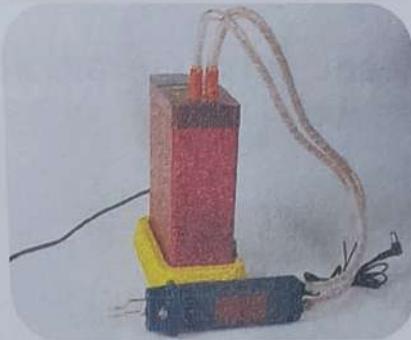


The welder's back should be inserted into the base vertically.



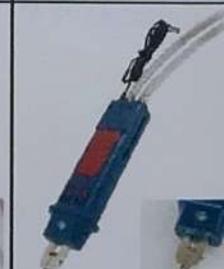
Welder with 73SA welding arm positioned in base.

Usage scenario:



Attach welder to base to prevent movement during welding process.

7 serial welding pen/optional

Model	HB-70A	HB-70BN	HB-71A	HB-71B	HB-73B
Illustration					
Welding method	One pin each welding pen	Two pins flat welding	Two pins flat welding	Single point butt welding	Two pins flat welding
Structure Differences	Separate Pins	Welding pins distance 3~7 mm(adjustable)	Welding pins distance 1~7 mm(adjustable)	Single point butt welding	Adjustable welding pressure, welding pins distance 3-7 mm(adjustable), pulse signal.
Applications	18650, 21700, lithium-ion, resistance, stainless steel net, etc.	18650, 21700, lithium-ion, iron, stainless steel, nickel, Mu, brass, titanium, etc.	Nickel sheet, circuit, blue teeth device repair, etc.	Polymer battery, stainless steel, etc.	18650, 21700, lithium-ion, iron, stainless steel, nickel, Mu, brass, titanium, etc.
Recommendation	Lithium battery welding	Lithium battery welding	Small hardware (similar with 70B's function)	Single-point butt welding	Normal battery pack welding

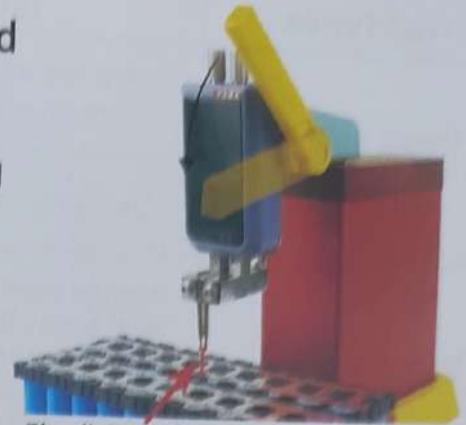
Installation diagram of handle controlled welding head

Standard with 73SA downward welding head



- Pressure adjustment
- Downward spot welding
- Easy to operate

- ☑ Spot welding is very solid
- ☑ Improve the welding quality and efficiency



The distance between of the welding needle and battery is 4-9mm.



1. Insert the welding head into the corresponding socket.



2. Remove the lid.



3. Tighten the screws.
(Keep copper wires separate)



4. Close the lid.

Welding head parameter(73SA)

Handle Torque	950g	Handle Operation Angle	0-50°
Welding Arm Operating Distance	15mm	Pressure Adjustment Range	1~9.5N
Peak Welding Energy	290J	Welding Arm Width	44mm

NOTE: Be careful not to touch the copper wires together during spot welding.

6. Cautions during welding process

1. You need to give each welding pin the same pressure to make sure the welding spots are all reliable.
2. MT mode is recommended for new users of 801D welding machine, the pressure you give shouldn't be too heavy or too light. Find the proper pressure for your project, and then you can try AT mode.
3. Keep two welding pins separate, or a shot circuit will occur.

Troubleshooting

Error Types	Issues	Solutions
Panel display "E01"	Are the welding pins in contact with each other?	Keep welding pins separate and keep welding pen copper wires separate
	Oxidation of welding pins	Use a grinder to remove the oxidation layer
Panel display "E02"	Are the welding pins in contact with each other? So that it is always in the output state.	In AT mode, keep welding pins and welding pen copper wires separate.
	The pedal switch is always in the closed state.	Check and reset the pedal switch, keeping the switch on.
Weak spots	Is the voltage under 5.2?	Charge the machine to between 5.2~5.8 volts or higher
No energy release	Is the adapter from GLITTER?	Use the GLITTER adapter



Attentions

1. Power inside the capacitor has been released for safe transportation before leaving the factory. When you receive the machine, please turn it on, charge it for 20~30 minutes, and wait for the voltage to rise between 5.2~5.8V before spot welding.
2. Use GLITTER adapter to work with the welding machine. An adapter from a third-party supplier will damage the device.
3. Please wear glasses and gloves during the welding process.
4. Removing the oxidation layer on welding pins is good for energy transfer.
5. Unplug the machine when it's not in use.
6. The welding current displayed instantaneously is pulse release, ordinary testing instruments cannot measure.
7. Welding materials should be cleaned before welding. Remove any oil stains or oxide layers on the surface to avoid poor welding.
8. Keep out of reach of children.
9. Unauthorized disassembly of the machine is not allowed and is unsafe.
10. Do not use the product in inflammable, explosive or water-spray environment.

Manufacturer: Foshan Huanteng Technology Co., Ltd

Tel: 18988514806/18022798593

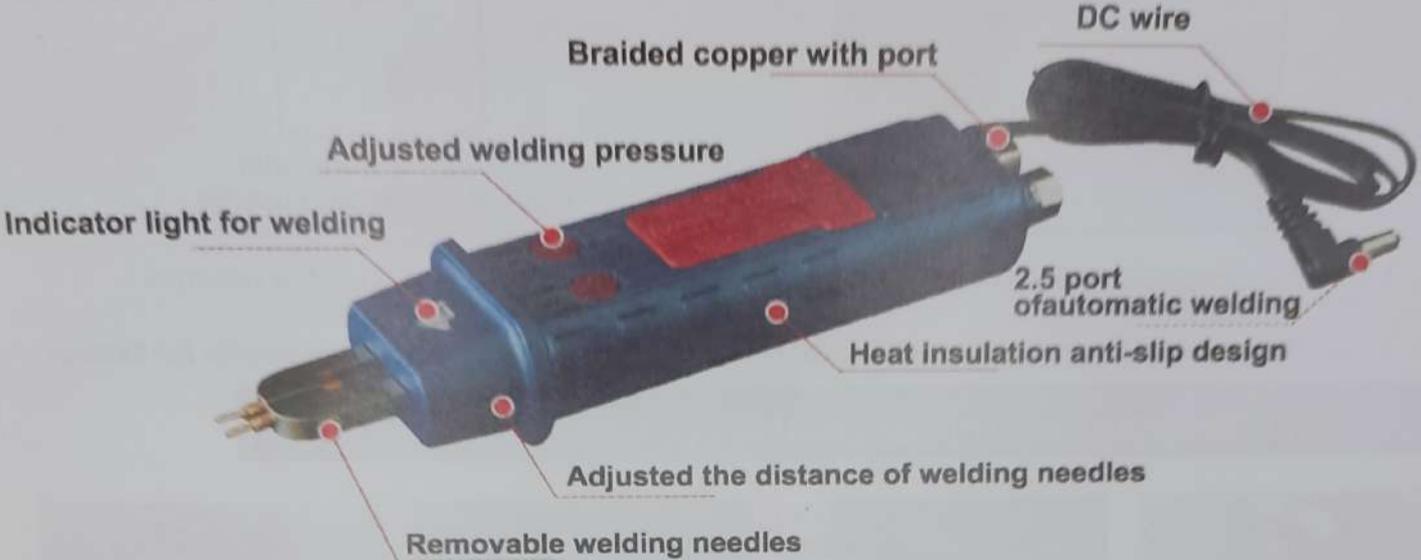
E-mail: fsglitter@hotmail.com

Website: <https://fsglitter.1688.com>

Address: Room 402,4/F,Building 1,NO.4 Guda Road,Chancheng District,Foshan City,Guangdong Province,China.

73B Mobile Spot Welding Pen Operation Instructions

Introducing the Spot Welding Pen



Adjustment operation guide

The knob for adjusting the pressure of the welding needle.



Max. pressure is about 1200g. Min. pressure is about 600g.

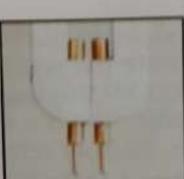


The welding needle pressure needs to be consistent, so as to avoid affecting the spot welding effect with one heavy and one light weight.

Note: The adjustment range of the pressure knob is within 270°. If it exceeds the range, it will be limited and can't be adjusted. If it exceeds the range and is adjusted forcefully, it will cause damage to the pressure system. Please adjust it carefully.

Adjusting the welding needle pitch

- ① Press the welding needle head to the hole position fixed by the screw.
- ② Loosen the two screws of the welding needle clamp seat.
- ③ Adjusting the screws of needle pitch on the left and right sides of the welding needle.
- ④ Adjust to the appropriate needle pitch and tighten the large screw.

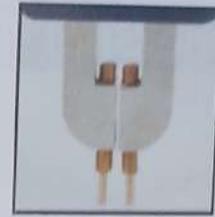


The shortest needle pitch is 3mm



the longest needle pitch is 7mm.

Detachable welding needle/adjustable welding needle balance



Adjust the horizontal state of the welding needle

- ① Turn the hexagonal wrench counterclockwise to loosen the screw. Then, insert or unscrew the welding needle.
- ② Turn the hexagonal wrench clockwise to loosen the screw and lock the welding needle for fixation.

Connect the spot welding pen to the spot welding machine



1. Connect the copper strip of the spot welding pen to spot welding machine.
2. Connect the DC cables of the spot welding pen to spot welding machine.
3. Set the spot welding mode to the MT manual mode.
4. Operation of pressing down to trigger spot welding

Dual color real-time spot welding work indicator light



Blue indicator light



Red work indicator light

After connecting the spot welding machine, a red/blue indicator light will be displayed, indicating that the connection is normal:

- ① The power on/off indicator lights will both light up, which is a normal occurrence.
- ② When the total negative electrode position of the copper wire connection device is different, the indicator light will turn on red/blue, and the indicator light will turn off when there is welding current output.

Precautions for spot welding operation

1. The welding needle of the spot welding pen should be pressed tightly on the welding work piece at the same time, otherwise uneven welding points may occur.
2. Depending on the thickness of the weldments, different welding pressures can be applied. (If the pressure is too light, it may cause false welding to penetrate the weldments. Conversely, if the pressure is too high, it may result in unstable spot welding.) At the beginning of welding, it is recommended to choose the MT foot mode first. After mastering the force, the AT automatic induction spot welding mode can be selected, which is suitable for efficient operation.
3. When spot welding, be careful not to touch the two welding needles together. Otherwise, a short circuit may occur and the machine may be damaged