

LS - A200 P User Manual

AC Auto Spot Welding Machine (Lithium Spot Pro)

1. Basic screen



The top displays AC frequency value (50HZ) , SP/MP1-8, PWR/MS, and temperature values sequentially.

SP (Single Pulse) is when spot welding is performed only once at the set intensity, while DP (Dual Pulse) is when a pre-spot is performed for conditioning purposes before the main spot, and then the actual spot is performed.

PWR is a power mode that increases or decreases the spot intensity in even steps, while MS simply increases or decreases it in milliseconds.

The temperature monitors the temperature of the 220V switching element inside the circuit, and when working on a large number of spots, it takes a break if it exceeds approximately 50 degrees.

The bottom part is related to spot intensity and movement, which is explained in detail in the related items below.

2. How to operate

Standby mode: Spot welds in the default mode, and you can adjust the intensity by turning the dial left and right.

Setting mode: When you press the dial briefly, the setting items will blink and cycle through each press (1 buzzer sound) When you press for 2 seconds in setting mode, it will exit to standby mode (2 buzzers sound)

Manual/Auto Switching: In standby mode, press the dial for 2 seconds to switch between Auto (An:) and Manual (Mn:) modes (3 beeps)

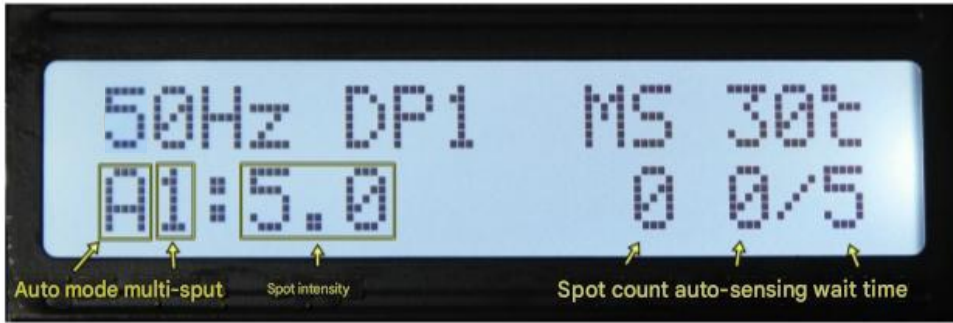
Reset settings: Press and hold for 8 to 10 seconds

(4 beeps) for more than 25 seconds. If the HW type has changed, press again to restore.

HW type change: Only when the encoder and LCD are different types when replacing them due to damage!!

- Dial left/right direction rotation: Set the intensity to 1.0 and press for more than 25 seconds (5 beeps)
- CLCD type change: Set the intensity to 1.5 or higher and press for 25 seconds or more (buzzer sounds 5 times)

3. Auto mode



A is for Auto mode, M for Manual mode

The 1 following A can be adjusted to Multi Spot in the settings for multi-spot recovery.

5.0 is the spot intensity - milliseconds (ms) or power (pwr), with a maximum value of 999

If you set the Step value of Power Ctrl to 0.5 in the settings, 0.5 will be adjusted to 1, 1 will be adjusted to 1.

0: Spot welding count after power on

The cumulative spot count (TotalCount) can be checked in the settings.

0/5: Autosensing count/delay (2-9)

When you bring the envelope to the nickel, the auto-sensing count increases.

If Spot Sound is Yes, a beep sound will be generated each time the count increases.

If this value matches the set Delay value, it will automatically become a spot.

4. Manual mode



In manual mode, the spot is advanced by pressing the switch.

The top notation is the same, the A notation at the bottom is changed to M, and the order is multi-spot, spot intensity, and spot count displayed.

5. Preferences

In standby mode, briefly pressing the dial once will enter the configuration mode with a short beep. The current setting value will blink, and you can adjust it by turning the dial left or right one step at a time. Each press of the dial will cycle through the settings, and you can exit to the standby screen immediately by pressing it for about 2 seconds. In auto mode, the auto standby value on the main screen will blink first, and in manual mode, it will change to the screen below.

5.1 Dual Pulse



Dual Pulse : Yes or No

Function to condition the spot surface before actual spot welding by removing oil or irregular contact areas of the parent material. If Yes, DP+ level is displayed at the top of the standby screen, and if No, SP (Single Pulse) is displayed.

> Level : 1~8

Sets the level of the dual spot.

Basically, use 1~3, and adjust upwards appropriately if the nickel oil content is high or thick.

5.2 Multi-spot (Caution)



Multi Spot: No, 2 ~ 4

Spot the same point multiple times

Normally, leave it at No and use it. If it doesn't stick well, increase the setting by one level

(Caution) Set the spot intensity a little weaker to avoid damaging the battery!!

> Interval: 25 ~ 80(ms)

The cooling time before the next spot weld is the interval between Multi Spots.

The units are milliseconds (ms) and are scaled appropriately to the thickness of the nickel strip.

5.3 Spot power adjustment



Power Ctrl: *MS* or *PWR*

Choose how you want to adjust spawn strength.

MS: Adjusts the spot intensity in milliseconds (default).

PWR: Adjusts the spot intensity in equal power units.

> Step: *1* or *0.5*

Adjusts the unit of increase or decrease when adjusting the intensity.

1: Adjust the intensity in 1 increments

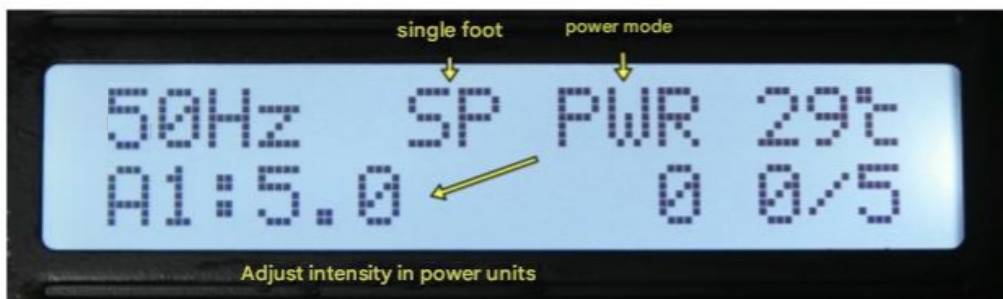
☞ 1 > 2 > 3

0.5: Adjust the intensity in 0.5 increments

☞ 1.0 > 1.5 > 2.0 > 2.5 > 3.0 > ...



☞ Spots are made over 5.0 ms.



☞ Spot is made during 5.0 pwr (ref, output corresponding to 5% of AC 1½ cycle)

5.4 Adjusting the beep sound and auto-sensing sensitivity



Spot Beep: *Yes or No*

Manual mode generates a beep sound for the set time when the spot is activated, and automatic (A) mode generates a beep sound when the auto sensing count increases. The default is Yes.

Auto Level: *0 ~ 9*

Autosensing sensitivity, default is 1

You can adjust this value to prevent malfunction when auto-sensing operates automatically.

As this value increases, auto-sensing accuracy increases, but sensing speed decreases.

5.5 Cumulative spot count and version information



SpotCount: Cumulative spot count

Note) The spot count value on the standby screen is the number of spots after the power is turned on.

Version: Firmware version