



Manuals.plus /

› AWithZ /

› AWithZ P20B 14.5KW SuperCapacitor Spot Welder Instruction Manual

AWithZ P20B

AWithZ P20B 14.5KW SuperCapacitor Spot Welder

INSTRUCTION MANUAL

1. Safety Information

Please read and understand all safety warnings and instructions before operating the AWithZ P20B Spot Welder. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Eye Protection:** Always wear appropriate eye protection (e.g., welding goggles or a welding helmet) to shield your eyes from sparks and intense light during welding operations.
- **Ventilation:** Ensure adequate ventilation in your workspace to disperse fumes and gases produced during welding.
- **Electrical Safety:** Do not operate the welder in wet conditions. Ensure the power supply is correctly grounded. Avoid touching live electrical parts.
- **Battery Handling:** Exercise caution when working with batteries. Lithium batteries can be volatile if mishandled. Do not short-circuit batteries.
- **Flammable Materials:** Keep flammable materials away from the welding area.
- **Children and Pets:** Keep the device and all accessories out of reach of children and pets.

2. Product Overview

The AWithZ P20B is a 14.5KW SuperCapacitor Spot Welder designed for efficient and precise welding of various battery types and metal sheets. It features both automatic and foot pedal operating modes, along with a wide range of adjustable settings.

Included Components:

- P20B Spot Welding Machine
- 15A Charger
- Foot Pedal (2m long)
- 3 Pairs of Replacement Welding Pins

- 5-meter Nickel Plated Sheet (0.15mm thickness)
- 18650 Battery Holder
- File
- Instruction Manual



Figure 2.1: AWithZ P20B Spot Welder and its complete set of accessories.

The main unit features a clear display and intuitive controls for adjusting welding parameters. The flexible welding pens allow for precise application, and the foot pedal provides enhanced control for intricate tasks.

AWithZ

Powerful Farah Spot Welder

Carefully Designed and Built

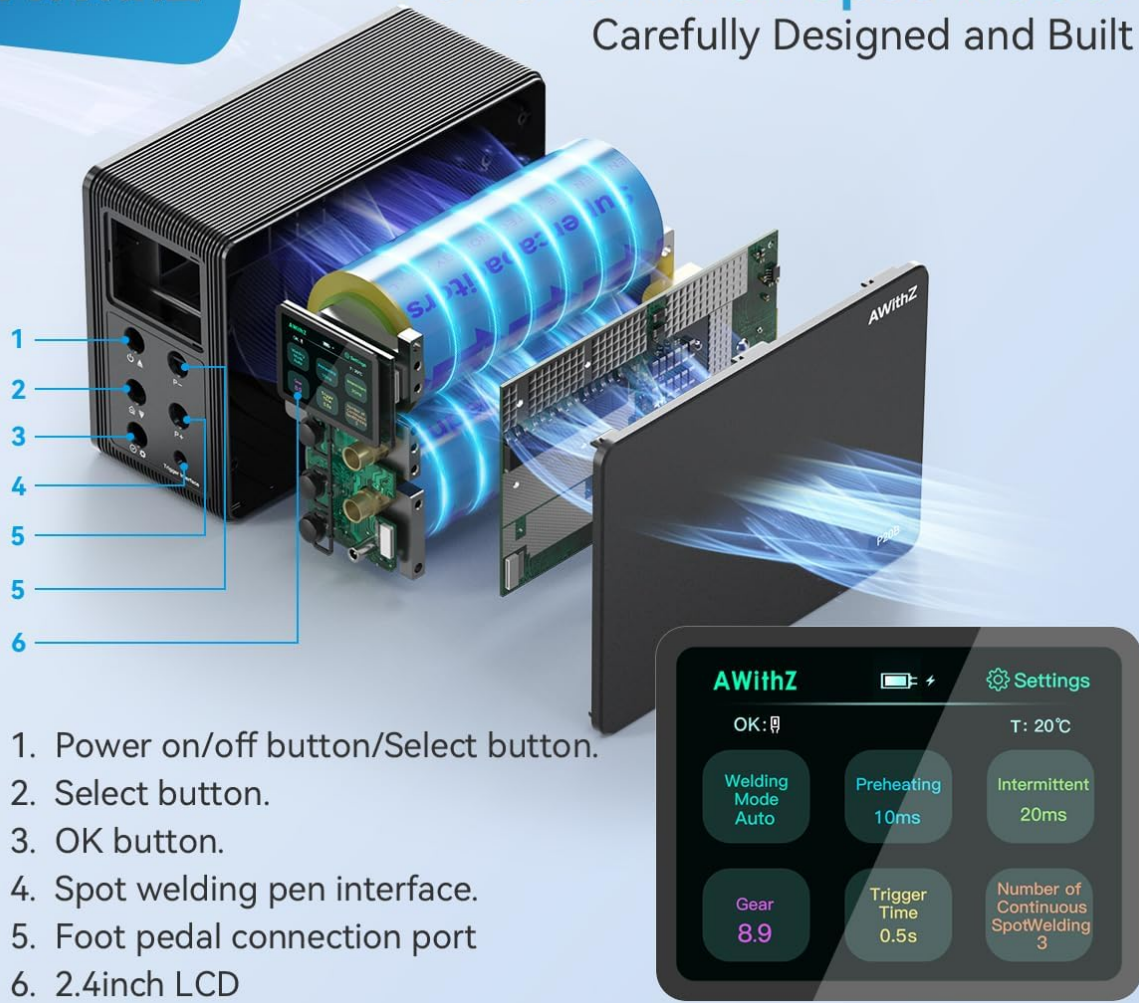


Figure 2.2: Detailed view of the AWithZ P20B Spot Welder's control panel and internal supercapacitors.

3. Setup Instructions

Follow these steps to set up your AWithZ P20B Spot Welder for first use:

1. **Unboxing:** Carefully remove all components from the packaging. Inspect for any damage.
2. **Connect Welding Pens:** Insert the welding pens into the designated ports on the front panel of the spot welder. Ensure a secure connection.
3. **Connect Foot Pedal (Optional):** If using the foot pedal mode, connect the foot pedal cable to the 'Trigger Interface' port.
4. **Initial Activation/Charging:** Connect the spot welder to a 100-240V AC power supply using the provided 15A charger. The device requires approximately 5 minutes of charging to reach an 'OK' state for spot welding, indicated on the display screen.
5. **Prepare Welding Tips:** Ensure the welding pins are clean and sharp. Use the provided file to sharpen them if necessary.



Figure 3.1: Quick setup guide for the AWithZ P20B Spot Welder.

4. Operating Instructions

The AWithZ P20B offers flexible operation modes and precise control over welding parameters.

4.1. Selecting Welding Mode

The device supports two primary welding modes:

- **Automatic Mode:** Once the appropriate gear is selected, the device will automatically trigger a weld when the welding pens make contact with the material.
- **Foot Pedal Mode:** Provides manual control over the welding trigger. Step on the foot pedal to initiate a weld. This mode is ideal for precise positioning.

Stable Accurate Welding

Support 2 welding modes

AT Mode:

Automatic trigger welding



Fast & Easy to welding

MT Mode:

Pedal trigger welding



Independent & Controllable

All mode support settings: Preheating, Interval, and Stitch Welding.

Figure 4.1: Illustration of Automatic and Foot Pedal welding modes.

4.2. Adjusting Welding Parameters

The P20B features 999 adjustable gears, allowing fine-tuning for various materials and thicknesses. Parameters such as preheating time, interval, and continuous spot welding count can also be adjusted via the control panel.

- **Gear Adjustment:** Use the 'P-' and 'P+' buttons on the control panel to increase or decrease the welding power (gear).
- **Material Compatibility:** The welder is suitable for materials such as 0.6mm nickel plated sheet, 0.6mm stainless steel sheet, 0.6mm iron sheet, 0.3mm pure nickel sheet, and 0.2mm copper sheet. Adjust the gear setting according to the material and thickness.

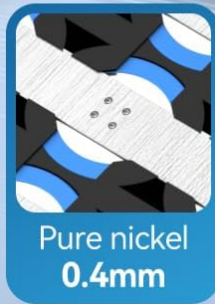
AWithZ Multifunction Farad Spot Welder

Easily welding
**Copper/Pure Nickel/
Nickel-plate/Steel/iron
sheet etc**

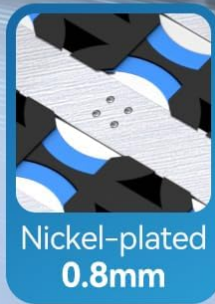
14.6KW



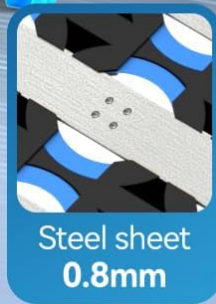
Copper
0.2mm



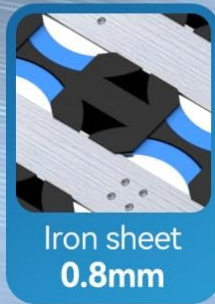
Pure nickel
0.4mm



Nickel-plated
0.8mm



Steel sheet
0.8mm



Iron sheet
0.8mm

Figure 4.2: Welding capabilities across different materials and thicknesses.

4.3. Welding Process

Place the material to be welded on a stable, non-conductive surface. Position the welding pens firmly on the contact points. Initiate the weld using either the automatic trigger or the foot pedal, depending on your selected mode. Observe the weld quality and adjust settings as needed.

4.4. Battery Status

The device features a battery indicator on its display. It is recommended to keep the internal supercapacitors charged for optimal performance. The unit is powered by built-in super energy storage capacitors, not user-replaceable batteries for power.

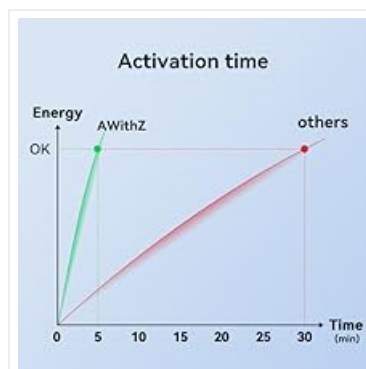


Figure 4.3: Activation time comparison, highlighting the quick readiness of the AWithZ P20B.

5. Maintenance

Regular maintenance ensures the longevity and optimal performance of your spot welder.

- **Welding Pin Replacement:** The welding pens are designed with replaceable pins. If the pins become worn or damaged, gently pull them out and insert new ones. Three pairs of replacement pins are included.
- **Pin Sharpening:** Use the provided file to sharpen the tips of the welding pins when they become dull. This maintains welding precision.
- **Cleaning:** Keep the device and welding pens clean and free from debris. Use a dry cloth for cleaning.

6. Troubleshooting

If you encounter issues with your AWithZ P20B Spot Welder, refer to the following common troubleshooting tips:

- **No Power:** Ensure the charger is properly connected to both the device and a working power outlet. Check the power switch.
- **No Weld Output:** Verify that the welding pens are securely connected. Check the selected welding mode and gear settings. Ensure the device has completed its initial activation (displaying 'OK').
- **Poor Weld Quality:** Adjust the gear setting to match the material and thickness. Ensure welding pins are clean and sharp. Apply consistent pressure during welding.
- **Overheating:** While designed for stable operation, continuous high-gear use may cause the welding pen leads to warm up. Allow the device to cool down if excessive heat is observed.

7. Specifications

Feature	Specification
Model Number	P20B
Manufacturer	AWithZ
Max Pulse Welding Power	14.6KW
Input Voltage	100-240V AC
Adjustable Gears	999
Welding Modes	Automatic, Foot Pedal
Compatible Materials	Nickel plated sheet (up to 0.6mm), Stainless steel sheet (up to 0.6mm), Iron sheet (up to 0.6mm), Pure nickel sheet (up to 0.3mm), Copper sheet (up to 0.2mm)
Welding Pen Lead Length	60 cm
Item Weight	2.53 kg
Parcel Dimensions	24 x 21.9 x 14.6 cm



Figure 7.1: Physical dimensions of the AWithZ P20B Spot Welder.

8. Official Product Video

For a visual guide on the product's features and operation, please watch the official video below:

Video 8.1: An overview of the AWithZ Spot Welder, demonstrating its 1.5-inch LCD screen and 7500 mAh battery capacity.

9. Warranty and Support

For warranty information, technical support, or service inquiries, please refer to the contact details provided with your purchase documentation or visit the official AWithZ website. Keep your purchase receipt as proof of purchase for warranty claims.

