TOOLTOP TT-Awithz-U2-5000mAh

TOOLTOP Awithz U2 Spot Welder Machine User Manual

Introduction

This manual provides detailed instructions for the safe and effective operation of your TOOLTOP Awithz U2 Spot Welder Machine. Please read this manual thoroughly before use and retain it for future reference.

The Awithz U2 is a portable spot welder designed for various battery assembly and repair tasks, featuring a 5000mAh internal battery, an LCD screen for real-time data, and a 90-level power adjustment system for precise control.

What's in the Box

Unpack your Awithz U2 Spot Welder and verify all components are present:

- Awithz U2 Spot Welding Machine
- Spot Welding Pens (2)
- Charging Cable (Type-C)
- Nickel Sheet (2 meters)
- Sandpaper (1 sheet)



Image: The Awithz U2 Spot Welder with its welding pens, charging cable, nickel strip, and sandpaper.

Product Overview

The Awithz U2 Spot Welder is a compact and powerful tool. Familiarize yourself with its components and features for optimal use.



Image: Front view of the Awithz U2 Spot Welder highlighting key features like 90-speed power regulation, dual pulse output, and Type-C charging interface.



Image: Diagram illustrating the physical dimensions of the Awithz U2 Spot Welder.

Key Components and Controls:



Image: The Awithz U2 Spot Welder with its welding pens and charging cable, showing the overall design.

- **LCD Screen:** Displays real-time information such as temperature, selected gear (power level), trigger time, and continuous welding count.
- **Power/Mode Switch:** A long press turns the device ON or OFF. A short press allows you to cycle through different display options or settings.
- **Adjust Key:** Use this button to modify settings. A long press enables continuous adjustment, while a short press allows for single-step adjustments.
- **Manual Spot Welding Key:** Activates a spot weld manually, providing precise control over the welding process.
- **Type-C Input:** The port used for charging the internal 5000mAh battery of the device.
- **USB Output:** This port can be used to charge other devices, effectively turning the spot welder into a power bank.
- **Output Ports:** Two dedicated ports for connecting the spot welding pens. Ensure a secure connection for proper operation.



Image: Internal view of the Awithz U2 Spot Welder, showcasing the high-quality lithium polymer battery and internal circuitry, designed for safety and durability.



Image: Illustrations demonstrating various applications for the Awithz U2 Spot Welder, including mobile phone battery transplantation, 18650 battery pack assembly, and general DIY assembly and maintenance.

Setup

Follow these steps to prepare your Awithz U2 Spot Welder for operation:

1. **Charge the Device:** Connect the provided Type-C charging cable to the welder's Type-C input port and a suitable USB power adapter (not included). The LCD screen will indicate the charging status. Ensure the device is fully charged before first use for optimal performance.
2. **Connect Welding Pens:** Insert the two spot welding pens firmly into the designated output ports on the welder. Ensure a secure and stable connection to prevent arcing or poor conductivity.
3. **Prepare Material:** Clean the surfaces of the materials to be welded. Use the included sandpaper if necessary to remove any oxidation, rust, or impurities. A clean surface is crucial for strong, consistent welds.
4. **Power On:** Long press the Power/Mode Switch button to turn on the device. The LCD screen will illuminate, displaying the current settings and battery level.

Operating Instructions

Power Adjustment

The Awithz U2 features 90 levels of output power adjustment, allowing for precise control over the welding process for various materials and thicknesses.



Image: Detailed diagram illustrating the 90 levels of output power adjustment on the Awithz U2 Spot Welder, showing how to select appropriate gear settings for different materials.

1. **Select Gear:** Short press the Power/Mode Switch to navigate through the display options until the 'Select Gear' setting is highlighted. Use the Adjust Key to increase or decrease the welding gear level. Higher numbers correspond to higher welding power.
2. **Determine Optimal Setting:** It is recommended to start with a lower power setting and perform test welds on scrap material. Gradually increase the power setting until a strong, consistent, and clean weld is achieved for your specific material thickness (the device supports up to 0.25mm nickel sheet).

Welding Process

1. **Position Materials:** Carefully place the nickel strip onto the battery terminal or other material to be welded. Ensure the materials are stable and properly aligned.
2. **Position Welding Pens:** Hold the two welding pens firmly, ensuring their tips are clean and sharp. Place the tips onto the nickel strip, making good, firm contact with both the strip and the underlying material. The tips should be close together but not touching each other. Apply slight pressure.
3. **Initiate Weld:** The welder will automatically detect proper contact and initiate a weld after a short, pre-set delay (the 'Trigger Time' is displayed on the LCD). Alternatively, you can press the Manual Spot Welding Key to initiate the weld at your desired moment.
4. **Inspect Weld:** After each weld, carefully inspect the joint for strength, consistency, and appearance. A good weld should be strong and not easily peeled off. Adjust power settings or technique as needed to achieve desired results.
5. **Continuous Welding:** The device supports continuous welding, and the 'Cont Welding' count on the LCD screen will increment with each successful weld, helping you track your progress.

Maintenance

Regular maintenance is essential to ensure the longevity, safety, and optimal performance of your Awithz U2 Spot Welder.

- **Clean Welding Tips:** Periodically clean the tips of the welding pens. Residue buildup can impair conductivity and weld quality. Use the included sandpaper or a fine file to gently remove any oxidation or material buildup.
- **Device Cleaning:** Wipe the main unit with a soft, dry cloth to remove dust and debris. Do not use abrasive cleaners, solvents, or immerse the device in liquids.
- **Storage:** When not in use, store the spot welder in a dry, cool place, away from direct sunlight, high temperatures, and excessive moisture. Keep it out of reach of children.
- **Battery Care:** For long-term storage (more than one month), ensure the internal battery is charged to approximately 50-70% of its capacity. This helps preserve the battery's lifespan and performance. Recharge the battery every 3-6 months if stored for extended periods.

Troubleshooting

Common Issues and Solutions:

Problem	Possible Cause	Solution
Weak or inconsistent welds	Low power setting, dirty welding tips, poor contact with material, material too thick for current setting	Increase power setting (gear level). Clean welding tips thoroughly. Ensure firm and stable contact with both welding pens. Verify material thickness is within the device's capabilities (max 0.25mm nickel).
No weld initiated	Welding pens not making proper contact, device not powered on, low battery charge, incorrect trigger time setting	Ensure both welding tips make good, simultaneous contact with the material. Power on the device. Charge the battery if low. Check trigger time setting on LCD.
Device not charging	Faulty Type-C cable or USB power adapter, charging port issue on the device	Try a different, known-good Type-C cable and USB power adapter. Ensure the charging port is clean and free of debris. If the issue persists, contact customer support.

Problem	Possible Cause	Solution
Device overheating	Excessive continuous use without cooling, high ambient operating temperature	Allow the device to cool down for a period. Reduce the frequency of continuous welding cycles. Operate in a well-ventilated area.

Specifications

Detailed technical specifications for the TOOLTOP Awithz U2 Spot Welder Machine:

Feature	Detail
Model Number	TT-Awithz-U2-5000mAh
Brand	TOOLTOP
Battery Capacity	5000mAh
Output Power Adjustment	90 Levels
Max Weldable Thickness	0.25mm (Nickel Sheet)
Charging Interface	Type-C
Compliance	CE, RoHS
Dimensions	15.9 x 9.2 x 2.5 cm (6.26 x 3.62 x 0.98 inches)
Date First Available	October 23, 2025

Warranty and Support

This product comes with a 1-year spare part availability duration as per EU regulations. For technical support, warranty claims, or service inquiries, please contact your retailer or the manufacturer directly. Please refer to your purchase documentation for specific warranty terms and contact information.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question