

## TOOLTOP TT-Awithz-UKF10

# TOOLTOP UKF10 Foot Pedal Capacitor Spot Welder Instruction Manual

Model: TT-Awithz-UKF10

## INTRODUCTION

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This manual provides detailed instructions for the safe and efficient operation of your TOOLTOP UKF10 Foot Pedal Capacitor Spot Welder. This device is designed for precise spot welding of 18650 lithium battery packs and other compatible materials, offering multiple welding modes and high power output for various DIY welding applications. Please read this manual thoroughly before operating the device to ensure proper usage, prevent damage, and maintain safety.

## SAFETY INSTRUCTIONS

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**WARNING: Failure to follow these safety instructions may result in electric shock, fire, serious injury, or death.**

- Always wear appropriate personal protective equipment (PPE), including safety glasses, welding gloves, and protective clothing, when operating the spot welder.
- Ensure the work area is well-ventilated and free from flammable materials.
- Do not operate the welder in damp or wet conditions.
- Keep children and unauthorized personnel away from the welding area.
- Do not touch the welding electrodes or workpieces immediately after welding, as they will be hot.
- Disconnect the power supply before performing any maintenance or cleaning.
- Use only the original charging cable and accessories provided with the device.
- Do not attempt to disassemble or modify the spot welder. Refer all servicing to qualified personnel.
- Be aware of potential sparks and molten metal during operation.

## PRODUCT OVERVIEW AND COMPONENTS

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The TOOLTOP UKF10 is a compact and powerful capacitor spot welder. Familiarize yourself with its main components:

- **Main Unit:** Contains the control panel, power knob, and charging port.
- **Welding Pens:** Two intelligent manual spot welding pens for precise application.
- **Foot Pedal:** For triggering welds in foot pedal mode.
- **Charging Cables:** Type-C to Type-C and Type-A to Type-C for charging.
- **Nickel Coil:** For welding applications.
- **Spare Soldering Pins:** Replacement pins for the welding pens.
- **Sandpaper:** For preparing surfaces.

# **AWithZ**

## **Farah capacitor Power battery welding**

10.2KW powerful dual pulse  
/patented technology for greater stability

Equipped with an intelligent  
manual spot welding pen



The image shows the AWithZ UKF10 Super Capacitor Spot Welder, a black rectangular device with a control panel on the front. The control panel features a large black knob, a digital display, and several buttons. Two white intelligent manual spot welding pens are connected to the top of the unit. A black foot pedal is connected to the side. The device is surrounded by various accessories, including a power cable and a foot pedal cable.

Ten thousand  
precise adjustments

**500000+cycles of lifespan**

Image: The main unit of the TOOLTOP UKF10 spot welder with its intelligent manual welding pens and foot pedal.

# AWithZ

Pioneer in the portable spot welding machine industry

## UKF10 Spot Welding



WP120-6 + WP110-6



### ACCESSORY



Pedal board \*1



Nickel coil \*1



C-C Charging cable \*1



A-C Charging cable \*1



1 pair of spare soldering pins



Sandpaper \* 1

Image: Included accessories: foot pedal, nickel coil, C-C charging cable, A-C charging cable, spare soldering pins, and sandpaper.

# Intelligent manual spot welding pen New heights in human-machine collaboration

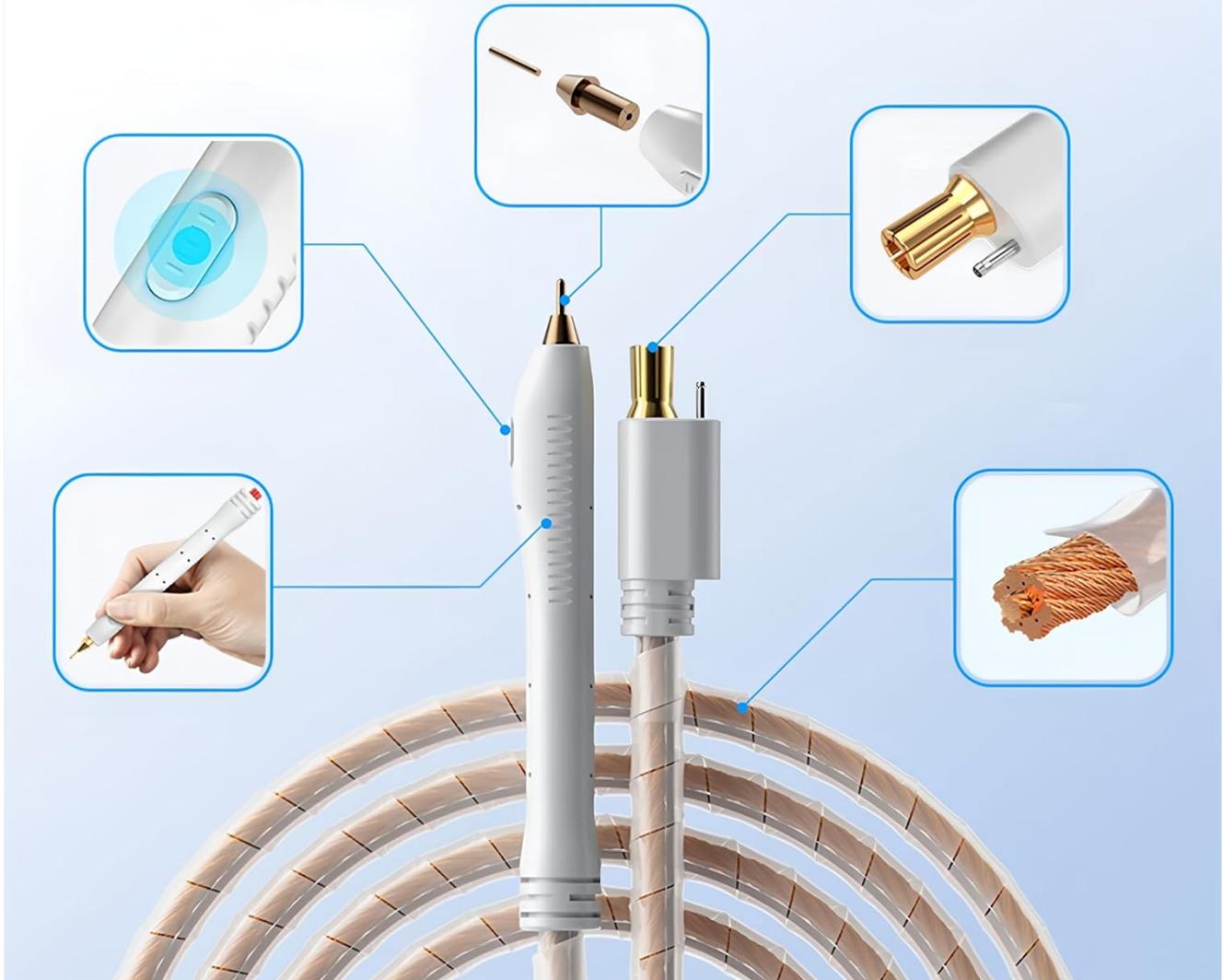


Image: Detailed view of the intelligent manual spot welding pen, highlighting its ergonomic design and connection points.

## SETUP

- 1. Unpacking:** Carefully remove all components from the packaging and inspect for any damage.
- 2. Charging:** Before first use, fully charge the spot welder using the provided Type-C charging cable. Connect one end to the welder's Type-C port and the other to a compatible USB power adapter (not included). The display will indicate charging status.
- 3. Connect Welding Pens:** Insert the intelligent manual spot welding pens firmly into their designated ports on the main unit. Ensure a secure connection.
- 4. Connect Foot Pedal (Optional):** If using foot pedal mode, connect the foot pedal to its dedicated port on the main unit.
- 5. Prepare Workpiece:** Ensure the surfaces to be welded are clean, dry, and free from rust, oil, or other contaminants. Use the provided sandpaper if necessary.

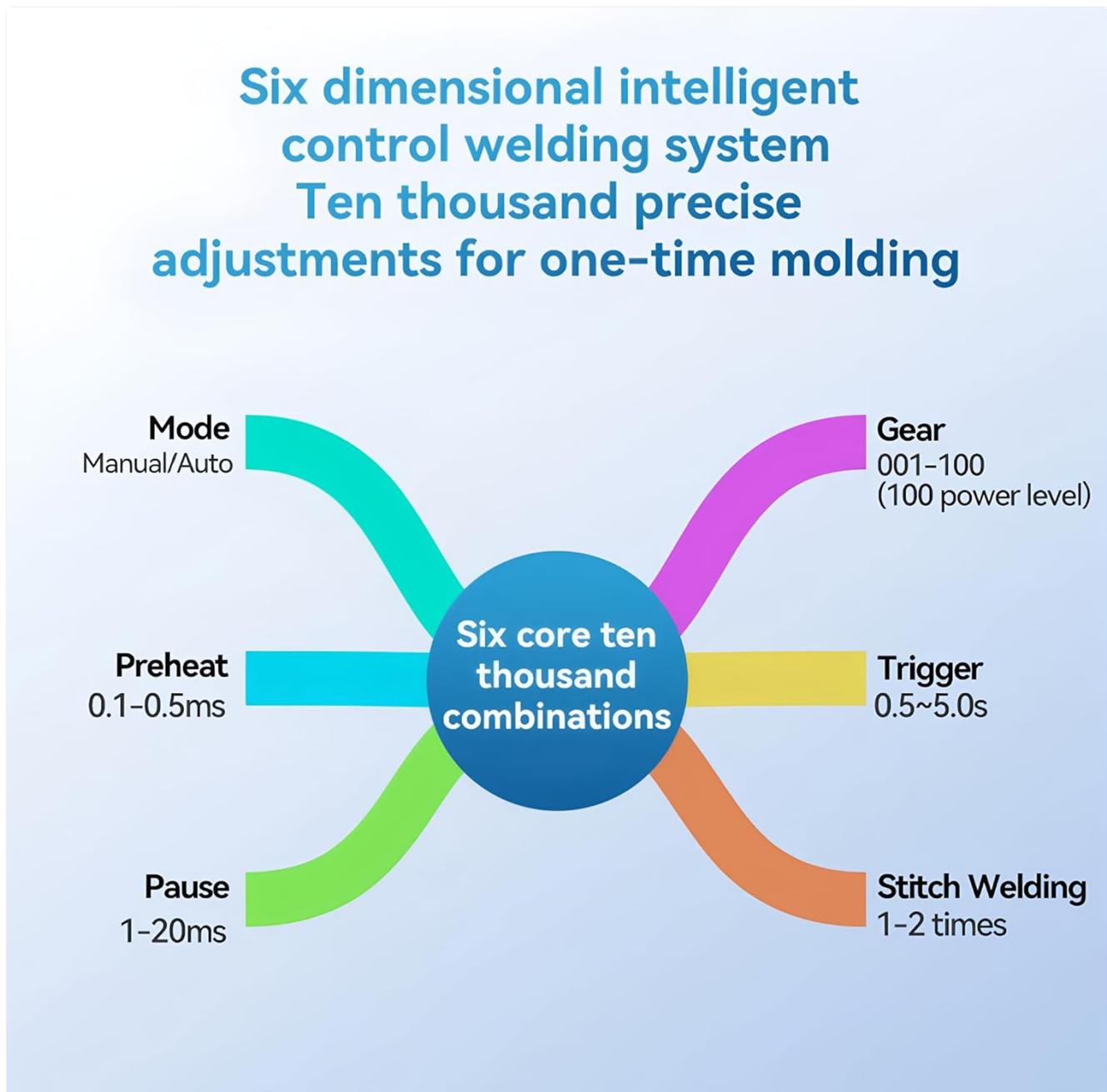
## OPERATING INSTRUCTIONS

## Power On/Off

- To power on, press and hold the power button (usually integrated with the knob) for a few seconds until the display illuminates.
- To power off, press and hold the power button again until the display turns off.

## Mode Selection and Adjustments

The UKF10 offers multiple welding modes and adjustable parameters for precise control. Use the main knob and display to navigate and adjust settings.



*Image: The control system interface displaying various adjustable parameters: Mode (Manual/Auto), Preheat, Pause, Gear (power level), Trigger, and Stitch Welding.*

- **Welding Modes:** Select between Manual, Automatic, or Foot Pedal welding modes.
  - *Manual Mode:* Triggered by a button on the welding pen.
  - *Automatic Mode:* Welds automatically when both pen tips contact the workpiece.
  - *Foot Pedal Mode:* Triggered by pressing the connected foot pedal.

- **Preheat (0.1-0.5ms):** Adjusts the preheating time to prepare the material for welding, improving weld quality.
- **Pause (1-20ms):** Sets the pause duration between welding pulses.
- **Gear (001-100):** Controls the welding power level. Start with lower settings and gradually increase as needed.
- **Trigger (0.5-5.0s):** Sets the trigger delay or duration.
- **Stitch Welding (1-2 times):** Configures the number of welding pulses for a single trigger.

Rotate the knob to select a parameter and press the knob to confirm or enter adjustment mode. Rotate again to change the value, and press to confirm.

## Welding Process

1. **Select Mode:** Choose your desired welding mode (Manual, Automatic, or Foot Pedal).
2. **Adjust Settings:** Based on the material thickness and type, adjust the Preheat, Gear (power), and other parameters. Refer to the material compatibility guidelines below.
3. **Position Workpiece:** Place the nickel strip or other material onto the battery terminal or workpiece.
4. **Apply Welding Pens:** Firmly press both welding pen tips onto the nickel strip, ensuring good contact with both the strip and the underlying material. Maintain even pressure.
5. **Trigger Weld:**
  - *Manual Mode:* Press the button on the welding pen.
  - *Automatic Mode:* The weld will trigger automatically once good contact is detected.
  - *Foot Pedal Mode:* Press the foot pedal.
6. **Inspect Weld:** After welding, carefully inspect the weld joint for strength and appearance. Adjust settings if the weld is too weak or too strong.

# 10.2KW dual pulse berserk output Double Buff overlay Weld firmly with 0.35 nickel plating and 0.2 pure nickel!

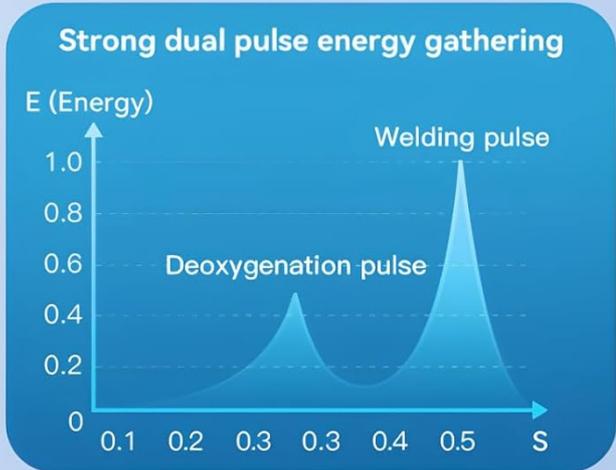
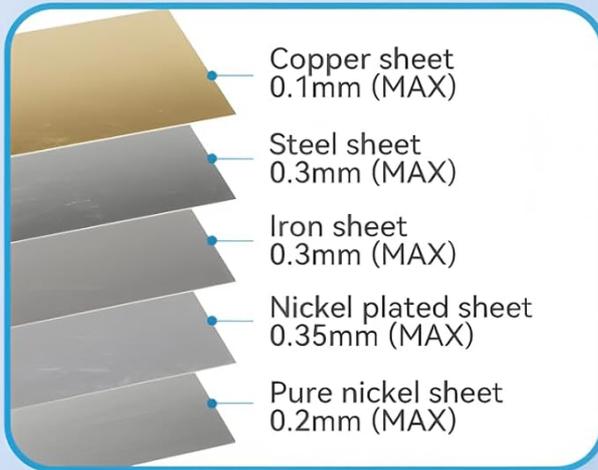
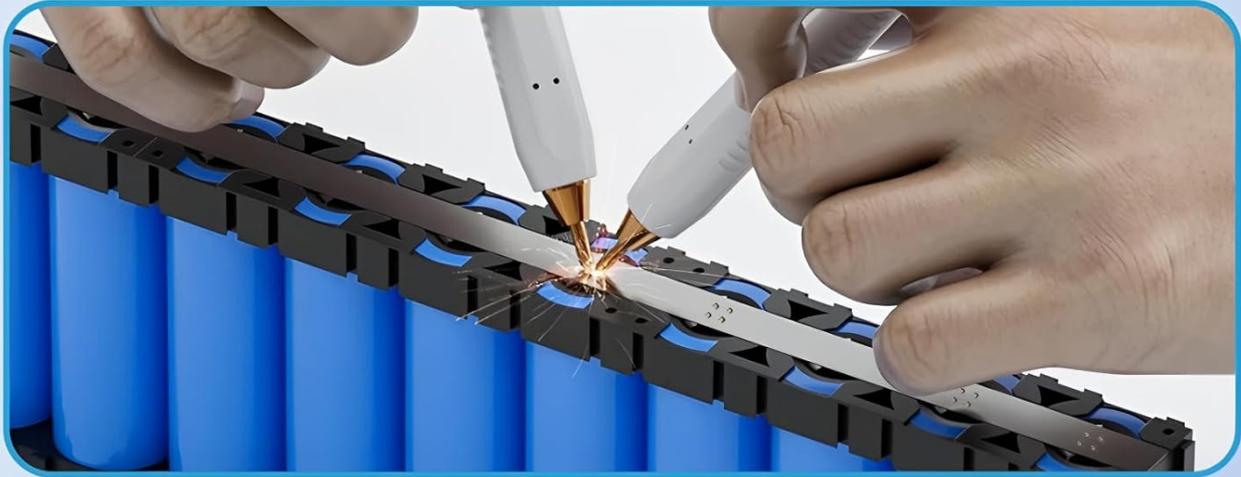


Image: Illustration of the spot welding process on battery cells, showing the application of welding pens to a nickel strip.

## Material Compatibility

The UKF10 spot welder is capable of welding various materials with specific thickness limitations:

Material Type	Maximum Thickness
Copper sheet	0.1mm
Steel sheet	0.3mm
Iron sheet	0.3mm
Nickel plated sheet	0.35mm
Pure nickel sheet	0.2mm

Note: Optimal welding results depend on material cleanliness, proper pressure, and correct power settings.

## MAINTENANCE

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- **Cleaning:** Regularly clean the welding pen tips and the main unit with a dry, soft cloth. Ensure no metal dust or debris accumulates around the connections.
- **Electrode Condition:** Inspect welding pen tips for wear or oxidation. If necessary, gently sand them with fine sandpaper to ensure good conductivity. Replace worn-out soldering pins with the provided spares.
- **Storage:** Store the spot welder in a cool, dry place, away from direct sunlight and moisture. Ensure it is fully charged before long-term storage to preserve battery life.
- **Battery Care:** Avoid fully discharging the battery frequently. Recharge when the battery indicator is low.

## TROUBLESHOOTING

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Problem	Possible Cause	Solution
Welder does not power on	Low battery; Power button not pressed correctly	Charge the device; Press and hold the power button firmly.
Weak or inconsistent welds	Insufficient power setting; Dirty or oxidized welding tips; Poor contact with workpiece; Material too thick	Increase "Gear" (power) setting; Clean or replace welding tips; Ensure firm and even pressure; Check material thickness against specifications.
Excessive sparks or burn-through	Too high power setting; Material too thin	Decrease "Gear" (power) setting; Verify material thickness is within limits.
Welder overheats	Continuous heavy use; Poor ventilation	Allow the welder to cool down; Ensure adequate airflow around the unit.
Foot pedal not triggering	Foot pedal not connected; Welder not in Foot Pedal mode	Ensure foot pedal is securely connected; Select "Foot Pedal" mode on the welder.

## SPECIFICATIONS

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- **Model Number:** TT-Awithz-UKF10
- **Power Output:** 10200W (peak)
- **Charging Port:** Type-C
- **Welding Modes:** Manual, Automatic, Foot Pedal
- **Adjustable Parameters:** Preheat, Pause, Gear (1-100), Trigger, Stitch Welding
- **Capacitor Lifespan:** 500,000+ cycles (based on AWithZ laboratory testing)
- **Certifications:** CE, RoHS
- **Manufacturer:** TOOLTOP

Select brand new high-quality  
Farad capacitors 500000+cycles of lifespan  
Empowering precision welding,  
durable as new

Life extension

120%

Number of cycles

50W+

Charging  
speed increase

30%



\*\*The data in the figure is obtained from AWithZ laboratory testing and is for reference only.  
Different environments and welding materials may have different results, please refer to the actual situation

*Image: Internal view highlighting the high-quality Farad capacitors, indicating a life extension of 120%, over 500,000 cycles, and a 30% increase in charging speed.*

## WARRANTY AND SUPPORT

The TOOLTOP UKF10 Foot Pedal Capacitor Spot Welder comes with a manufacturer's warranty. Please refer to your purchase documentation for specific warranty terms and conditions.

- **EU Spare Part Availability:** 1 Year
- For technical support, warranty claims, or service inquiries, please contact your retailer or the manufacturer directly.
- Do not attempt to repair the device yourself, as this may void the warranty and pose safety risks.

