

TOOLIOM TL-200TP ACDC PRO

TOOLIOM TL-200TP ACDC PRO Multiprocess Welder User Manual

Model: TL-200TP ACDC PRO

Brand: TOOLIOM

1. INTRODUCTION AND SAFETY INFORMATION

This manual provides essential information for the safe and effective operation of your TOOLIOM TL-200TP ACDC PRO Multiprocess Welder. Please read this manual thoroughly before operation to ensure proper use and to prevent injury or damage.

General Safety Precautions:

- Always wear appropriate personal protective equipment (PPE), including welding helmet, gloves, and protective clothing.
- Ensure adequate ventilation in the welding area to disperse fumes.
- Do not operate the welder in damp or wet conditions.
- Disconnect power before performing any maintenance or adjustments.
- Keep children and unauthorized personnel away from the welding area.

2. PRODUCT OVERVIEW

The TOOLIOM TL-200TP ACDC PRO is a high-performance, versatile welding machine designed for a wide range of welding applications. It integrates multiple welding processes into a single compact unit.

Key Features:

- **6-in-1 Welding Modes:** AC TIG, DC TIG, AC Pulsed TIG, DC Pulsed TIG, Stick, and TIG Spot Welding.
- **Dual Voltage Capability:** Operates on both 110V and 220V power supplies.
- **IGBT Inverter Technology:** Provides stable arc performance and energy efficiency.
- **Large LED Display:** Clear display of welding parameters for easy monitoring and adjustment.
- **Foot Pedal Compatibility:** Allows for remote current control (foot pedal not included).
- **Aluminum Welding Capability:** Specifically designed for effective AC TIG welding of aluminum.

Components and Accessories:

The welder comes with essential accessories to get you started. Refer to the image below for a visual representation of the main unit and included items.



Figure 2.1: Main unit and included accessories of the TOOLIOM TL-200TP ACDC PRO Welder.

Included accessories typically consist of:

- Work Clamp
- Electrode Holder
- TIG Torch with Consumables
- Gas Hose
- Power Cord Adapter

ACCESSORIES



- ① Work Clamp
- ② Electrode Holder
- ③ TIG Torch with Consumables
- ④ Gas Hose
- ⑤ Power Cord Adapter



Figure 2.2: Visual representation of the welder and its standard accessories.

3. SETUP

Power Connection:

- Ensure the welder is connected to a power source matching the selected voltage (110V or 220V).
- Use the provided power cord adapter if necessary.

Gas Connection (for TIG Welding):

- Connect the gas hose from the welder to your shielding gas cylinder (e.g., Argon for TIG).
- Ensure all connections are secure and leak-free.

Torch and Ground Clamp Connection:

- Connect the TIG torch to the appropriate port on the front panel.
- Connect the ground clamp cable to the designated ground terminal.
- Attach the ground clamp securely to the workpiece or welding table.

Foot Pedal (Optional):

If using a foot pedal (not included), connect it to the designated port on the welder. This allows for remote amperage control during welding.



Figure 3.1: Foot pedal connection point for remote control (foot pedal sold separately).

4. OPERATING MODES

The TOOLIOM TL-200TP ACDC PRO offers six distinct welding modes, providing flexibility for various materials and applications.

6 IN 1

VERSATILE SELECTION

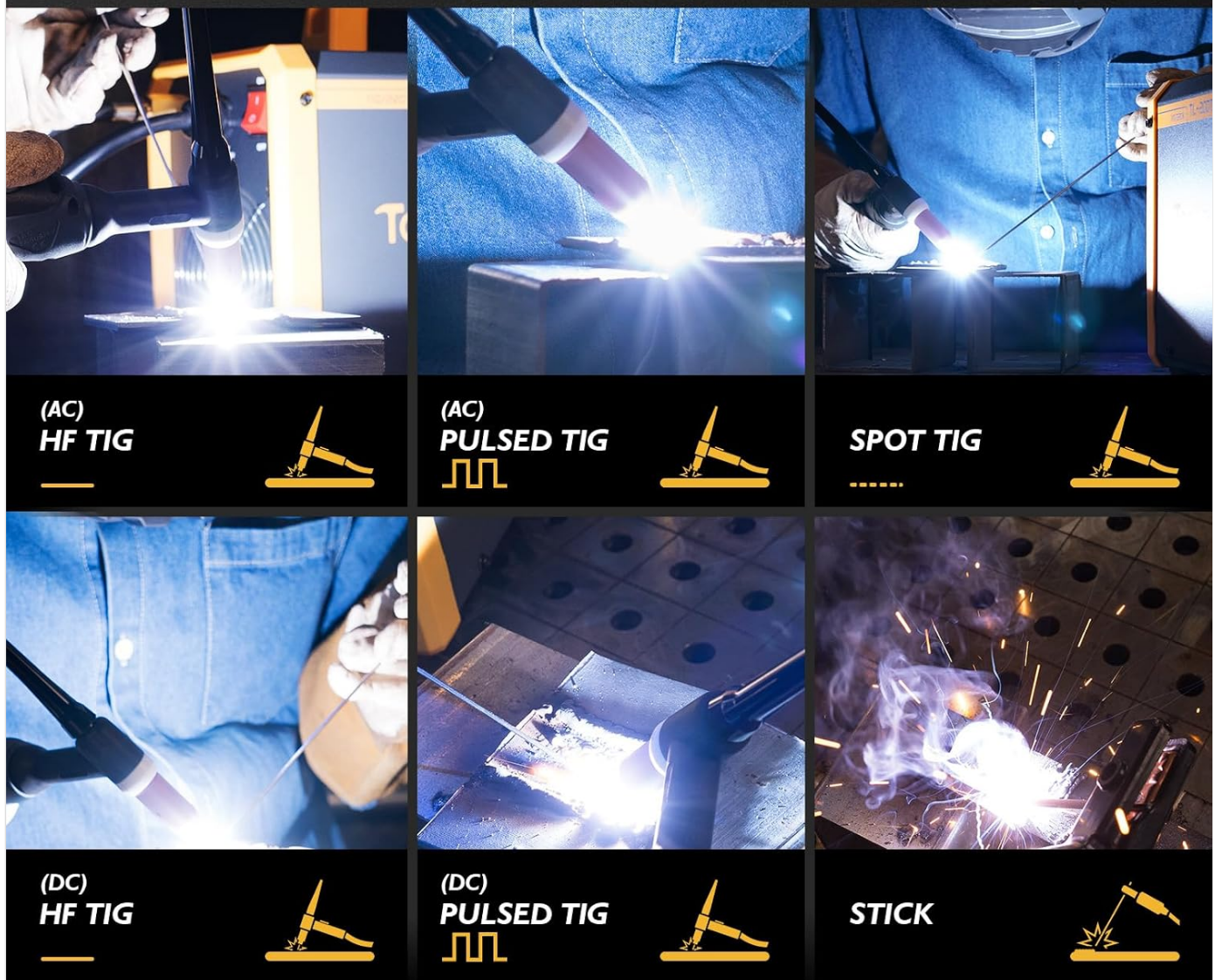


Figure 4.1: Overview of the 6-in-1 versatile welding modes.

4.1. AC TIG Welding (High Frequency)

Ideal for welding aluminum and magnesium alloys. The alternating current helps to break up the oxide layer on aluminum, ensuring a clean weld. High Frequency (HF) start provides a non-contact arc initiation.

4.2. DC TIG Welding (High Frequency)

Suitable for welding stainless steel, carbon steel, copper, and other non-ferrous metals (excluding aluminum). Provides a stable arc and precise control for thin materials.

4.3. AC Pulsed TIG Welding

Combines AC TIG with a pulsed current, offering enhanced control over heat input. This is particularly useful for welding thin aluminum, reducing distortion, and achieving a consistent bead appearance.

TIG 200P ACDC SET-UP-GUIDE

MATERIAL	THICKNESS	FUNCTION SELECTION	AMPERAGE (A)	WAVEFORM SELECTION	TUNGSTEN COLOR	FILLER METAL	FILLER METAL DIA	PRE FLOW (S)	POST FLOW (S)	GAS FLOW RATE (L/MIN)	AC BALANCE (%)
ALUMINUM	1/25"(1.0mm)	AC	40-65	SQUARE	GREEN / PURPLE	4043	1/16"(1.6mm)	0.3	5	8-12	35
	1/16"(1.6mm)		50-80							12-15	
	3/32"(2.4mm)		75-110							15-20	
	1/8"(3.2mm)		100-150				3/32"(2.4mm)			18-23	
	3/16"(4.8mm)		140-200								
STEEL	1/16"(1.6mm)	DC	50-80	/	GREY / RED / WHITE / PURPLE	ER70S-2	1/16"(1.6mm)	0.3	5	8-12	/
	3/32"(2.4mm)		70-120				3/32"(2.4mm)			12-15	
	1/8"(3.2mm)		90-140				1/8"(3.2mm)			15	
	3/16"(4.8mm)		120-200								
STAINLESS STEEL	1/16"(1.6mm)	DC	45-85	/	GREY / RED / WHITE / PURPLE	ER308/308L	1/16"(1.6mm)	0.3	5	8-12	/
	3/32"(2.4mm)		80-120				3/32"(2.4mm)			12-15	
	1/8"(3.2mm)		80-130								
	3/16"(4.8mm)		120-200				1/8"(3.2mm)				

Figure 4.2: Example of an AC Pulsed TIG weld.

4.4. DC Pulsed TIG Welding

Similar to AC Pulsed TIG but for DC weldable metals. The pulsing action helps to control the weld puddle, minimize heat input, and improve penetration, resulting in cleaner and stronger welds on materials like stainless steel.



Figure 4.3: Example of a DC Pulsed TIG weld.

4.5. TIG Spot Welding

Used for quickly joining two pieces of thin metal at specific points. This mode provides a controlled burst of current for precise, localized welds, often used for tacking or sheet metal fabrication.

ACCESSORIES

- ① Work Clamp
- ② Electrode Holder
- ③ TIG Torch with Consumables
- ④ Gas Hose
- ⑤ Power Cord Adapter



Figure 4.4: Example of TIG Spot Welding.

4.6. Stick Welding (MMA/SMAW)

A versatile process for general fabrication and repair, using coated electrodes. This mode is suitable for a variety of materials and thicknesses, especially in outdoor or less controlled environments.

FOOT PEDAL REMOTE CONTROL

(NOT Included in the package)



Figure 4.5: Example of Stick Welding.

5. WELDING GUIDELINES

Optimal welding results depend on proper settings for material type and thickness. The following table provides recommended starting parameters for various materials when using the TIG 200P ACDC PRO.

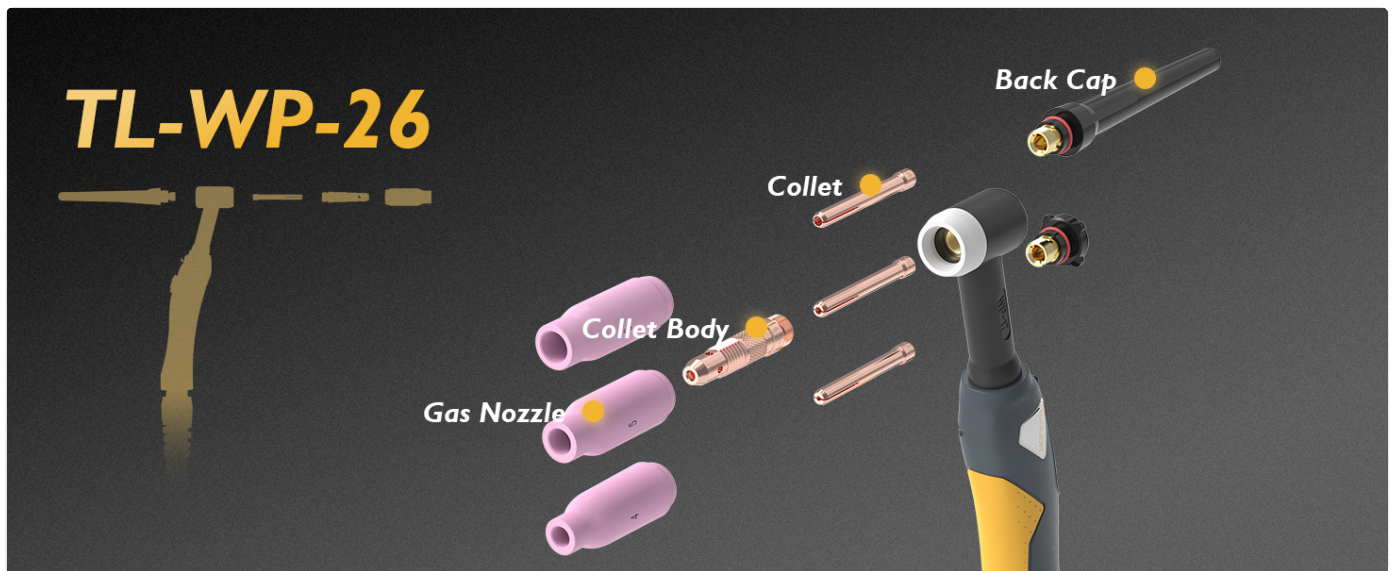


Figure 5.1: TIG 200P ACDC Setup Guide - Recommended Parameters.

Aluminum Welding Specifics:

The TL-200TP ACDC PRO is highly capable for aluminum welding. For optimal results, ensure proper AC balance and use appropriate filler metal and tungsten.

- Max welding thickness for aluminum: 1/8" (3mm) @ 110V and 3/16" (5mm) @ 220V.
- Min welding thickness: 24 GA (0.5mm).

BORN FOR ALUMINUM WELDING



Figure 5.2: Aluminum welding thickness examples at different voltages.

ALUMINUM HF TIG WELDING



ALUMINUM PULSED TIG WELDING



Figure 5.3: Examples of Aluminum HF TIG and Pulsed TIG welds.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your welding machine.

Cleaning:

- Periodically clean the exterior of the welder with a dry, soft cloth.
- Use compressed air to blow out dust and debris from the cooling vents. Ensure the power is disconnected before cleaning.

Torch Consumables:

- Regularly inspect and replace worn-out TIG torch consumables (collets, collet bodies, gas nozzles, back caps, and tungsten electrodes).

- Ensure proper assembly of the TIG torch components for consistent gas flow and arc stability.



Figure 6.1: TL-WP-26 TIG Torch Component Diagram.

Storage:

- Store the welder in a dry, clean environment, away from direct sunlight and excessive dust.
- Protect cables and accessories from damage during storage.

7. TROUBLESHOOTING

This section addresses common issues you might encounter during operation. For problems not listed here, please contact customer support.

Problem	Possible Cause	Solution
Welder does not power on	No power supply; tripped circuit breaker; faulty power cord.	Check power connection; reset circuit breaker; inspect power cord for damage.
No arc in TIG mode	No gas flow; incorrect tungsten setup; poor ground connection; wrong mode selected.	Check gas cylinder and flow rate; ensure tungsten is properly installed and sharpened; secure ground clamp; verify TIG mode is active.
Unstable arc / Poor weld quality	Contaminated tungsten/filler; insufficient shielding gas; incorrect amperage/settings; dirty workpiece.	Clean or replace tungsten/filler; check gas flow and purity; adjust amperage and other parameters according to guidelines; clean workpiece thoroughly.
Welder overheats / Thermal overload	Exceeded duty cycle; blocked cooling vents; high ambient temperature.	Allow welder to cool down; ensure vents are clear; operate in a cooler environment.

8. SPECIFICATIONS

Detailed technical specifications for the TOOLIOM TL-200TP ACDC PRO Welder.

- **Model:** TL-200TP ACDC PRO
- **Item Weight:** 27.9 pounds
- **Package Dimensions:** 17.88 x 13.5 x 11.5 inches
- **Country of Origin:** China

- **Power Source:** AC (Dual Voltage 110V/220V)
- **Included Components:** 200A TIG Welder (main unit)



Figure 8.1: Physical dimensions and weight of the welder.

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the warranty card included with your product or contact TOOLIOM customer service directly. Specific warranty terms and conditions may vary.

For the latest support resources and contact details, please visit the official TOOLIOM website or your point of purchase.

Online Resources: [TOOLIOM Brand Store on Amazon](#)

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