

YESWELDER ARC-125D PRO

YESWELDER ARC-125D PRO Mini Inverter Welder User Manual

Model: ARC-125D PRO

1. Product Overview

The YESWELDER ARC-125D PRO is a compact and portable mini inverter welding machine designed for both MMA (Manual Metal Arc, also known as Stick welding) and Lift TIG (Tungsten Inert Gas) welding processes. It features an intelligent LED display for clear visibility of welding parameters and incorporates advanced technologies such as Hot Start, Arc Force, Anti-Stick, and VRD (Voltage Reduction Device) for enhanced performance and safety.



Image 1.1: The YESWELDER ARC-125D PRO Mini Inverter Welder shown with its included ground clamp and electrode holder.

KEY FEATURES:

- **2-in-1 Welding Modes:** Supports both MMA (Stick) and Lift TIG welding for versatile applications.
- **Large LED Display:** Provides clear and easy-to-read information on current, electrode size, function mode, and welding mode.
- **Advanced Welding Functions:** Equipped with Hot Start, Arc Force, Anti-Stick, and VRD for improved arc ignition, stability, and safety.
- **Portable Design:** Compact dimensions (23.6 x 9.4 x 13 cm) and lightweight (approximately 2 kg) for easy transport and storage.
- **Safety Protections:** Includes automatic compensation for voltage fluctuations, overcurrent protection, overload protection, and temperature control.

2. Safety Information

Welding operations involve significant risks. Always prioritize safety to prevent injury or damage. Read and understand all

safety warnings and instructions before operating this equipment.

GENERAL SAFETY PRECAUTIONS:

- **Personal Protective Equipment (PPE):** Always wear appropriate PPE, including a welding helmet with proper shade, flame-resistant clothing, welding gloves, and safety shoes.
- **Ventilation:** Ensure adequate ventilation to remove welding fumes and gases, which can be hazardous to health.
- **Fire Prevention:** Keep a fire extinguisher nearby. Remove all flammable materials from the welding area. Be aware of sparks and hot slag.
- **Electrical Safety:** Ensure the welding machine is properly grounded. Do not operate in wet conditions. Inspect cables and connections for damage before each use.
- **Eye and Skin Protection:** Welding arc rays can cause severe burns to eyes and skin. Never look at the welding arc without proper eye protection.
- **Work Area:** Keep the work area clean, dry, and free of clutter. Ensure stable footing.
- **Children and Bystanders:** Keep children and unauthorized personnel away from the welding area.

The VRD (Voltage Reduction Device) function is designed to reduce the open-circuit voltage to a safe level when the machine is not actively welding, minimizing the risk of electric shock. Always ensure this feature is active unless specific welding conditions require its deactivation (refer to operating instructions).

3. Components and Controls

Familiarize yourself with the components and control panel of your YESWELDER ARC-125D PRO welding machine.

INCLUDED COMPONENTS:

- YESWELDER ARC-125D PRO Mini Inverter Welder
- Ground Clamp with Cable
- Electrode Holder with Cable
- User Manual

CONTROL PANEL INTRODUCTION:



Image 3.1: Front and rear view of the ARC-125D PRO, highlighting control panel elements and connections.

1. **Parameter Button (PARAM):** Used to cycle through adjustable parameters such as Hot Start and Arc Force.

2. **Welding Mode Button (MODE):** Toggles between MMA (Stick) and Lift TIG welding modes.
3. **VRD Button (VRD ON/OFF):** Activates or deactivates the Voltage Reduction Device.
4. **Digital Display:** Shows current settings, selected mode, and other operational information.
5. **Value Knob:** Adjusts the welding current or other selected parameters.
6. **Positive Output Terminal (+):** Connects to the electrode holder for MMA or TIG torch for Lift TIG.
7. **Negative Output Terminal (-):** Connects to the ground clamp.
8. **Input Power Cable:** Connects the machine to the 230V AC power supply.
9. **Power Switch:** Turns the welding machine ON or OFF.
10. **Fan:** Provides cooling for the internal components during operation.

4. Setup

Proper setup is crucial for safe and effective welding. Follow these steps before beginning any welding task.

4.1 POWER CONNECTION:

- Ensure the welding machine's power switch is in the OFF position.
- Connect the input power cable to a grounded 230V AC power outlet. Verify that the power supply meets the machine's requirements.

4.2 CONNECTING WELDING CABLES:

1. **Ground Clamp:** Connect the ground clamp cable to the Negative Output Terminal (-) on the front panel. Securely attach the ground clamp to the workpiece or a clean, bare metal part of the welding table, ensuring good electrical contact.
2. **Electrode Holder (for MMA):** Connect the electrode holder cable to the Positive Output Terminal (+) on the front panel.
3. **TIG Torch (for Lift TIG):** For Lift TIG welding, connect your TIG torch (not included) to the Positive Output Terminal (+). Ensure the TIG torch has a gas valve for manual gas control.

Always ensure all connections are tight and secure before powering on the machine.

5. Operating Instructions

This section details the operation of the YESWELDER ARC-125D PRO for both MMA and Lift TIG welding modes.

5.1 MMA (STICK) WELDING:

1. **Power On:** Turn on the welding machine using the Power Switch. The LED display will illuminate.
2. **Select MMA Mode:** Press the MODE button until "Stick" or "MMA" is indicated on the digital display.
3. **Insert Electrode:** Securely insert the appropriate electrode (e.g., E6011, E6013, E6010, E7018 up to 3.18mm) into the electrode holder.
4. **Adjust Current:** Use the Value Knob to set the desired welding current (Amperage) based on the electrode type and material thickness.
5. **Adjust Parameters (Optional):** Press the PARAM button to cycle through Hot Start and Arc Force settings. Use the Value Knob to adjust these values as needed for optimal arc ignition and stability.
6. **VRD Function:** Ensure the VRD is ON for maximum safety, especially in damp environments or when working at height.

7. **Begin Welding:** Strike the arc by lightly touching the electrode to the workpiece and quickly lifting it slightly to establish the arc. Maintain a consistent arc length and travel speed.



Image 5.1: Example of Stick welding in progress.

5.2 LIFT TIG WELDING:

For Lift TIG welding, a TIG torch with a gas valve and a separate gas cylinder (Argon) are required (not included).

1. **Power On:** Turn on the welding machine.
2. **Select Lift TIG Mode:** Press the MODE button until "Lift TIG" is indicated on the digital display.
3. **Connect TIG Torch:** Ensure your TIG torch is connected to the Positive Output Terminal (+) and the gas hose is connected to your Argon gas cylinder.
4. **Prepare Tungsten Electrode:** Install a sharpened tungsten electrode into the TIG torch.
5. **Adjust Current:** Use the Value Knob to set the desired welding current.
6. **Open Gas Valve:** Open the gas valve on the TIG torch to establish gas flow.
7. **Initiate Arc (Lift Arc):** Gently touch the tungsten electrode to the workpiece. A small current will flow. Slowly lift the torch to establish the arc. The machine will automatically increase the current to the set value.
8. **Perform Welding:** Maintain a consistent arc length and feed filler rod manually if required.
9. **Terminate Arc:** To stop welding, simply lift the torch away from the workpiece. Close the gas valve on the TIG torch after welding.



Image 5.2: Example of Lift TIG welding in progress.

6. Maintenance

Regular maintenance ensures the longevity and safe operation of your welding machine.

GENERAL MAINTENANCE TIPS:

- **Cleaning:** Periodically clean the machine's exterior with a dry, soft cloth. Use compressed air to blow out dust and debris from the ventilation openings. Ensure the machine is unplugged before cleaning.
- **Cable Inspection:** Regularly inspect all welding cables, connections, and the power cord for cuts, fraying, or damage. Replace damaged components immediately.
- **Terminal Connections:** Ensure all output terminals are clean and connections are tight. Loose connections can

cause overheating and poor performance.

- **Storage:** Store the welding machine in a clean, dry environment, away from excessive dust, moisture, and corrosive materials.
- **Fan Operation:** Ensure the cooling fan is not obstructed and operates freely during use.

7. Troubleshooting

This section provides solutions to common issues you might encounter during operation.

Problem	Possible Cause	Solution
No power/Machine does not turn on	Power cord unplugged; No power from outlet; Faulty power switch	Check power cord connection; Test outlet with another device; Contact customer service if switch is faulty.
No welding arc	Poor ground connection; Incorrect welding mode; Insufficient current; Damaged cables/electrode holder	Ensure ground clamp has good contact; Verify correct mode (MMA/Lift TIG); Increase current setting; Inspect and replace damaged components.
Unstable arc/Poor weld quality	Incorrect current setting; Improper electrode/tungsten preparation; Dirty workpiece; Incorrect arc length/travel speed	Adjust current; Use correct electrode/sharpen tungsten; Clean workpiece thoroughly; Practice maintaining consistent arc length and speed.
Overheat indicator active	Exceeded duty cycle; Insufficient ventilation; High ambient temperature	Allow machine to cool down; Ensure fan is unobstructed; Operate in a cooler environment.
Anti-Stick function activates frequently	Electrode sticking due to low current or improper technique	Increase welding current; Improve arc striking technique.

If you encounter issues not listed here or if the suggested solutions do not resolve the problem, please contact YESWELDER customer service.

8. Specifications

Detailed technical specifications for the YESWELDER ARC-125D PRO Mini Inverter Welder.

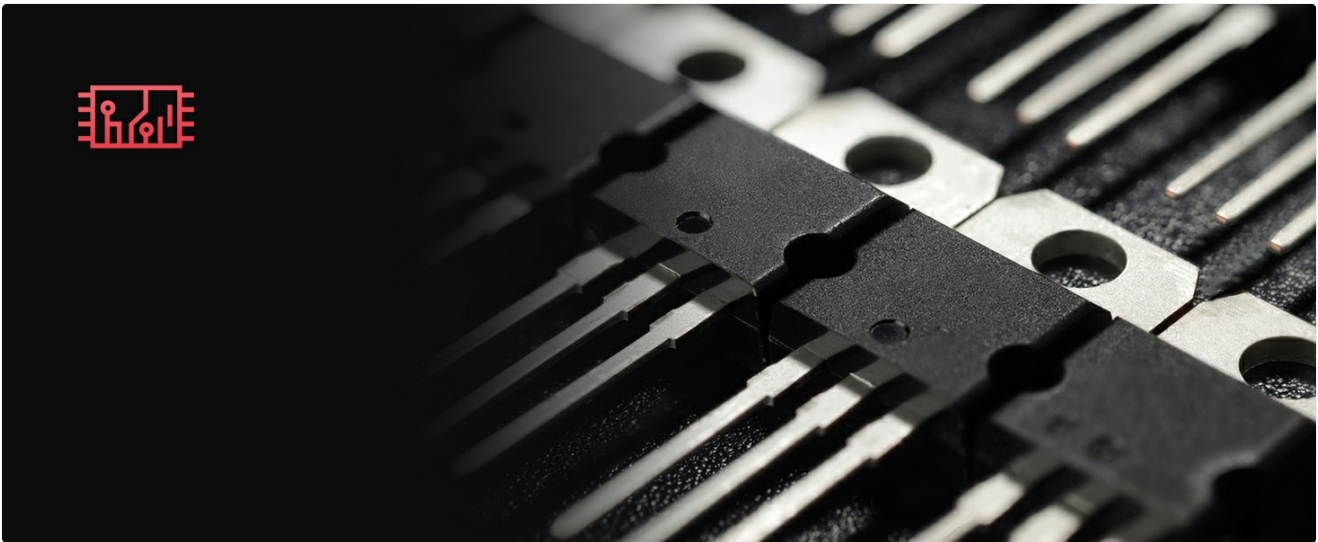


Image 8.1: Technical specifications for the ARC-125D PRO.

Specification	Value
Model Name	ARC-125D PRO
Manufacturer	YESWELDER
Input Voltage	230V AC
Max Output Current	125 A
Dimensions (L x W x H)	23.6 x 9.4 x 13 cm (9.3 x 3.7 x 5.1 inches)
Weight	Approx. 2 kg
Cooling Mode	Fan Cooling
Insulation Grade	F
Protection Class	IP21S
Included Components	Welding machine, ground clamp, electrode holder






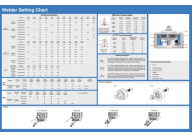
Image 8.2: The ARC-125D PRO's compact size and light weight (2kg).

9. Warranty and Customer Support

YESWELDER is committed to providing quality products and customer satisfaction.

For any issues, questions, or concerns regarding your YESWELDER ARC-125D PRO welding machine, please refer to the contact information provided with your product packaging or visit the official YESWELDER website for support. When contacting support, please have your model number (ARC-125D PRO) and purchase details readily available.

Related Documents - ARC-125D PRO

	<p>YESWELDER TIG-250P ACDC IGBT Inverter Welder Operator's Manual</p> <p>Official operator's manual for the YESWELDER TIG-250P ACDC IGBT Inverter Welder. Learn about safety, product overview, functions, technical specifications, operation, and maintenance for this professional welding machine.</p>
	<p>YesWelder MIG-250PRO IGBT Inverter Multi-Process Welder Operator's Manual</p> <p>This operator's manual provides comprehensive instructions for the YesWelder MIG-250PRO IGBT Inverter Multi-Process Welder. It covers essential safety precautions, detailed installation procedures, operation guides for MIG, Flux-Cored, Stick, and Lift TIG welding modes, maintenance procedures, and troubleshooting tips.</p>
	<p>YesWelder MIG-250PRO IGBT Inverter Multi-Process Welder Operator's Manual</p> <p>Comprehensive operator's manual for the YesWelder MIG-250PRO, detailing safety, installation, operation, maintenance, and troubleshooting for MIG, Flux-Cored, Stick, and Lift TIG welding processes. Includes technical specifications and setup guides.</p>
	<p>YESWELDER MIG-205DS PRO IGBT Inverter Multi-Process Welder Operator's Manual</p> <p>Comprehensive operator's manual for the YESWELDER MIG-205DS PRO IGBT Inverter Multi-Process Welder. Covers safety precautions, installation, operation for MIG, Flux-Cored, Stick, and Lift TIG welding, maintenance, and troubleshooting.</p>
	<p>YESWELDER MIG-205DS Welder Settings and Guide</p> <p>Detailed welding parameters, consumables, and operational guide for the YESWELDER MIG-205DS welder. Covers MAG, CO2, Gasless, Lift TIG, and ARC welding processes, including wire selection, current, voltage, and gas flow rates.</p>

YWM-160
IGBT INVERTER MULTI-PROCESS WELDER
(MIG, MAG, FLUX-CORED, STICK, LIFT TIG)
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OPERATOR'S MANUAL

YESWELDER

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[YesWelder YWM-160 IGBT Inverter Multi-Process Welder Operator's Manual](#)

Operator's manual for the YesWelder YWM-160 IGBT Inverter Multi-Process Welder, covering setup, operation, maintenance, and troubleshooting for MIG, MAG, Flux-Cored, Stick, and Lift TIG welding.