

YESWELDER ARC-205D-EU

YESWELDER 205A MMA/Lift TIG Arc Welder Instruction Manual

Model: ARC-205D-EU

1. INTRODUCTION

This manual provides essential information for the safe and effective operation, setup, maintenance, and troubleshooting of your YESWELDER 205A MMA/Lift TIG Arc Welder. Please read this manual thoroughly before operating the machine to ensure proper use and to prevent injury or damage.



Image 1.1: Front view of the YESWELDER 205A MMA/Lift TIG Arc Welder, showcasing its compact design and control panel.

2. SAFETY INFORMATION

Welding operations involve significant risks. Always prioritize safety to prevent electric shock, burns, fire, and other hazards. Adhere to all local and national safety regulations.

General Safety Precautions:

- Wear appropriate personal protective equipment (PPE), including a welding helmet with proper shade, flame-resistant clothing, welding gloves, and safety shoes.
- Ensure the welding area is well-ventilated to avoid inhaling fumes.
- Keep flammable materials away from the welding area.
- Always disconnect power before performing maintenance or adjustments.
- Do not operate the welder in damp or wet conditions.

Integrated Safety Features:

The YESWELDER 205A is equipped with several safety mechanisms:

- **Automatic Voltage Fluctuation Compensation:** Helps maintain stable welding performance despite input power variations.

- **Overcurrent Protection:** Automatically shuts down the machine if current exceeds safe limits.
- **Overload Protection:** Prevents damage from excessive load.
- **Temperature Control:** Monitors internal temperature and initiates automatic shutdown if overheating occurs.
- **IP21 Protection Standard:** Provides protection against solid objects over 12mm and vertically falling water drops.
- **Electrostatic Coating:** Unique coating designed to prevent shock transfer.



Image 2.1: Overview of the YESWELDER 205A's built-in safety features.

3. PRODUCT OVERVIEW

The YESWELDER 205A is a versatile 2-in-1 welding machine offering both Stick (MMA) and Lift TIG welding capabilities. It features an advanced IGBT inverter technology for stable arc performance and a user-friendly interface.

Key Features:

- **Dual Welding Modes:** Supports Stick (MMA) and Lift TIG welding.
- **High Output:** Up to 205 amperes, suitable for various welding tasks.
- **Advanced Functions:** Includes Hot Start, Arc Force, and Anti-Stick for improved arc ignition and stability.
- **Large LED Display:** Provides clear visibility of current, electrode size, and welding mode.
- **Portable Design:** Weighs approximately 3.8 kg (8.4 lbs) for easy transport.
- **Durable Construction:** Features an additional plastic casing for enhanced protection.



Image 3.1: The YESWELDER 205A supports both Stick (MMA) and Lift TIG welding modes.

Control Panel Introduction:

Familiarize yourself with the control panel components for efficient operation.



Image 3.2: Detailed view of the control panel, indicating the digital display, value knob, VRD button, parameter button, and welding mode button.

1. **Digital Display:** Shows welding parameters such as current, electrode size, and selected mode.
2. **Value Knob:** Adjusts welding current and other parameters.
3. **VRD Button:** Activates or deactivates Voltage Reduction Device for enhanced safety in certain environments.
4. **Parameter Button:** Cycles through adjustable parameters (e.g., Hot Start, Arc Force).
5. **Welding Mode Button:** Selects between Stick (MMA) and Lift TIG welding modes.

LATEST VERSION UPGRADED LARGE LED DISPLAY

Subvert the Traditional Visual Experience



Image 3.3: The upgraded large LED display provides clear and comprehensive information during operation.

4. SETUP

Proper setup is crucial for safe and effective welding. Follow these steps carefully.

4.1 Unpacking and Inspection:

- Remove the welder and all accessories from the packaging.
- Inspect for any shipping damage. Contact your supplier immediately if damage is found.
- Ensure all components listed in the packing list are present.

4.2 Connecting Accessories:



Image 4.1: Electrode holder and ground clamp connections.

1. **Ground Clamp Connection:** Connect the ground clamp cable to the negative (-) output terminal on the welder. Securely attach the ground clamp to the workpiece or welding table, ensuring good electrical contact.
2. **Electrode Holder Connection (for MMA/Stick):** Connect the electrode holder cable to the positive (+) output terminal on the welder. Insert the welding electrode into the holder.
3. **TIG Torch Connection (for Lift TIG - torch sold separately):** If performing Lift TIG welding, connect the TIG torch cable to the negative (-) output terminal. Connect the gas hose from the TIG torch to your argon gas regulator.

4.3 Power Connection:

- Ensure the welder's power switch is in the OFF position.
- Connect the power input cable to a suitable 230V power outlet. Verify that the power source meets the welder's requirements.

5. OPERATING INSTRUCTIONS

The YESWELDER 205A offers two primary welding modes: Stick (MMA) and Lift TIG.

5.1 Starting the Welder:

- After connecting all cables and ensuring safety, turn the power switch to the ON position.
- The LED display will illuminate, showing the default welding mode and current.

5.2 Stick (MMA) Welding:

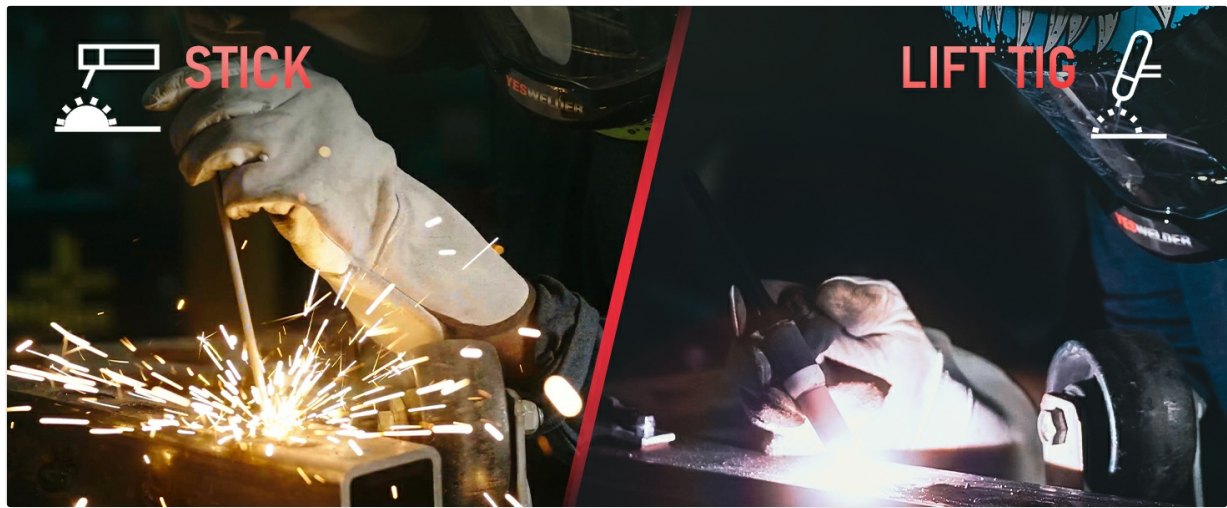


Image 5.1: Visual representation of Stick welding (left) and Lift TIG welding (right).

1. **Select Mode:** Press the 'Welding Mode Button' until 'Stick' (MMA) is indicated on the display.
2. **Set Current:** Use the 'Value Knob' to adjust the welding current (amperes) according to the electrode type and material thickness. The machine supports up to 205A.
3. **Adjust Parameters (Optional):** Press the 'Parameter Button' to cycle through Hot Start and Arc Force settings. Adjust these using the 'Value Knob' as needed for optimal arc ignition and stability.
4. **Begin Welding:** Strike the arc by lightly touching the electrode to the workpiece and quickly lifting it slightly. Maintain a consistent arc length and travel speed.

5.3 Lift TIG Welding:

For Lift TIG welding, a TIG torch with a gas valve is required (not included).

1. **Select Mode:** Press the 'Welding Mode Button' until 'Lift TIG' is indicated on the display.
2. **Set Current:** Use the 'Value Knob' to adjust the welding current (amperes) based on the material and tungsten electrode size.
3. **Gas Flow:** Open the gas valve on the TIG torch to establish argon gas flow.
4. **Initiate Arc:** Gently touch the tungsten electrode to the workpiece and then lift it slightly (1-2mm) to initiate the arc. The arc will start at a low current and ramp up to the set current.
5. **Perform Weld:** Maintain a short arc length and feed filler rod manually if required.

6. MAINTENANCE

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

6.1 Daily Maintenance:

- Clean the exterior of the machine with a dry, soft cloth.
- Inspect all cables and connections for damage or loose fittings.
- Check the electrode holder and ground clamp for wear.

6.2 Periodic Maintenance (Monthly/Quarterly):

- **Internal Cleaning:** Disconnect power. Open the machine casing and use compressed air to blow out

dust and debris from the cooling fins and internal components. Ensure no moisture enters.

- **Fan Check:** Verify that the cooling fan operates freely and is not obstructed.
- **Terminal Inspection:** Check all power terminals for corrosion or looseness. Tighten if necessary.

Caution: Only qualified personnel should perform internal maintenance. Always disconnect power before opening the machine.

7. TROUBLESHOOTING

Refer to the table below for common issues and their potential solutions.

Problem	Possible Cause	Solution
Welder does not power on	No power from outlet; Power switch off; Internal fuse blown	Check power supply; Turn power switch ON; Contact service for fuse replacement
No arc or weak arc	Poor ground connection; Incorrect current setting; Wet or old electrodes; Damaged cables	Ensure good ground contact; Adjust current; Use dry electrodes; Inspect and replace cables
Overheat indicator on	Exceeded duty cycle; Insufficient ventilation; Fan malfunction	Allow machine to cool down; Ensure clear airflow; Check fan operation
Unstable arc	Incorrect current/voltage; Contaminated workpiece; Improper electrode angle	Adjust settings; Clean workpiece; Correct electrode technique

8. SPECIFICATIONS

Technical specifications for the YESWELDER ARC-205D-EU model.

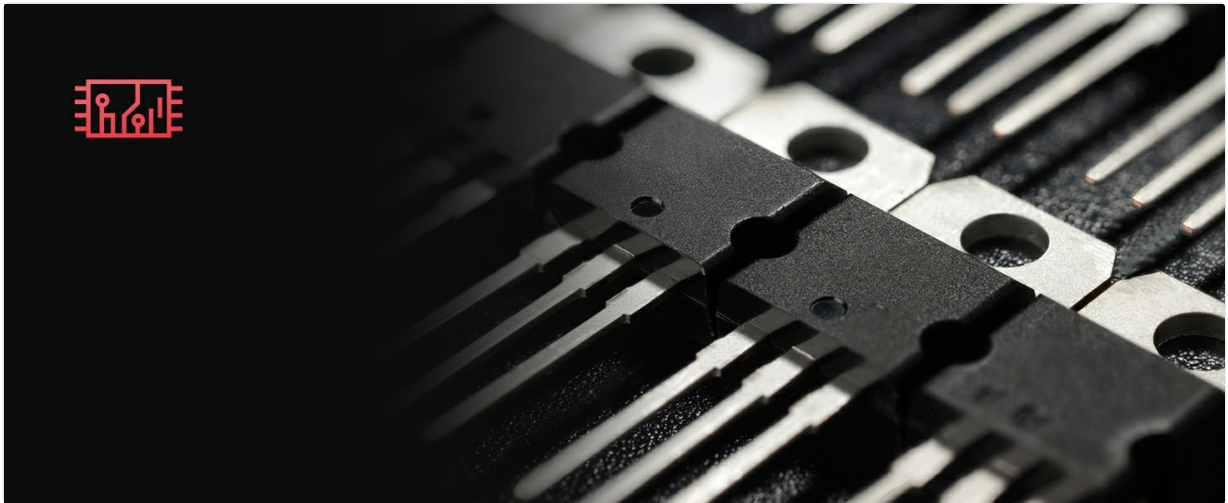


Image 8.1: Detailed technical specifications for the ARC-205D model.






Specification	Value
---------------	-------

Specification	Value
Model Number	ARC-205D-EU
Input Voltage (U1)	230V
Max Input Current (I1 max)	29A
Effective Input Current (I1 eff)	22.4A
Output Current (I2)	205A (MMA), 158A (TIG)
Output Voltage (U2)	18.2V (MMA), 16.3V (TIG) at 60% duty cycle
No-Load Voltage (U0)	65V
Duty Cycle (X)	60% at 205A, 100% at 158A
Dimensions (L x W x H)	31.5 x 12 x 20.8 cm
Weight	3.8 kg (8.4 lbs)
Cooling Method	Fan Cooling
Insulation Grade	F
Protection Class	IP21S

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact YESWELDER customer service. Keep your purchase receipt as proof of purchase.

For further assistance, visit the official YESWELDER website or contact their authorized service centers.

	<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>MIG-250PRO IGBT INVERTER MULTI-PROCESS WELDER (MIG, FLUX-CORED, STICK, LIFT TIG)</p>  <p>OPERATOR'S MANUAL</p> <p>YESWELDER®</p> <p>To help us serve you better, go to www.yeswelder.com</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>MIG-250PRO IGBT INVERTER MULTI-PROCESS WELDER (MIG, FLUX-CORED, STICK, LIFT TIG)</p>  <p>OPERATOR'S MANUAL</p> <p>YESWELDER®</p> <p>To help us serve you better, go to www.yeswelder.com</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>MIG-205DS PRO IGBT INVERTER MULTI-PROCESS WELDER (MIG, MAG, FLUX-CORED, STICK, LIFT TIG)</p>  <p>OPERATOR'S MANUAL</p> <p>YESWELDER®</p> <p>To help us serve you better, go to www.yeswelder.com</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>YWM-160 IGBT INVERTER MULTI-PROCESS WELDER (MIG, MAG, FLUX-CORED, STICK, LIFT TIG)</p>  <p>OPERATOR'S MANUAL</p> <p>YESWELDER®</p> <p>To help us serve you better, go to www.yeswelder.com</p>	<p>YesWelder YWM-160 IGBT Inverter Multi-Process Welder Operator's Manual</p> <p>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.</p>
<p>FIRSTESS DP200 IGBT INVERTER MULTI-PROCESS WELDER (DUAL PULSE MIG, FLUX-CORED, LIFT TIG, STICK)</p>  <p>OPERATOR'S MANUAL</p> <p>YESWELDER®</p> <p>To help us serve you better, go to www.yeswelder.com</p>	<p>YesWelder FIRSTESS DP200 IGBT Inverter Multi-Process Welder Operator's Manual</p> <p>Comprehensive operator's manual for the YesWelder FIRSTESS DP200 IGBT Inverter Multi-Process Welder, covering setup, operation, safety, and troubleshooting for Dual Pulse MIG, Flux-Cored, Lift TIG, and Stick welding.</p>