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› YESWELDER Stick Welder 165Amp Instruction Manual

YESWELDER ARC-165DS

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Model: ARC-165DS

1. PRODUCT OVERVIEW

The YESWELDER ARC-165DS is a powerful and versatile 165Amp digital display IGBT Inverter ARC Welder machine, designed for both professional and hobbyist use. It features dual voltage capability (110V/220V), built-in Hot Start, and Auto Adaptive Arc Force, ensuring stable and reliable arc starts and minimizing electrode sticking. Its portable design makes it ideal for various welding tasks.



Figure 1: YESWELDER ARC-165DS Stick Welder, showcasing its compact design and included accessories like electrode holder and ground clamp.

PRODUCT HIGHLIGHTS



Figure 2: Key features of the ARC-165DS, including Automatic Hot Start for easy arc ignition, Auto Adaptive Arc Force for stable welding, and advanced IGBT Technology for efficient power conversion.

2. SAFETY INFORMATION

Always prioritize safety when operating welding equipment. Wear appropriate Personal Protective Equipment (PPE) including a welding helmet, gloves, and protective clothing. Ensure proper ventilation in your work area to avoid inhaling fumes.

- **Automatic Shutdown:** The machine is equipped with automatic compensation for voltage fluctuation, over current protection, overload protection, and temperature control. It will automatically shut down if it gets too hot or is being overworked to prevent damage and ensure user safety.
- **Ventilation:** Ensure the machine's vents are clear and unobstructed to allow for proper airflow and prevent overheating.
- **Electrical Safety:** Always connect the welder to a properly grounded power source.

SAFETY FIRST

Protection you can depend on

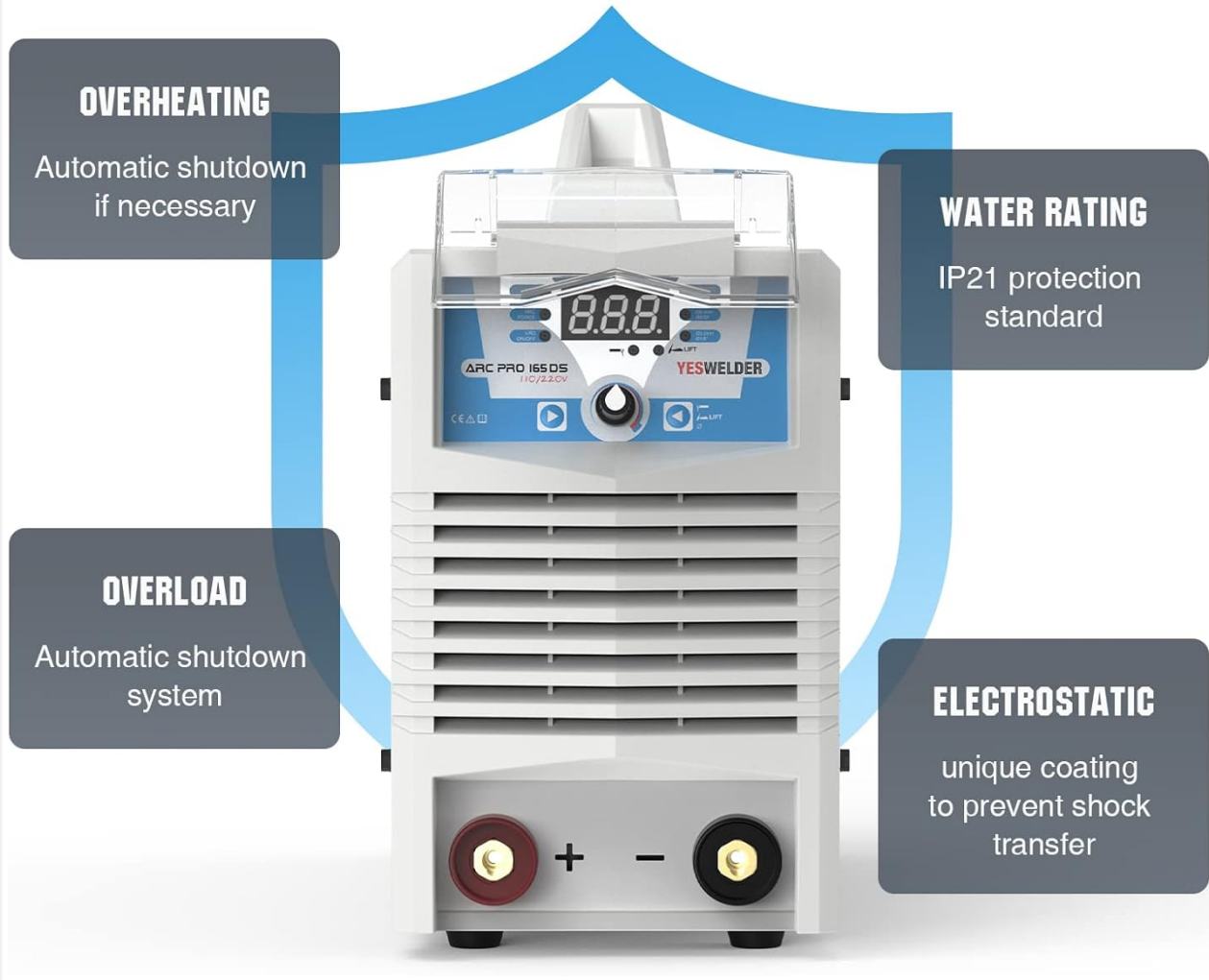


Figure 3: Overview of the welder's safety features, including automatic shutdown for overheating and overload, IP21 water rating, and unique electrostatic coating.

3. SETUP

3.1 Power Connection

The ARC-165DS supports dual voltage input (110V/220V). The machine automatically detects the input voltage. Use the appropriate power cord and adapter for your power supply.



Figure 4: Illustration of the dual voltage capability, showing the machine adapting to both 110V and 220V power inputs.

3.2 Connecting Welding Leads

The machine uses Dinse plug leads for quick and secure connections. Ensure the leads are fully inserted and twisted to lock them in place.

- Connect the electrode holder cable to the positive (+) terminal for DC Electrode Positive (DCEP) welding.
- Connect the ground clamp cable to the negative (-) terminal.
- For DC Electrode Negative (DCEN) welding, reverse the connections: electrode holder to negative (-) and ground clamp to positive (+).



Video 1: Official YESWELDER demonstration video showing the ARC Welder 165Amp in operation, including connection of leads and welding process. This video highlights the machine's capabilities and ease of use.

3.3 Control Panel Overview

The control panel features a bright digital display and intuitive controls for adjusting welding parameters.

- **Digital Display:** Shows the selected welding current (amperage).
- **Welding Current Adjustment:** Use the main dial to set the desired welding current.
- **Arc Force Adjustment:** Adjusts the arc force to minimize electrode sticking and improve arc stability.
- **Electrode Diameter Selection:** Allows you to select the diameter of your welding electrodes, and the machine will automatically suggest a recommended welding current. You can then fine-tune this current based on your welding habits.

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Community over **50,000** strong



Figure 5: Close-up of the welder's control panel, detailing the digital display, welding current adjustment dial, and buttons for arc force and electrode diameter selection.

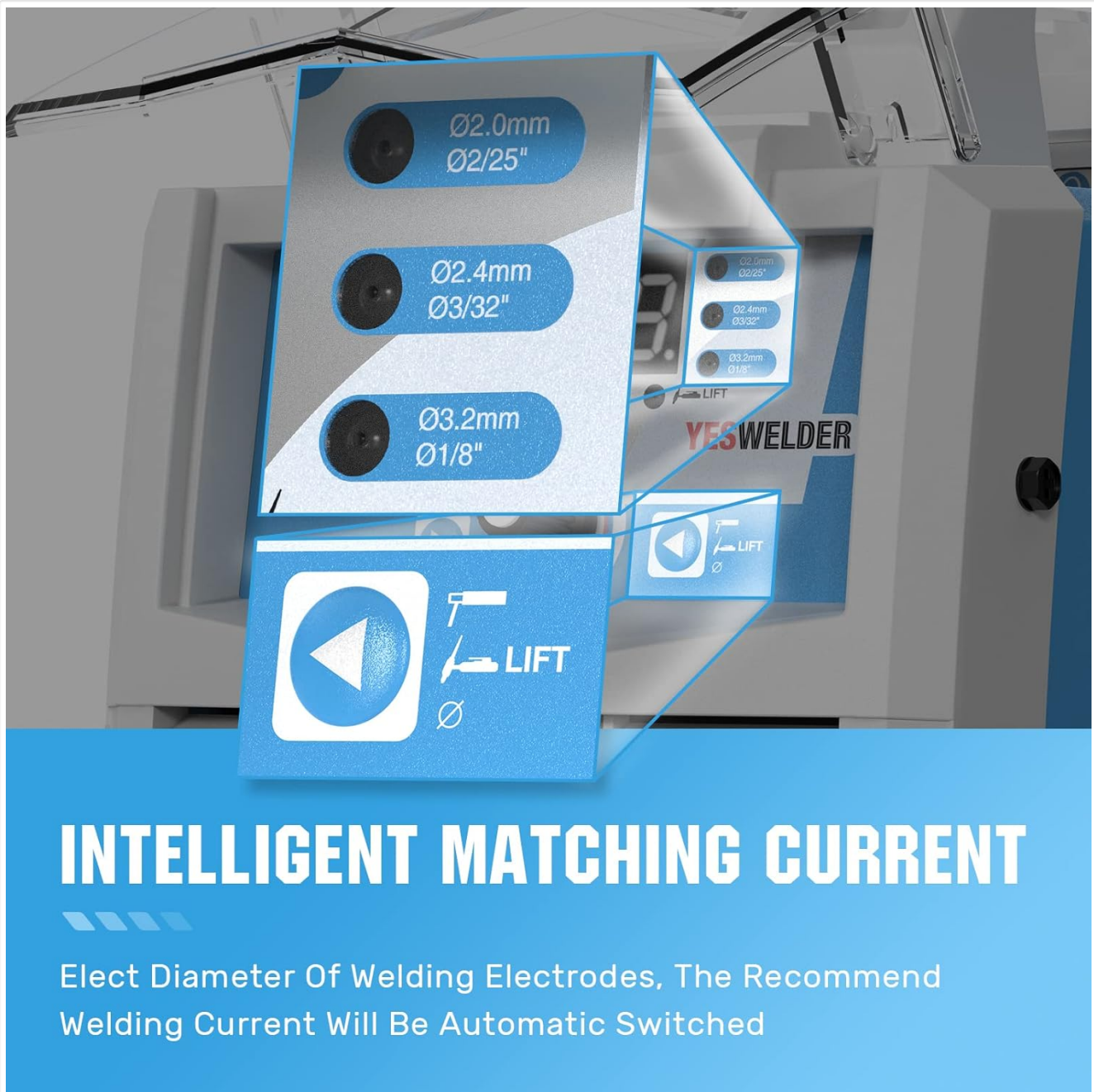


Figure 6: Visual representation of the intelligent matching current feature, which automatically suggests welding current based on selected electrode diameter (2.0mm, 2.4mm, 3.2mm).

4. OPERATING INSTRUCTIONS

4.1 Stick Welding (MMA)

The ARC-165DS is ideal for most 6010, 6011, 6013, and 7018 rods. Adjust the amperage and arc force according to the electrode type and material thickness. The Auto Adaptive Arc Force minimizes electrode sticking in the puddle without compromising arc stability or increasing spatter.

- Select the appropriate electrode diameter on the control panel.
- Adjust the welding current (amperage) as needed.
- Set the Arc Force to optimize arc stability.
- Strike the arc and maintain a consistent travel speed and arc length for optimal weld quality.

LARGE RANGE OF ELECTRODES

1.6 - 4.0 mm rod size

WIDE RANGE OF METALS

Flawless results indoor and outdoor with a range of qualities of steel types and cast iron



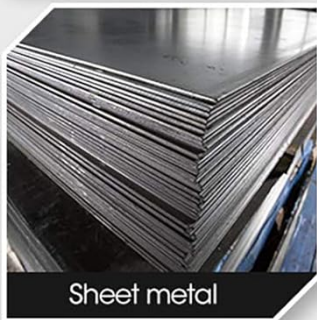
Cast iron



Mild steel



Stainless steel



Sheet metal



Square pipe



Metal cage

Figure 7: Demonstrates the wide range of electrodes (1.6-4.0mm rod size) and metals (cast iron, mild steel, stainless steel, sheet metal, square pipe, metal cage) that can be welded with this machine.

4.2 TIG Welding (Lift TIG)

The ARC-165DS is capable of Lift TIG welding with the proper equipment (TIG torch, gas regulator, and shielding gas, sold separately). Lift TIG provides a clean arc start without high-frequency interference.

- Ensure the machine is set to Lift TIG mode (if available on your model, refer to the control panel).
- Connect the TIG torch and ground clamp as per TIG welding polarity requirements.
- Gently touch the tungsten electrode to the workpiece and lift slightly to initiate the arc.

5. MAINTENANCE

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

- **Cleaning:** Regularly clean the machine's exterior, especially the ventilation grilles, to prevent dust and debris buildup. Use the provided wire brush to clean weld spatter from your workpiece and electrode holder.
- **Cable Inspection:** Periodically inspect all cables, including the power cord, electrode holder cable, and ground clamp cable, for any signs of damage, fraying, or loose connections. Replace damaged cables immediately.
- **Storage:** Store the welder in a dry, clean environment away from excessive dust and moisture when not in use.

High Ventilation System

COOLEST AIR FLOW



INDUSTRIAL HEAT SINK



ENDLESS WELDING

HIGH PERFORMANCE FAN

Dual ball bearing design ensures consistent cooling



HIGH RPM



QUIET



**30,000
MTPH HOURS**



Figure 8: Details the high ventilation system, including an industrial heat sink and a high-performance fan with dual ball bearing design for consistent cooling and extended operational hours.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Welder does not power on.	No power supply; loose connection; internal fault.	Check power outlet and cable connections. Ensure power switch is ON.
Arc is unstable or difficult to start.	Incorrect amperage/arc force setting; damp electrodes; poor ground connection.	Adjust amperage and arc force. Use dry electrodes. Ensure ground clamp has good contact.
Machine overheats and shuts down.	Blocked ventilation; exceeding duty cycle; high ambient temperature.	Clear vents. Allow machine to cool down. Reduce welding time or amperage.

7. SPECIFICATIONS

Model: ARC-165DS

Input Voltage: 110V/220V Dual Voltage

Amperage: Up to 165 Amp

Technology: IGBT Inverter

Features: Hot Start, Auto Adaptive Arc Force, Digital Display

Weight: Approximately 11 pounds (5 kg)

Dimensions: Approximately 18 x 13.89 x 7.93 inches (45.7 x 35.3 x 20.1 cm)

Duty Cycle (110V @ 120 Amps): 40%

Duty Cycle (220V @ 160 Amps): 40%


600+
Thousands
 600,000+ Our Fans Worldwide


10+
Years of Innovation
 Dedicated to Welding for over 10 Years

In Research & Development,
 Manufacturing, Sales, and Fulfillment,
 customers determine our direction.
 What customers need is our first
 motivation —UP TO YOU.

Figure 9: Visual representation of the welder's dimensions and included accessories: 10ft Earth Clamp, Wire Brush, 110V-220V Adapter, and 10ft Electrode Holder.

8. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact YESWELDER customer service directly. Refer to the product packaging or the official YESWELDER website for the most up-to-date contact details.
Official Website: www.yeswelder.com