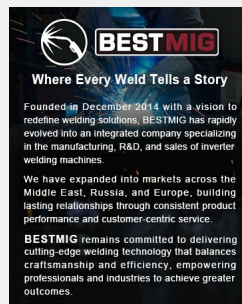


BESTMIG. MIG 135A Welder



BESTMIG 135A MIG Welder

USER MANUAL

1. Introduction

Thank you for choosing the BESTMIG 135A 3-in-1 Welding Machine. This manual provides essential information for the safe and efficient operation, setup, maintenance, and troubleshooting of your new welder. Designed for versatility, this portable IGBT Inverter machine supports MIG (Flux Core), Lift TIG, and Stick welding, making it suitable for a wide range of applications from home DIY projects to professional use. Please read this manual thoroughly before operating the machine to ensure proper usage and to maximize its lifespan.

2. Safety Instructions

Welding can be hazardous. It is crucial to follow all safety precautions to prevent injury or damage.

- **Electric Shock:** Always ensure the machine is properly grounded. Do not touch live electrical parts. Work in a dry area and wear dry gloves.
- **Fumes and Gases:** Welding fumes and gases can be hazardous to your health. Work in a well-ventilated area or use local exhaust ventilation.
- **Arc Rays:** Arc rays can burn eyes and skin. Always wear an approved welding helmet with appropriate shade filter and protective clothing.
- **Fire and Explosion:** Welding sparks and hot metal can cause fires. Keep flammable materials away from the welding area. Have a fire extinguisher readily available.
- **Burns:** Hot metal and equipment can cause severe burns. Wear protective gloves and clothing. Allow welded materials to cool before handling.

- **Personal Protective Equipment (PPE):** Always wear a welding helmet, welding gloves, protective clothing, and safety shoes.
- **Machine Placement:** Place the welder on a stable, level surface. Ensure adequate airflow around the machine to prevent overheating.

3. Package Contents

Upon unpacking, verify that all items listed below are present and undamaged.



Image: The BESTMIG 135A Welder with all included accessories, such as the welding machine, wire brush, flux core welding wire, 14AK torch with cable, electrode holder with cable, earth clamp with cable, welding gloves, auto darkening welding glasses, and welding helmet.

1. BESTMIG Welding Machine (MIG 135A Welder)
2. Wire Brush
3. Flux Core Welding Wire
4. 14AK Torch With Cable (MIG Gun)

5. Electrode Holder With Cable (for Stick Welding)
6. Earth Clamp With Cable
7. Welding Gloves
8. Auto Darkening Welding Glasses
9. Welding Helmet

4. Product Overview

The BESTMIG 135A is a compact and powerful 3-in-1 welding machine.



Image: Front view of the BESTMIG 135A Welder, showing the control panel, output terminals, and ventilation grilles.

4.1. Key Features

- **3-in-1 Functionality:** Supports MIG (Flux Core), Lift TIG, and Stick (MMA) welding.
- **IGBT Inverter Technology:** Provides stable arc, high efficiency, and precise control.

- **Digital Control & Display:** Intuitive full-color LED display for real-time monitoring and adjustment of welding parameters.
- **Automatic Parameter Adjustment:** Simplifies operation for beginners by automatically adjusting settings based on current.
- **Portable Design:** Lightweight (approx. 10.71 lbs) with a convenient carry handle for easy transport.
- **Comprehensive Accessory Kit:** Includes essential accessories like an auto-darkening helmet/glasses and welding gloves.

4.2. Welding Modes Explained



Image: Visual representation of the three welding modes: Flux MIG, Lift TIG, and MMA/ARC (Stick welding), demonstrating the different torch and electrode setups.

- **MIG (Flux Core) Welding:** Uses a continuously fed wire electrode and a self-shielding flux core wire, eliminating the need for external shielding gas. Ideal for outdoor use and general fabrication.
- **Lift TIG Welding:** Provides precise, high-quality welds, especially on thinner materials. Requires a TIG torch (not included as standard for this model, but compatible) and external shielding gas (Argon). The arc is initiated by lightly touching the tungsten electrode to the workpiece and then lifting it.
- **Stick (MMA) Welding:** Uses a consumable electrode coated with flux. Suitable for welding thicker materials and in outdoor conditions.

5. Setup

5.1. Power Connection

The BESTMIG 135A operates on a 110V AC power supply.

- Ensure the welder's power switch is in the "OFF" position.
- Connect the power cord to a suitable 110V grounded outlet. Ensure the circuit can handle the welder's power requirements.

5.2. Wire Spool Installation (for MIG Flux Core)



Image: Detailed diagram illustrating the correct installation of the flux core wire spool, including the spool lock, spring, spool spacer, spool, and spindle, and how to feed the wire through the feeding device for 0.30" (0.8mm) and 0.40" (1.0mm) wire sizes.

1. Open the side panel of the welder to access the wire feeder compartment.
2. Place the flux core wire spool onto the spindle, ensuring it rotates freely.
3. Secure the spool with the spool lock and spring.
4. Feed the wire through the wire guide and into the drive roller mechanism. Ensure the wire is seated correctly in the groove corresponding to its diameter (0.030" or 0.040").
5. Close the drive roller tension arm. Adjust tension as needed; it should be firm enough to feed the wire without slipping but not so tight as to deform the wire.
6. Extend the MIG gun cable and press the trigger to feed the wire through the gun liner until it exits the contact tip.

5.3. Connecting Welding Accessories

- **Earth Clamp:** Connect the earth clamp cable to the negative (-) output terminal on the front panel. Securely attach the clamp to the workpiece or a clean, bare metal part of the welding table.
- **MIG Gun (14AK Torch):** Connect the MIG gun cable to the positive (+) output terminal. Ensure it is securely fastened.
- **Electrode Holder (for Stick Welding):** For Stick welding, connect the electrode holder cable to the positive (+) output terminal and the earth clamp to the negative (-) output terminal.
- **Lift TIG Torch (Optional):** If using a Lift TIG torch (not included), connect it to the negative (-) output terminal and the earth clamp to the positive (+) output terminal.

6. Operating Instructions

Before operating, ensure you are wearing all necessary Personal Protective Equipment (PPE), including the auto-darkening welding helmet/glasses and welding gloves.

APPLY TO 0.30" (0.8 MM) & 0.40"(1.0 MM) FLUX CORE WIRE



Image: A person wearing an auto-darkening welding helmet and gloves, operating the BESTMIG 135A welder to join metal pieces, demonstrating proper safety attire during welding.

6.1. Selecting Welding Mode

Turn on the welder. Use the MODE selection button on the control panel to cycle through MIG (Flux), Lift TIG, and MMA (Stick) modes. The digital display will indicate the selected mode.

6.2. MIG (Flux Core) Welding

- Select "FLUX" mode.
- The machine's digital technology will automatically adjust parameters based on your current settings. You can fine-tune voltage and wire feed speed using the control knob if needed.
- Ensure the workpiece is clean and free of rust, paint, or oil.
- Position the MIG gun at the correct angle (typically 10-15 degrees push angle for flux core).
- Press the trigger to initiate the arc and begin welding. Maintain a consistent travel speed and arc length for optimal results.

6.3. Lift TIG Welding

- Select "LIFT TIG" mode.
- Connect a compatible DC Lift TIG torch (not included) and an Argon gas cylinder with regulator.
- Set the desired amperage on the control panel.
- To start the arc, lightly touch the tungsten electrode to the workpiece, then lift it slightly (approx. 1/16" to 1/8"). The arc will ignite.
- Maintain a short arc length and consistent travel speed. Use filler rod as needed.

6.4. Stick (MMA) Welding

- Select "MMA" mode.
- Insert the appropriate electrode into the electrode holder.
- Set the desired amperage based on the electrode type and material thickness.
- Strike the arc by lightly scratching the electrode against the workpiece, then quickly lifting it to establish the arc.
- Maintain a consistent arc length and travel speed.

7. Maintenance

Regular maintenance ensures the longevity and optimal performance of your welding machine. Always disconnect the power before performing any maintenance.

- **Cleaning:** Periodically clean the inside of the machine using dry, compressed air to remove dust and metal particles. Clean the exterior with a soft, dry cloth.
- **Cable and Connection Inspection:** Regularly inspect all cables, connections, and the MIG gun for wear, damage, or loose connections. Replace damaged parts immediately.
- **Wire Feeder Maintenance:** Check the drive rollers for wear and ensure they are clean. Clean the MIG gun liner periodically to prevent wire feeding issues.
- **Storage:** Store the welder in a clean, dry environment, away from excessive dust, moisture, and extreme temperatures.

8. Troubleshooting

This section provides solutions to common operational issues. For problems not listed here, contact customer support.

Problem	Possible Cause	Solution
Welder does not power on.	No power supply; loose power cord; tripped circuit breaker.	Check power outlet, ensure cord is securely plugged in, reset circuit breaker.
No arc or weak arc.	Poor ground connection; incorrect settings; worn contact tip/electrode.	Ensure ground clamp is on clean metal; adjust settings; replace worn parts.
Wire feeding issues (MIG).	Incorrect drive roller tension; clogged liner; wrong size contact tip.	Adjust drive roller tension; clean liner; use correct contact tip for wire size.
Excessive spatter.	Incorrect voltage/wire speed; improper stickout; dirty workpiece.	Adjust settings; maintain proper stickout; clean workpiece.
Overheating protection activated.	Exceeded duty cycle; poor ventilation.	Allow machine to cool down; ensure adequate airflow around the welder.

9. Specifications

Technical specifications for the BESTMIG 135A Welder.

Feature	Detail
Model	MIG 135A Welder
Manufacturer	BESTMIG
Input Voltage	110V AC
Output Current	Up to 135A (True Current)
Welding Processes	MIG (Flux Core), Lift TIG, Stick (MMA)
Compatible Wire Size (MIG)	0.030" (0.8mm) to 0.040" (1.0mm) Flux-Cored Wire
Max Material Thickness	Up to 1/8 inch
Dimensions (L x W x H)	14.8 x 9.8 x 6.6 inches
Item Weight	10.71 pounds
Color	Red Black

10. Warranty and Support

For detailed warranty information, including terms, conditions, and registration, please refer to the manufacturer's official website or the warranty card included with your product.

Should you require technical assistance, replacement parts, or have any questions regarding your BESTMIG 135A Welder, please contact BESTMIG customer support through their official channels.

Note: No official seller videos were found in the provided product data to embed in this manual.