ANDELI MIG-135PLUS

ANDELI MIG-135PLUS 4-in-1 Welder Instruction Manual

Model: MIG-135PLUS

1. Important Safety Information

Read and understand all safety warnings and instructions before operating this welding machine. Failure to follow these instructions may result in electric shock, fire, serious injury, or death.

- **Electric Shock Can Kill:** Do not touch live electrical parts. Wear dry welding gloves and protective clothing. Insulate yourself from the work and ground.
- **Fumes and Gases Can Be Hazardous:** Keep your head out of the fumes. Use ventilation or exhaust to remove fumes from the breathing zone.
- **Arc Rays Can Burn Eyes and Skin:** Wear a welding helmet with a proper shade filter. Wear protective clothing to protect skin.
- **Fire and Explosion Hazard:** Remove all flammables from the welding area. Have a fire extinguisher nearby.
- **Hot Parts Can Cause Severe Burns:** Allow the welding gun and workpiece to cool before touching.
- **Magnetic Fields:** Pacemaker wearers should consult their doctor before operating.

2. Product Overview

The ANDELI MIG-135PLUS is a versatile 4-in-1 welding machine designed for various welding tasks. It supports Flux MIG (gasless), TIG Lift, and Electrode (MMA) welding modes. Featuring IGBT inverter technology, a large LED display, and Smart Synergic Control, this machine offers precision and ease of use for both beginners and experienced welders.

Key Features

- **4-in-1 Welding Modes:** Flux MIG (gasless), TIG Lift, and Electrode (MMA) for diverse applications.
- **135A High Power Output:** Capable of welding mild steel up to 2/5" thick.

- **Dual Voltage (220V):** Adapts to various power sources for home or professional use.
- **4.1-inch LED Display:** Provides clear, real-time welding parameters without removing your helmet.
- **Smart Synergic Control:** Automatically optimizes voltage and wire feed speed based on amperage or wire diameter settings.
- **IGBT Inverter Technology:** Ensures stable performance and efficient power conversion.
- **Advanced Protection System:** Includes compensation for voltage fluctuations, overcurrent, overload, overheating, and overvoltage protection.

LED Display

The 4.1-inch LED display provides clear visibility of welding parameters. Its reinforced transparent anti-impact shield protects it from sparks and debris, ensuring durability in demanding environments.

Figure 2.1: Large LED Display for real-time data visibility.

IGBT Inverter Technology

The integrated IGBT inverter technology ensures consistent stability and efficient power delivery, contributing to precise and reliable welding performance across all modes.

Figure 2.2: IGBT Inverter Technology for stable and efficient welding.

3. Components Included

The following components are typically included with your ANDELI MIG-135PLUS welder:

- ANDELI MIG-135 Plus Welder (1 unit)
- Electrode Holder (10ft) (1 unit)
- Welding Torch (10ft) (1 unit)
- Gasless Wire (1 unit)

Note: TIG Lift torch is sold separately.

4. Setup

Before operating the welder, ensure all connections are secure and the work area is safe and well-ventilated.

4.1 Power Connection

1. Ensure the welder's power switch is in the OFF position.
2. Connect the power cord to a suitable 220V power outlet. The machine is designed for dual voltage operation.
3. Verify the power source meets the welder's requirements.

4.2 Connecting Welding Accessories

1. **Electrode Holder (MMA Welding):** Connect the electrode holder cable to the positive (+) terminal and the

ground clamp cable to the negative (-) terminal on the front panel.

2. **MIG Torch (Flux MIG Welding):** Connect the MIG torch cable to the designated MIG connector. Ensure the gasless wire is properly loaded into the wire feeder.
3. **TIG Torch (TIG Lift Welding):** If using a TIG Lift torch (sold separately), connect it to the appropriate terminal. The ground clamp should be connected to the negative (-) terminal.

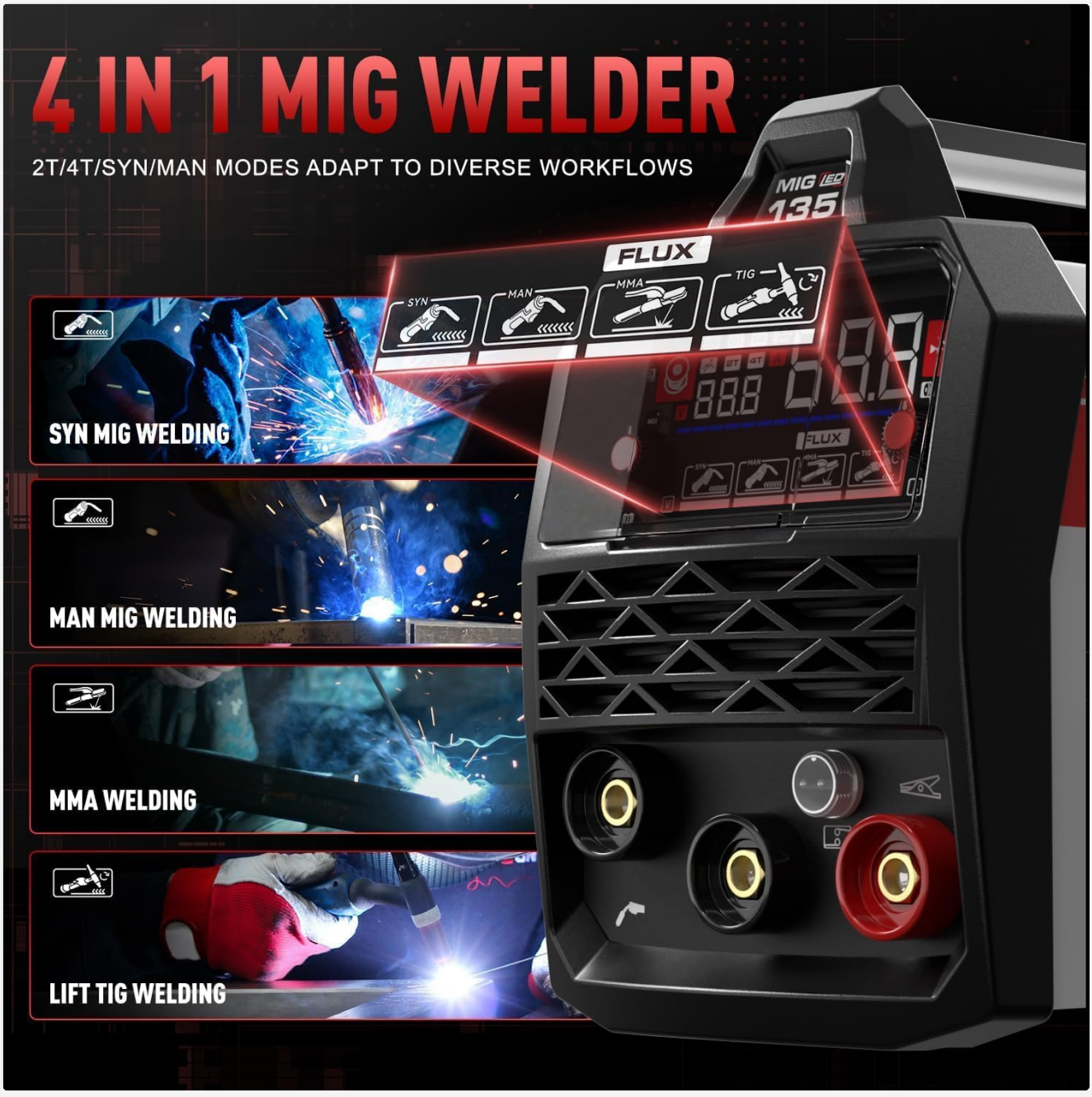

Figure 4.1: Front panel connections for various welding modes.

5. Operating Instructions

The ANDELI MIG-135PLUS offers multiple welding modes and control options. Familiarize yourself with each setting before beginning your welding task.

5.1 Selecting Welding Mode

Use the mode selection button on the control panel to cycle through the available welding processes: Flux MIG, MMA, and TIG Lift. The selected mode will be indicated on the LED display.

Figure 5.1: Overview of 4-in-1 welding modes.

5.2 Control Modes: Synergic vs. Manual

The welder features two control modes to suit different skill levels and project requirements:

- **Automatic Mode (Synergic Control):** Recommended for beginners. Adjusting the amperage or wire diameter automatically optimizes voltage and wire feed speed.
- **Adjustment Mode (Manual Control):** Recommended for skilled workers. Allows for separate and precise adjustment of current and voltage.

Figure 5.2: Automatic and Adjustment Control Modes.

5.3 2T/4T Settings

These settings control the trigger operation of the welding torch:

- **2T (Two-Touch):** Press and hold the switch to dispense welding wire; release the switch to stop. Suitable for short welds.
- **4T (Four-Touch):** Press the switch once to automatically continue dispensing welding wire; press it again to stop. Ideal for longer welds, reducing hand fatigue.

Figure 5.3: Explanation of 2T and 4T trigger modes.

Figure 5.4: Function settings including 2T, 4T, and Inductive mode.

5.4 Inductive Mode

The inductive mode allows for adjustment of arc softness and hardness, providing greater control over the weld bead appearance and penetration.

6. Maintenance

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

- **Cleaning:** Periodically clean the internal components with dry, compressed air to remove dust and metal particles. Ensure the machine is unplugged before cleaning.
- **Cable Inspection:** Regularly inspect all welding cables, torch, and electrode holder for damage, cuts, or loose connections. Replace damaged components immediately.
- **Wire Feeder:** Keep the wire feeder mechanism clean and free of debris to ensure smooth wire feeding.
- **Storage:** Store the welder in a dry, clean environment when not in use.

7. Troubleshooting

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

Problem	Possible Cause	Solution
Welder does not power on	No power supply; loose power cord; internal fuse blown.	Check power outlet and cord. Ensure power switch is ON. Contact service if fuse is suspected.
No arc	Poor ground connection; incorrect welding mode; damaged torch/electrode holder.	Ensure ground clamp is securely attached to clean metal. Verify correct mode. Inspect and replace damaged parts.
Wire feed issues (MIG)	Incorrect wire tension; clogged liner; wrong drive roller size; tangled wire.	Adjust wire tension. Clean or replace liner. Use correct drive rollers. Untangle wire spool.
Overheat protection activated	Exceeded duty cycle; poor ventilation; blocked air vents.	Allow machine to cool down. Ensure adequate ventilation. Clear any obstructions from air vents.

8. Specifications

Feature	Detail
Manufacturer	ANDELI
Model Number	MIG-135PLUS
Item Code	MIG-135PLUS
Power Type	AC
Input Voltage	220V (Dual Voltage)
Max Output Current	135A
Dimensions (Package)	40 x 32 x 29.5 cm
Item Weight	4.13 kg
Batteries Required	No
Included Components	Welder, Electrode Holder, Welding Torch, Gasless Wire

9. Warranty and Support

For warranty information, technical support, or service inquiries, please contact ANDELI customer service directly. Refer to the product packaging or the official ANDELI website for contact details.