KAIWEETS KWS-103

KAIWEETS KWS-103 Self-Adjusting 3-in-1 Wire Stripper Instruction Manual

Model: KWS-103

1. Introduction

The KAIWEETS KWS-103 is a versatile 3-in-1 tool designed for electrical work, combining wire stripping, cutting, and crimping functionalities. Its self-adjusting mechanism simplifies operation across a range of wire gauges, making it suitable for both professional and residential applications.

Image 1.1: The KAIWEETS KWS-103 Self-Adjusting 3-in-1 Wire Stripper, showcasing its design and primary functions.

2. Safety Information

Always adhere to safety guidelines when using hand tools to prevent injury. This tool is designed for specific electrical tasks; improper use can lead to damage or harm.

- Always wear appropriate personal protective equipment, including safety glasses, to protect against flying debris.
- Ensure the power supply to any electrical circuit is disconnected before working on wires.
- Keep hands and fingers clear of moving parts and cutting blades during operation.
- Do not use the tool for purposes other than its intended design (stripping, cutting, crimping electrical wires).
- Store the tool in a dry, secure place, out of reach of children.
- Inspect the tool for damage before each use. Do not use if any part is broken or compromised.

3. Product Overview and Components

The KWS-103 features a robust design with clearly identifiable components for its multi-functional capabilities.

Image 3.1: Key components of the KWS-103, including stripping strength setting, stripping length adjustment, wire cutter, and crimping sections for insulated and non-insulated terminals.

Key Features:

- **Self-Adjusting Stripping Jaws:** Automatically adapts to wire sizes from 10 to 24 AWG (0.2-5.27 mm²).
- **Wire Cutter:** Integrated blade for cutting copper, aluminum, sheathed core wire, and cables.
- **Crimping Tool:** Dedicated sections for crimping insulated terminals (10-22 AWG / 0.5-6 mm²) and non-insulated terminals (12-10 AWG / 4-6 mm², 16-14 AWG / 1.5-2.5 mm², 22-18 AWG / 0.5-1 mm²).
- **Stripping Length Guide:** Adjustable guide for consistent strip lengths.
- **Stripping Strength Adjustment:** Knob to fine-tune stripping force for different insulation types.
- **TPR Handle:** Ergonomically designed thermoplastic rubber handles for enhanced comfort and reduced hand fatigue.

4. Operating Instructions

4.1 Wire Stripping

The self-adjusting mechanism simplifies the stripping process. No manual gauge selection is required for standard wires.

1. **Adjust Stripping Length:** Slide the red length guide to the desired stripping length. This ensures consistent results.

Image 4.1.1: The adjustable length guide for precise wire stripping.

2. **Insert Wire:** Place the wire into the stripping jaws, ensuring the end of the insulation aligns with the length guide.
3. **Squeeze Handles:** Firmly squeeze the handles together. The jaws will grip the wire, cut the insulation, and pull it away, exposing the conductor.

Image 4.1.2: The stripping mechanism in action, demonstrating its ability to strip multiple wires simultaneously.

4. **Release Handles:** Release the handles to free the stripped wire.
5. **Adjust Stripping Strength (if needed):** For very thin or thick insulation, or if the wire is damaged during stripping, adjust the small knob near the stripping jaws. Turn clockwise to increase grip strength, counter-clockwise to decrease.

Image 4.1.3: The stripping strength adjustment knob, used for fine-tuning the tool's grip on various insulation types.

4.2 Wire Cutting

The integrated cutter is suitable for various types of electrical wires.

1. **Position Wire:** Place the wire to be cut into the designated cutting blade area located between the handles.
2. **Squeeze Handles:** Apply firm pressure to the handles to cut through the wire.

4.3 Wire Crimping

The tool includes specific crimping dies for insulated and non-insulated terminals.

1. **Select Die:** Identify the correct crimping die based on the terminal type (insulated or non-insulated) and its AWG/mm² size. The sizes are marked on the tool.
2. **Insert Terminal:** Place the terminal into the selected crimping die.
3. **Insert Wire:** Insert the stripped wire into the terminal.
4. **Squeeze Handles:** Squeeze the handles completely until the crimp is formed. Ensure a secure connection.

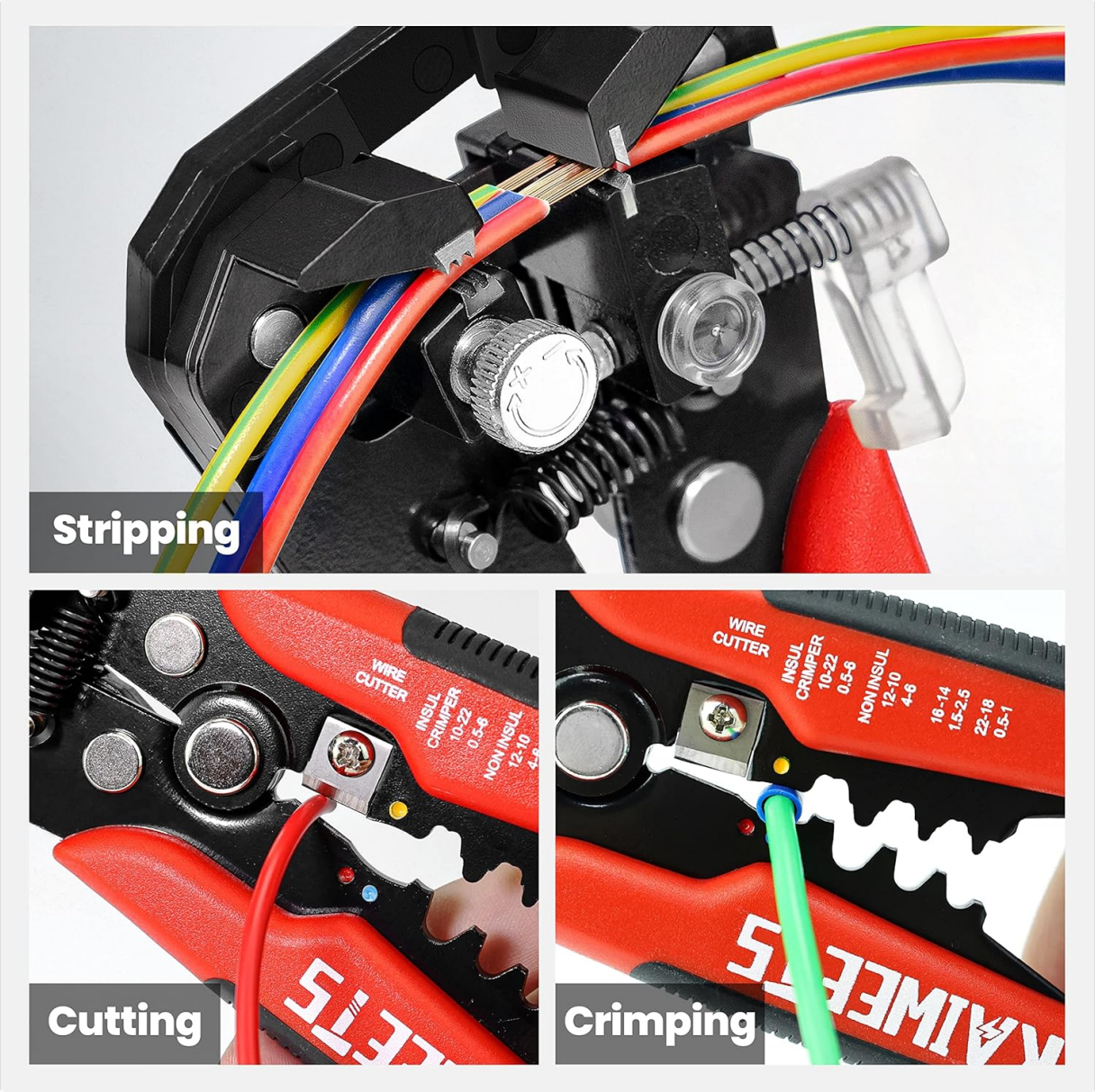


Image 4.3.1: A visual representation of the stripping, cutting, and crimping functions of the KWS-103.

Image 4.3.2: Detailed view of the crimping process, showing a wire being securely attached to a terminal.

5. Maintenance

Proper maintenance ensures the longevity and optimal performance of your KAIWEETS KWS-103 wire stripper.

- **Cleaning:** After each use, wipe the tool clean with a dry cloth to remove any wire fragments, insulation residue, or dirt.
- **Lubrication:** Periodically apply a small amount of light machine oil to the pivot points and moving parts to ensure smooth operation.
- **Storage:** Store the tool in a dry environment to prevent rust. Keep the jaws closed to protect the cutting edges.
- **Inspection:** Regularly check the blades and jaws for wear, damage, or misalignment. Replace the tool if significant damage is observed.

6. Troubleshooting

If you encounter issues with your KWS-103, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Wire not stripping cleanly or insulation tearing.	Incorrect stripping strength setting; dull blades; wire not properly seated.	Adjust the stripping strength knob. Ensure wire is fully inserted. Inspect blades for wear.
Difficulty cutting wire.	Wire gauge too large for cutter; dull blade.	Ensure wire is within the tool's capacity. Inspect cutting blade for damage.
Crimped terminal is loose.	Incorrect crimping die used; insufficient pressure; terminal or wire gauge mismatch.	Verify correct die selection for terminal and wire. Apply full pressure. Ensure wire is stripped to the correct length and fully inserted into the terminal.
Handles are stiff or squeaky.	Lack of lubrication; dirt accumulation.	Clean the tool and apply light machine oil to pivot points.

7. Specifications

Technical details for the KAIWEETS KWS-103 wire stripper.

- **Model:** KWS-103
- **Material:** Alloy Steel
- **Handle Material:** Thermoplastic Elastomer (TPE)
- **Product Dimensions:** 8.07"L x 4.13"W
- **Item Weight:** 320 Grams (11.3 ounces)
- **Wire Stripping Capacity:** 10-24 AWG (0.2-5.27 mm^2)
- **Crimping Capacity (Insulated Terminals):** 10-22 AWG (0.5-6 mm^2)
- **Crimping Capacity (Non-Insulated Terminals):** 12-10 AWG (4-6 mm^2), 16-14 AWG (1.5-2.5 mm^2), 22-18 AWG (0.5-1 mm^2)
- **Usage:** Electrical repair and maintenance, Residential use, Professional use

Image 7.1: Dimensional overview of the KAIWEETS KWS-103, showing its length, width, and thickness.

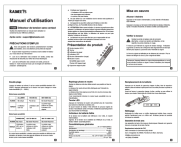
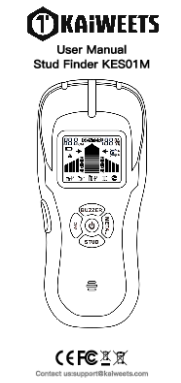
8. Warranty and Support

KAIWEETS is committed to product quality and customer satisfaction.

- **Customer Service:** KAIWEETS provides 3-year customer service for the KWS-103 wire stripper.
- **Technical Support:** Lifetime technical support is available for every KAIWEETS wire stripper sold.
- **Response Time:** KAIWEETS aims to provide solutions to customer inquiries within 24 hours.

For any questions or assistance, please contact KAIWEETS customer support through their official channels or the retailer where the product was purchased.

Related Documents - KWS-103

	VT200 Non-Contact Voltage Detector User Manual User manual for the Kaiweets VT200 non-contact voltage detector, covering safety precautions, product overview, operation, battery replacement, and general specifications.
	KAIWEETS KM601 Smart Digital Multimeter User Manual Comprehensive user manual for the KAIWEETS KM601 True RMS Smart Digital Multimeter. Learn about its features, operation, safety guidelines, and specifications.
	KAIWEETS KES01M Stud Finder User Manual User manual for the KAIWEETS KES01M Stud Finder, detailing its modes for detecting studs, metal, and AC wires, along with operation, calibration, and safety instructions.
	Kaiweets KM601 Smart Digital Multimeter User Manual Comprehensive user manual for the Kaiweets KM601 Smart Digital Multimeter, covering safety information, product features, measurement modes (SMART and MANUAL), terminal descriptions, maintenance, specifications, and warranty.
	KAIWEETS HT206D True-RMS Digital Clamp Meter User Manual Comprehensive user manual for the KAIWEETS HT206D True-RMS Digital Clamp Meter, covering safety, product overview, functions, operating instructions, measurement procedures, specifications, accuracy, maintenance, and warranty information.
	KAIWEETS HT118A True-RMS Digital Multimeter: User Manual and Specifications Detailed user manual for the KAIWEETS HT118A True-RMS Digital Multimeter. Includes safety instructions, multimeter features, measurement operations, general and accuracy specifications, and maintenance guidelines.