

KONNWEI KW218

KONNWEI KW218 12V Automotive Battery Tester User Manual

Model: KW218

1. INTRODUCTION

The KONNWEI KW218 is a professional 12V automotive battery tester designed to accurately assess the health of various battery types, including regular flooded, AGM flat plate, AGM spiral, GEL, EFB, and Lithium batteries. It provides comprehensive analysis of battery health, cranking performance, and charging system efficiency. This manual provides detailed instructions for the proper use and maintenance of your KW218 battery tester.

2. SAFETY INFORMATION

Always observe the following safety precautions when using the KW218 battery tester:

- Wear eye protection and protective clothing when working near batteries.
- Ensure the vehicle is in a well-ventilated area.
- Avoid sparks or flames near the battery, as batteries can produce explosive gases.
- Do not touch battery terminals or cables with bare hands while testing.
- Keep the tester dry and clean. Do not expose it to moisture or extreme temperatures.
- If battery acid comes into contact with skin or eyes, flush immediately with water and seek medical attention.

3. PACKAGE CONTENTS

Upon opening your KONNWEI KW218 package, you should find the following items:

- KONNWEI KW218 Car Battery Tester unit with integrated test leads and clamps.

4. PRODUCT OVERVIEW AND COMPONENTS

The KW218 features a user-friendly interface and robust design for reliable performance.



Figure 4.1: KONNWEI KW218 Battery Tester showing its main display and robust clamps.

Key components include:

- **2.4-inch HD Screen:** Provides clear and accurate presentation of test results.
- **Navigation Buttons:** 'EXIT' and 'ENTER' buttons, along with directional arrows, for menu navigation.
- **Pure Copper Clips:** Designed for strong conductivity and secure connection to battery terminals.
- **Integrated Line Machine Design:** Ensures a stable interface and durable, break-resistant wiring.
- **ABS Industrial Grade Material:** Durable casing that resists fingerprints and stains.

Excellent Details To Meet Customer Needs



Figure 4.2: Detailed view of the KW218's screen, copper clips, and integrated cable design.

5. SETUP AND CONNECTION

To begin testing, follow these steps to connect the KW218 to your vehicle's battery:

1. Ensure the vehicle's ignition is off and all accessories are turned off.
2. Clean the battery terminals to ensure good contact.
3. Connect the **red positive (+) clamp** of the tester to the **positive (+) terminal** of the battery.
4. Connect the **black negative (-) clamp** of the tester to the **negative (-) terminal** of the battery.
5. The tester will power on automatically once connected correctly.

Non-professional Personnel Can also Operate



Figure 5.1: Proper connection of the KW218 to a vehicle battery.

6. OPERATING INSTRUCTIONS

The KW218 offers several testing modes to diagnose your battery and charging system.

6.1. Battery Test

This function tests the overall health of the battery, including its State of Health (SOH), State of Charge (SOC), internal resistance, and voltage.

1. From the main menu, select 'Battery Test' using the arrow buttons and press 'ENTER'.
2. Follow the on-screen prompts to input battery type (e.g., Flooded, AGM) and CCA rating.
3. The tester will display results such as SOH, SOC, CCA value, voltage, and a general status (e.g., 'GOOD BATTERY', 'REPLACE').

6.2. Cranking Test

The Cranking Test evaluates the vehicle's starting system, including the starter motor. It measures the cranking voltage and time.

1. From the main menu, select 'Cranking Test' and press 'ENTER'.
2. Follow the on-screen instructions to start the vehicle.
3. The tester will record the minimum cranking voltage and the cranking time, providing a 'CRANKING NORMAL' or 'CRANKING ABNORMAL' status.

6.3. Charging Test

This test assesses the vehicle's charging system, including the alternator and regulator, by measuring the loaded and unloaded voltage, and ripple voltage.

1. From the main menu, select 'Charging Test' and press 'ENTER'.
2. Follow the on-screen instructions, which typically involve starting the engine and revving it to a specified RPM.
3. The tester will display results such as loaded voltage, unloaded voltage, ripple voltage, and a 'CHARGING NORMAL' or 'CHARGING ABNORMAL' status.

7. SUPPORTED BATTERY TYPES AND STANDARDS

The KW218 is compatible with a wide range of 6V and 12V batteries and supports various testing standards.

Support Multiple Battery Types

Regular flooded, AGM flat plate, AGM spiral, GEL, EFB, Lithium battery



Figure 7.1: The KW218 supports multiple battery types.

Supported Battery Types:

- Regular Flooded
- AGM Flat Plate
- AGM Spiral
- GEL
- EFB
- Lithium battery

Supported Measurement Standards and Test Ranges:

Covers 9 Battery Standards



Measure Standard	Test Range
Cold cranking Amps(CCA)	100-2000CCA
International Electrotechnical Commission(IEC)	100-1400CCA
Europe-Norm(EN)	100-2000CCA
Deutsche Industrie-Norm(DIN)	100-1400CCA
Cranking Amps(CA)	100-2000CCA
Battery Council International (BCI)	100-2000CCA
Marine Cranking Amps(MCA)	100-2000CCA
Society of Automotive Engineers(SAE)	100-2000CCA
Japanese Industry Standard (JIS)	126A17-245H52

Figure 7.2: Supported battery testing standards and their ranges.

Measure Standard	Test Range
Cold Cranking Amps (CCA)	100-2000 CCA
International Electrotechnical Commission (IEC)	100-1400 CCA
Europe-Norm (EN)	100-2000 CCA
Deutsche Industrie-Norm (DIN)	100-1400 CCA
Cranking Amps (CA)	100-2000 CCA
Battery Council International (BCI)	100-2000 CCA
Marine Cranking Amps (MCA)	100-2000 CCA
Society of Automotive Engineers (SAE)	100-2000 CCA
Japanese Industry Standard (JIS)	126A17-245H52

8. MAINTENANCE

To ensure the longevity and accurate performance of your KW218 battery tester:

- **Cleaning:** Wipe the unit with a soft, dry cloth after each use. Do not use abrasive cleaners or solvents.
- **Storage:** Store the tester in a clean, dry environment, away from direct sunlight and extreme temperatures.
- **Cable Care:** Avoid bending or crimping the test leads excessively. Inspect the cables and clamps regularly for any signs of damage.

9. TROUBLESHOOTING

If you encounter issues with your KW218, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Tester does not power on.	Poor connection to battery; battery completely dead.	Ensure clamps are securely connected to clean battery terminals. Check battery voltage with a multimeter if possible.
Inaccurate readings.	Corroded terminals; incorrect battery type/CCA input.	Clean battery terminals thoroughly. Verify correct battery type and CCA rating are entered in the tester.
Screen frozen or unresponsive.	Temporary software glitch.	Disconnect the tester from the battery, wait a few seconds, then reconnect.

10. SPECIFICATIONS

- **Brand:** KONNWEI
- **Model:** KW218
- **Power Source:** Battery Powered (via vehicle battery)
- **Display:** 2.4-inch HD Color Screen
- **Supported Battery Voltage:** 6V / 12V
- **Supported Battery Types:** Regular Flooded, AGM Flat Plate, AGM Spiral, GEL, EFB, Lithium
- **Test Range:** 100-2000 CCA
- **Supported Standards:** CCA, IEC, EN, DIN, CA, BCI, MCA, SAE, JIS
- **Housing Material:** ABS Industrial Grade Plastic

11. WARRANTY AND SUPPORT

KONNWEI products are designed for reliability and performance. For warranty information or technical support, please refer to the contact details provided with your purchase or visit the official KONNWEI website. Please retain your proof of purchase for warranty claims.

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