

KONNWEI® KW880



User's Manual



**Battery Tester & Car Battery Match
Car OBDII Diagnostic Scanner**

1.Product Profile:

KW880 Car OBDII Dianostic Tool & Car Battery Tester & Car Battery Match 3 in 1.

KW880 car obd2 diagnostic scanner can work on all 1996 and newer 12V gasoline and diesel that are OBD II compliant.

It can identify the cause of your CHECK ENGINE and perhaps fix it without going to see your dealer. It assists you in easily passing annual emissions tests and SMOG CHECK. It covers full OBDII/ EOBD diagnostic functions for engine system. O2 sensor test, EVAP systems test, and board monitoring test give you full control of your vehicle's running status, while a graphical and numeric live data stream display will help you to find out the faulty sensor readings.

KW880 battery tester can test all automotive cranking lead acid battery, including ordinary lead acid battery, AGM flat plate battery, AGM spiral battery, and gel battery, lithium battery etc. it adopts the state-of-the-art conductance testing technology in the word to easily, quickly and accurately measure the actual cold cranking amps capability of the vehicle starting battery, healthy state of the battery itself, and common fault of the vehicle starting system and charging system, which can help maintenance personnel to find the find the problem quickly and accurately, thus to achieve quick vehicle repair.

KW880 car battery match enables you to perform a resetting operation on the monitoring unit of vehicle battery, in which the original low battery fault information will be cleared and battery matching will be done. Battery matching must be performed in the following cases:

- a) Main battery is replaced. Battery matching must be performed to clear original low battery information and prevent the related control module from detecting false information. If the related control module detects false information, it will invalidate some electric auxiliary functions, such as automatic start & stop function, sunroof without one-key trigger function, power window without automatic function.
- b) Battery monitoring sensor. Battery matching is performed to re-match the control module and motoring sensor to detect battery power usage more accurately, which can avoid an error message displaying on the instrument panel.

It support multi-languages, customer can select different language which includes English, French, Spanish, German, Russian, Italian.

2 Technical Parameters:

Voltage Measurement Range 6-16V DC.

Cold Cranking Amps Measurement Range

Measurement Standard	Measurement Range
CCA	100-2000
BCI	100-2000
CA	100-2000
MCA	100-2000
JIS	26A17-245H2
DIN	100-1400
IEC	100-1400
EN	100-2000
SAE	100-2000

3 . Main Menu Description:

- OBDII Diagnostic Menu
- Car Battery Tester Menu
- Battery Match Menu



4. OBDII Diagnostic Menu:

Choose "Diagnostic" For OBDII Diagnosis.

Monitor Status	
MIL Status	OFF
DTCs in this ECU	0
Readiness Completed	0
Readiness Not Completed	0
Readiness Not Supported	10
Datastream Supported	114
Ignition	Spark
Protocol Type	CAN

4.1 Diagnostic Menu:

After OBDII Connected Well On Car , Show "Monitor Status" ,
And Click "Enter" For Next Step To Look Through Below 9 Functions.

Diagnostic Menu
Read Codes
Erase Codes
I/M Readiness
Data Stream
Freeze Frame
O2 Sensor Test
On-Board Monitoring
Evap System(mode\$8)

Diagnostic Menu
Vehicle Information

4.2 Read Codes:

Check The Car Fault Problem: Select [Read Codes] and press **OK** button in Diagnostic Menu. If there are some codes, the screen will display the codes as shown below:

Read Codes
Current DTCs(\$03)
Pending DTCs(\$07)
Permanent DTCs(\$0A)
Record DTC

P0010	1/11
A camshaft Position Actuator Circuit/Open Bank 1	

4.3 Erase Codes:

Select [Erase Codes], Until The Emission-Related Diagnostic Information has been Cleared!

Diagnostic Menu
Read Codes
Erase Codes
I/M Readiness
Data Stream
Freeze Frame
O2 Sensor Test
On-Board Monitoring
Evap System(Mode\$8)



4.4 I/M Readiness:

Select [I/M Readiness] and press OK button, the screen will display the interface as shown below:

I/M Readiness
Since DTCs Were Cleared
This Drive Cycle

I/M Readiness			
MIL		IGN	Spark
DTC	14	Pd DTC	15
MIS	✓	EVAP	✗
FUE	✓	AIR	✗
CCM	✓	O2S	✗
CAT	✗	HRT	✗
HCAT	✗	EGR	✗

4.5 Data Stream:

Press UP or DOWN button to select data stream in main menu interface and then press OK button to confirm , the screen will display the interface as shown below:

Datastream	1/17
Fuel system 1 status	CL
Fuel system 2 status	CL
Calculated LOAD Value	9.0%
Engine Coolant Temperature	158° F
Short Term Fuel Trim - Bank 1	-24.2%

View Graphic Items				
Max	9.0	158	-24.2	-89.2
Max	9.0	158	-24.2	-89.2
■ LOAD PCT=9.0%		■ ECT=158° F		
■ SHRTFT1=24.2%		■ LONGFT1=89.1%		

4.6 Freeze Frame:

When an emission-related fault occurs, certain vehicle conditions are recorded by the on-board computer. This information is referred to as freeze frame data. Freeze Data is a snapshot of the operating conditions at the time of an emission-related fault.

Diagnostic Menu
Read Codes
Erase Codes
I/M Readiness
Data Stream
Freeze Frame
O2 Sensor Test
On-Board Monitoring
Evap System(mode\$8)

Freeze Frame
Freeze Frame
Record Freeze

4.7 O2 sensor Test:

The results of O2 sensor test are not live values but instead the results of the ECU last O2 sensor test. For live O2 sensor readings, refer to any of the live sensor screens such as Graph Screen.

Diagnostic Menu
Read Codes
Erase Codes
I/M Readiness
Data Stream
Freeze Frame
O2 Sensor Test
On-Board Monitoring
Evap System(mode\$8)

Select O2 Sensor
Bank1 - Sensor1
Bank1- Sensor2

4.8 On-board monitoring:

This function can be utilized to read the results of on-board diagnostic monitoring tests for specific components/systems.

Diagnostic Menu
Read Codes
Erase Codes
I/M Readiness
Data Stream
Freeze Frame
O2 Sensor Test
On-Board Monitoring
Evap System(mode\$8)

On- Board Monitoring
Catalyst Monitor B1
Sensor Heater B1 - S1
Sensor Heater B1 - S2

4.9 Evap System:

The EVAP test function lets you initiate a leak test for the vehicle EVAP system. The scan tool does not perform the leak test, but signals to vehicle's on-board computer to initiate the test. Before using the system test function , Refer to the vehicle service repair manual to determine the procedures necessary to stop the test.

Diagnostic Menu
Read Codes
Erase Codes
I/M Readiness
Data Stream
Freeze Frame
O2 Sensor Test
On-Board Monitoring
Evap System(mode\$8)

4.10 Vehicle Information:

Select [Vehicle Information] and press OK, the screen will display the information

Diagnostic Menu
Vehicle Information

Vehicle Information
Vehicle Identification Number(VIN) Not supported
Calibration Identifications(CID) Not supported
Calibration Verification Numbers(CVN) Not supported

5 Car Battery Menu:

After entering car battery test program, tester displays Main Menu, Tester Battery "In-vehicle" or "Out-of-Vehicle", Press UP/DOWN key to select the battery location. in vehicle or out of vehicle, then press ENTER key to confirm.

Main Menu		
		
Diagnostic	Car BAT	Battery Match
		
Waveform	Review	DTC Lookup

Battery Location
In - Vehicle
Out - Of - Vehicle

- For Example ,Select “Battery Test”, “ Out-of- vehicle”, Then show below data.

Select Type
Regular Flooded
AGM Flat Plate
AGM Spiral
GEL
EFB
Lithium

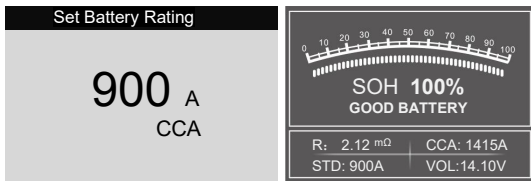
Select Standard
CCA
IEC
EN
DIN
CA
BCI

Below is -Cold Cranking Amps Measurement Range :

Measurement Standard	Measurement Range
CCA	100-2000
BCI	100-2000
CA	100-2000
MCA	100-2000
JIS	26A17-245H2
DIN	100-1400
IEC	100-1400
EN	100-2000
SAE	100-2000

1. CCA: Cold Cranking Amps, specified by SAE&BCI, most frequently used value for starting battery at 0°F(-18 °C) ;
2. BCI: Battery Council international standard;
3. CA: Cranking Amps standard, effective starting current value at 0°C;
4. MCA: Marine Cranking Amps standard, effective starting current value at 0°C;
5. JIS: Japan Industrial Standard, displayed on the battery as combination of the numbers and letters, e.g. 55D23, 80D26 ;
6. DIN: German Auto Industry Committee Standard;
7. IEC: Internal Electron technical Commission Standard;
8. EN: European Automobile Industry Association Standard ;
9. SAE: Society of Automotive Engineers Standard.

Now Select one of them (CCA,IEC,EN, DIN, CA, BCI, MCA, SAE, JIS)
(Please check your own battery standard). The test result will be showed as below , Press the up and down keys to switch between SOH and SOC.



The battery test result will show different type: (Good Battery / Good, Recharge / Replace / Bad cell, Replace / Charge, Retest)

- For Example, Select “ Battery in- vehicle” , Then show below data

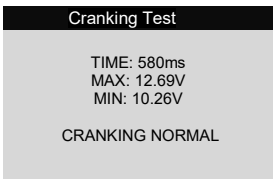
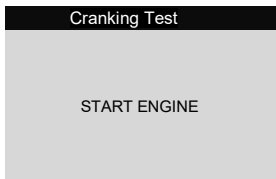
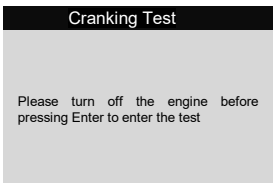
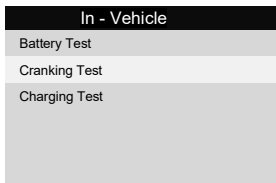
Battery Location	In - Vehicle
In- Vehicle	Battery Test
Out - Of - Vehicle	Cranking Test
	Charging Test

- For example , Select “Battery Test” ,The current health status of the battery can be directly detected.

Battery Test
1. Check surface charge, Turn Lights on.
2. Take headlights on about 10 seconds.
3. Turn lights off.

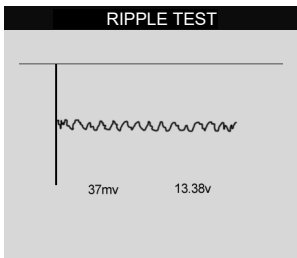
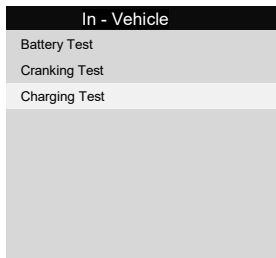
There will be a prompt after entering, please proceed to the next step according to the prompt.

- For example , Select “ Cranking Test”, the data will be showed as below :



There will be a prompt after entering, please proceed to the next step according to the prompt.

- For example , Select “Charging Test”, the data will be showed as below :



Charging Test

Increase RPM to 2500 r/min and keep it 10 seconds, Press ENTER to continue

Charging Test

Loaded 14.44V
Unloaded 14.0V
Ripple 153mV
CHARGING NORMAL

There will be a prompt after entering, please proceed to the next step according to the prompt.

6 Battery Match Menu:



This function enables you to perform a resetting operation on the monitoring unit of vehicle battery, in which the original low battery fault information will be cleared and battery matching will be done. Battery matching must be performed in the following cases:

a) Main battery is replaced. Battery matching must be performed to clear original low battery information and prevent the related control module from detecting false information. If the related control module detects false information, it will invalidate some electric auxiliary functions, such as automatic start & stop function, sunroof without one-key trigger function, power window without automatic function.

b) Battery monitoring sensor. Battery matching is performed to re-match the control module and monitoring sensor to detect battery power usage more accurately, which can avoid an error message displaying on the instrument panel.

FUNCTION INTRODUCTION

Battery Matching:

1. Use The Car Diagnostic Device To Reset The Car Battery Monitoring Unit To Clear Original Fault Information About Insufficient Battery Electric Quantity, And Match The Battery Again And Monitor Battery Based On Current Battery Information

[OK]-Confirm

[◀] [▶] 1/3

FUNCTION INTRODUCTION

2. Battery Matching Must Be Performed In The Following Cases:

A) Main Battery Is Replaced. Battery Matching Must Be Performed To Clear Original Electric

[OK]-Confirm

[◀] [▶] 1/3

FUNCTION INTRODUCTION

Quantity Insufficiency Information And Prevent The Related Control Module From Detecting False Information. If The Related Control Module Detects False Information, It Will Invalidate Some Electric Auxiliary Functions, Such As Automatic Start & stop Function, Sunroof Without One-key Trigger Function, Power Window Without Automatic Function.

[OK]-Confirm

[◀] [▶] 2/3

FUNCTION INTRODUCTION

B) Battery Monitoring Sensor. Battery Matching Is Performed To Re-match The Control Module And Monitoring Sensor To Detect Battery

[OK]-Confirm

[◀] [▶] 2/3

FUNCTION INTRODUCTION

Electric Quantity Use Information More Accurately, Which Can Avoid The Instrument Panel Displaying False Information.

[OK]-Confirm

[◀] [▶] 3/3

Register Battery...

Note: If Another Battery Capacity Or Another Battery Was Retrofitted Recently, The New Battery Capacity Is Only Displayed Correctly In The Diagnosis After A Terminal Change. Note: The History Of The Last Battery Change Is Deleted During Programming By The Engine Electronics (DME Or DDE).

[OK]-Confirm

[◀] [▶] 1/1

BAT. Match**FUNCTION INTRODUCTION**

ACURA

AUDI

BENTLEY

BMW

BUGATTI

1/33

BAT. Match

CHRYSLER/JEEP/DODGE

CITROEN

FORD

GM

HONDA

HYUNDAI

7/33

BAT. Match

NFINITI

JAGUAR

KIA

LAMBORGHINI

LANDROVER

LEXUS

13/33

BAT. Match

MAZDA

MG

MERCEDES-BENZ

MINI

MIT SUBISHI

NISSAN

19/33

BAT. Match

OPEL

PEUGEOT

PORSCHE

RENAULT

SEAT

SKODA

25/33

BAT. Match

TOYOTA

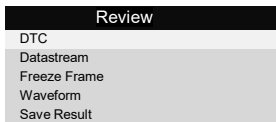
VOLVO

VW

31/33

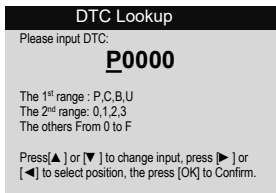
7 Review :

From the startup screen, or press ESC button to enter Main Menu
Press UP/DOWN button to select the [Review] function in the Main Menu and press ENTER button, The screen will display the interface as shown below



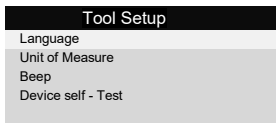
8 DTC Lookup:

It can Check all test result



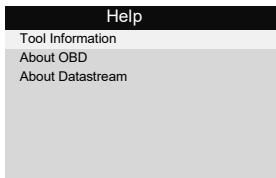
9 Setup:

Select language: English, French, Spanish, German, Russian, Italian.





10 Help:



11 . Print & Update:

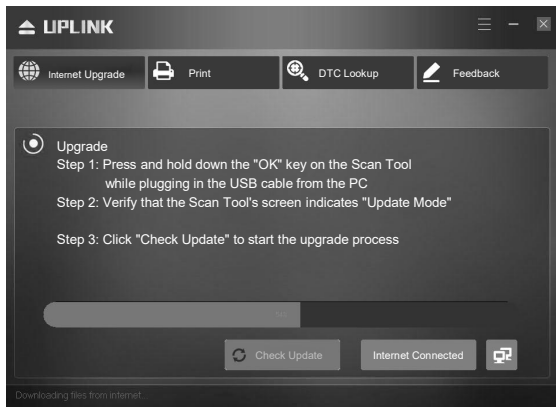
This function allows you to update and print the tool software through a computer .To update and print your tool, you need the following items:

1. tester tool
2. A PC or laptop with USB ports
3. USB cable

Step:

- 1) Downloading the applications from our website www.konnwei.com.
- 2) Run uplink.exe in your computer(Mac OS and linux does not compatible).
- 3) Press and hold any button until the USB cable is connected with computer and release it after the tool display a message "Update Mode".
- 4) Open the uplink software, click "Check update" button, will download the upgrade file from internet then update to tester tool.
- 5) Wait for few minutes until update succeed.

- 6) During the update procedure.
- 7) Restart tester tool finish the whole update.



5. Service Procedures:

If you have any questions, please contact your local store, distributor or visit our website at www.konnwei.com , or email to konnwei@konnwei.com. If it becomes necessary to return the tool for repair, contact your local distributor for more information.

