KONNWEI® KW890

2.8"
TFT COLOR SCREEN

User's Manual

OBD2 & Battery Tester & Oil Reset 3 in 1

Car Diagnostic Scanner
Car Battery Tester
Oil Service Light Reset

1.Product Profile:

KW890 Car OBDII Dianostic Tool & Car Battery Tester & Oil Service Light Reset 3 in 1.

KW890 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 with out 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 testgive 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.

KW890 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.

KW890 Oil Service Light Reset allows you to reset the service lamps on the instrument cluster. The Service Indicator System is designed to alert the driver when the vehicle is due for a service. Tips: Oil service reset function is determined by the actual condition of the vehicle.

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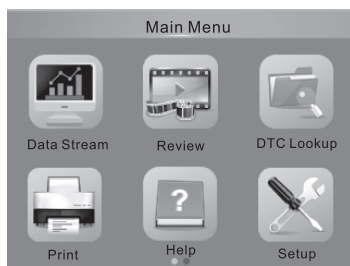
2 Technical Parameters:

Voltage Measurement Range 6-16V DC.

Cold Craning 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
- Oil Service Light Reset

Main Menu

Diagnose   Car BAT   Waveform

Oil Reset   Read Codes   vehicle information

Main Menu

Data Stream   Review   DTC Lookup

Print   Help   Setup

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
Lgnition	Spark
Protocol Type	CAN

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
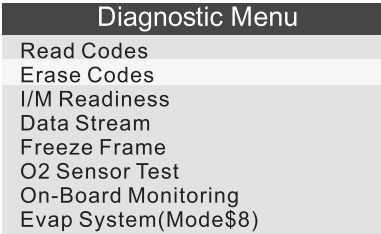
codes as shown below:

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
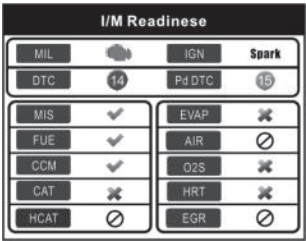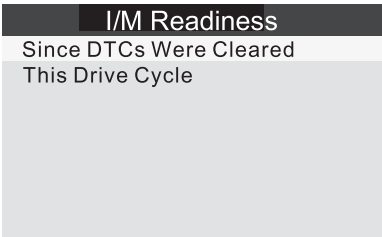
4.5 Data Stream:

   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
Calculated LOAD Value	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 and 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

Freeze Frame
Freeze Frame
Record Freeze

4.7 02 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

Main Menu
Diagnose	Car BAT	Waveform
Oil Reset	Read Codes	vehicle information

Battery Location
In - Vehicle
Out - Of - Vehicle

• For Example ,Select "Battery Test", " Out-of- vehicle", Then show below data.

Select Type	Select Standard
Regular Flooded	CCA
AGM Flat Plate	IEC
AGM Spiral	EN
GEL	DIN
EFB	CA
Lithium	BCI

Below is -Cold Craning 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 valueat 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.

Set Battery Rating
900 A
CCA

0 10 20 30 40 50 60 70 80 90 100
SOH 100%
GOOD BATTERY

R : 2.12 mΩ	CCA: 1415A
STD: 900A	VOL:14.10V
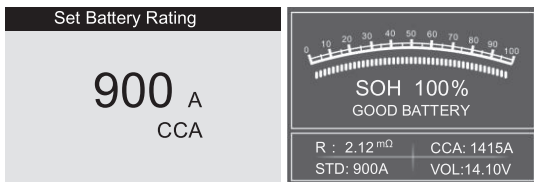
The battery test result will show different type: (Good Battery / Good, Recharge / Replace

/ Bad cell, Replace / Charge, Retest)

● For Example, Select " Battery in- vehicle" , Then show below data

Battery Location
In- Vehicle
Out - Of - Vehicle

In- Vehicle
Battery Test
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 :

In - Vehicle
Battery Test
Cranking Test
Charging Test

Cranking Test
Please turn off the engine before pressing Enter to enter the test

Cranking Test
START ENGINE

Cranking Test
TIME: 580ms MAX: 12.69V MIN: 10.26V CRANKING NORMAL

In - Vehicle
Battery Test
Cranking Test
Charging Test

RIPPLE TEST
37mv   13.38v
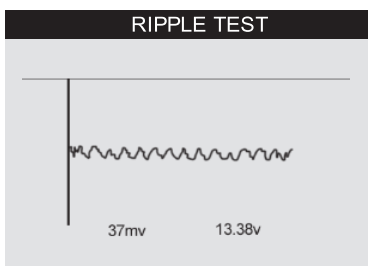
Charging Test	Charging Test
Increase RPM to 2500 r/min and keep it 10 seconds, Press ENTER	Loaded 14.44V Unloaded 14.0V Ripple 153mV

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

6 Oil Service Light Reset Menu:

Oil Reset Service allows you to perform reset for the Engine Oil Life system, which calculates an optimal oil life change interval depend on the vehicle driving conditions and climate.

Oil Service Light Reset
BORGWARD
CHRYSLER/JEEP/GODGE
CITROEN
DACIA
DAEWOO
FERRARI

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Oil Service Light Reset
FIAT/ALFA ROMEO/LANCIA
FORD
GM
HOLDEN
HONDA
INFINITI

13/53

Oil Service Light Reset
LANDROVER
LEXUS
MASERATI
MAYBACH
MAZDA
MG

25/53

Oil Service Light Reset
ISUZU
INDIA (Indian Cars)
JAGURA
KIA
LAMBORGHINI
LANCIA

19/53

Oil Service Light Reset
MERCEDES-BENZ
MINI
MITSUBISHI
NISSAN
OPEL
PEUEGOT

31/53

Oil Service Light Reset
PORSCHE
PORTON
RENAULT
ROLLS-ROYCE
ROMEO/ALFA ROMEO
ROVER

37/53

Oil Service Light Reset
SAAB
SCION
SEAT
SKODA
SMART
SUBARU

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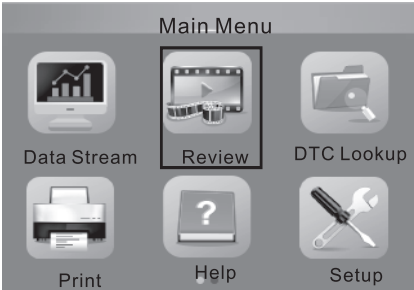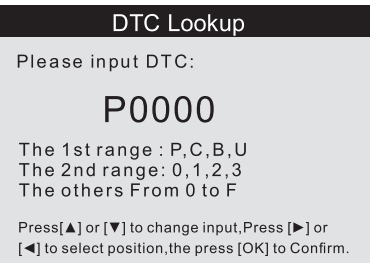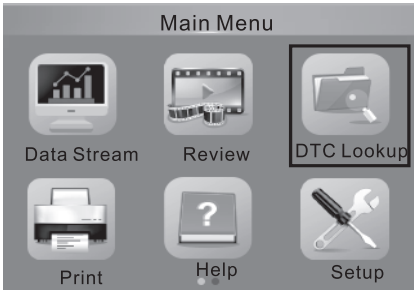| Oil Service Light Reset |
| --- |
| SUZUKI |
| TOYOTA |
| VAUXHALL |
| VOLVO |
| VW |

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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
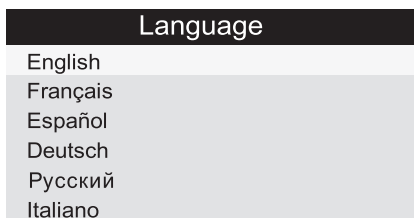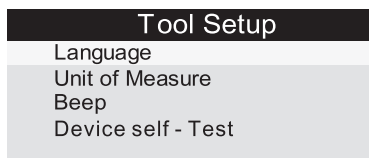and press ENTER button, The screen will display the interface as shown
below

Main Menu

Data Stream	Review	DTC Lookup
Print	Help	Setup

Review

DTC
Datastream
Freeze Frame
Waveform
Save Result
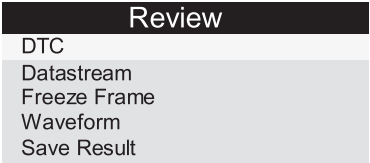
8 DTC Lookup:

It can Check all test result

Main Menu

Data Stream	Review	DTC Lookup
Print	Help	Setup

DTC Lookup

Please input DTC:

P0000

The 1st range : P,C,B,U
The 2nd range: 0,1,2,3
The others From 0 to F

Press[▲] or [▼] to change input,Press [►] or
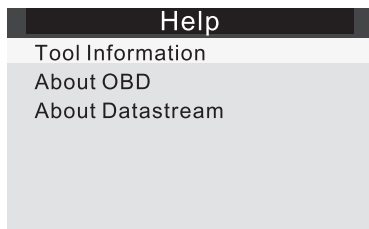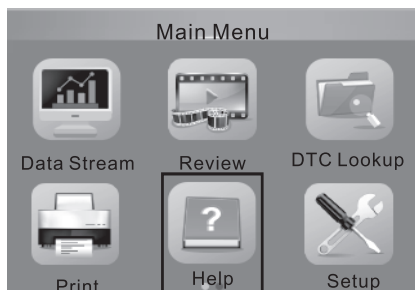[◄] to select position,the press [OK] to Confirm.

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) 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.
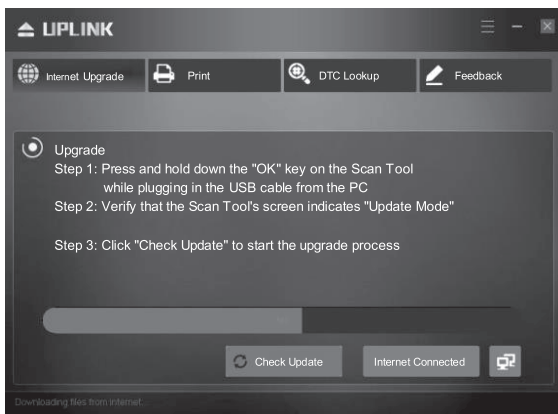
5.Service Procedures:

If you have any questions, please contact your local store, distributor or visit our website at www.konnwei.com .

If it becomes necessary to return the tool for repair, contact your local distributor for more information.