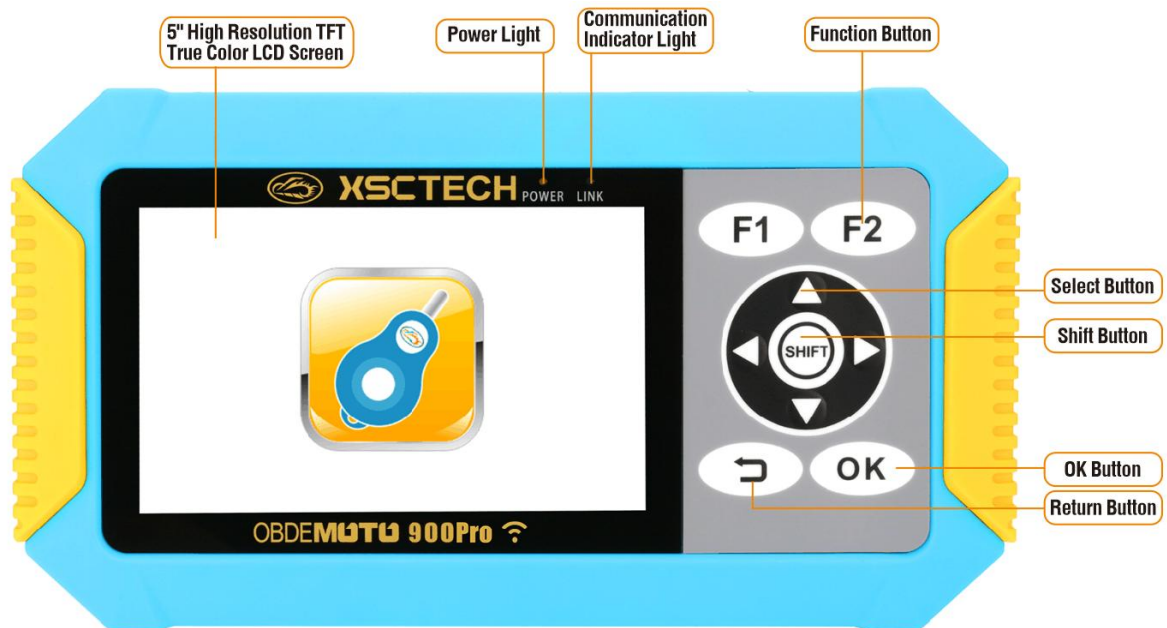# OBDEMOTO-900Pro

BMW Motorcycle Key Match Special Diagnostic Scanner
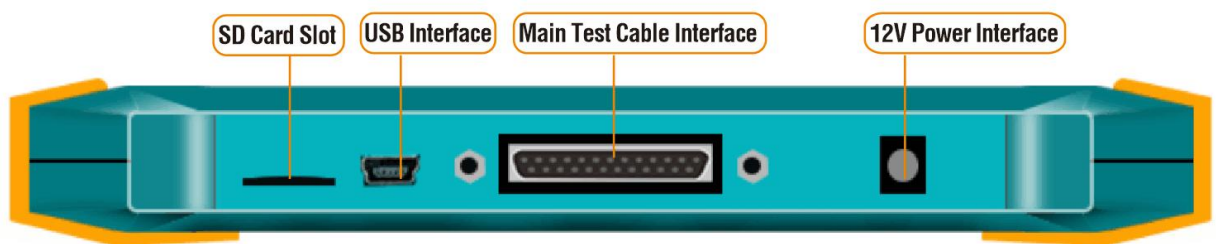
XSCTECH

User Manual

I. Introduction and wiring of the diagnostic scanner

1. Appearance of OBDEMOTO-900Pro (Hereinafter referred as "diagnostic scanner"):

2. Top view of diagnostic scanner:

3. BMW anti-theft special diagnostic scanner packing list:

OBDEMOTO-900PRO English[BMW Key] Packing List

No.	Specif./No.	Content	Qty.
1		900PRO Diagnostic scanner	1
2	6-003	**OBD-II**	1
3	6-026	Main Test Cable	1
4	6-030	Battery Clamp Cable	1
5	6-001	BMW-10P	1
6	6-028	USB Cable	1
7	K-004	Universal Cable Jumper line	1
8	K-005	Adapter KEY-BOX	1
9	K-006	KEY-Programmer	1
10	K-007	BMW KEY-Programmer	1
11		Plastic Box	1
12		SD Card	1

4.Button Function:

▲▼ Up/Down Arrow: Select Test Item

◄► Left/Right Arrow: Page-up/Page-down

OK Button: Enter/Execute

Button: Return/Exit

F1,F2 Button: Function Button

Shift Button: Auxiliary Button

5.Matters needing attention:

1) The screen pictures and screenshots shown in this manual (such as the mark of "Button") are for interpretation only and may be slightly different from the real object.

2) The contents of this manual are subject to change without prior notice.

3) We, "The Company", shall not be liable for any special, indirect, incidental, or consequential loss of any person arising out of or in connection with the purchase or use of these products.

4) We, "The Company", shall not be liable for any third party claims of any kind arising from the use of these products.

5) Avoid use and storage in extreme temperature environment. Low temperature will make the display image slow and dull, or completely unable to display. Besides, avoid direct exposure to the sun and do not place the scanner in any place where high temperature will occur. High temperature will make the machine casing fade or deformation, and damage the internal circuit.

6) Do not disassemble the scanner or change the online settings without permission.

7) Do not use a ballpoint pen or other sharp objects to press or prod the operation key of the scanner.

8) Please use a soft dry cloth to clean the outside of the scanner. If the scanner is very dirty, please wipe it with a soft cloth soaked with a diluted solution of neutral household detergent and water. Be careful to wring out excess water before wiping. Do not use petroleum extract, diluent or other volatile solvents to clean, otherwise there is a risk of erasing the printing mark and damaging the protective casing.

9) Do not use synchronous on-line diagnosis test when testing ignition system jump-off voltage, otherwise the scanner may be damaged due to high voltage interference.
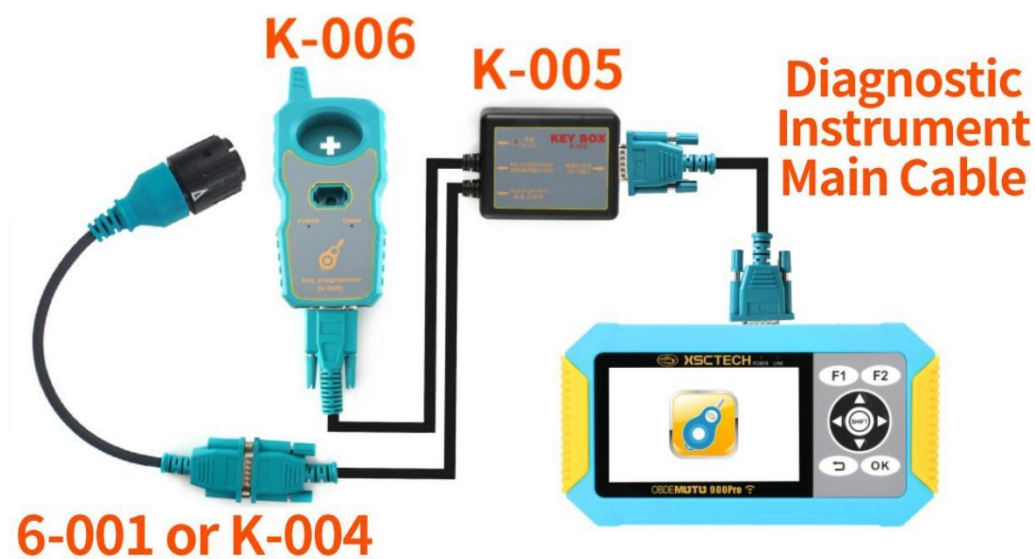
In-service inspection:

1) Check whether the ignition switch is on or the engine is running.

2) Check whether the power light of the scanner is on (red) or the communication indicator light is blinking during detecting the system.

3) Check the diagnostic connection cable and diagnostic base for poor contact or short circuit.

4) Check whether the version of the software is suitable for the vehicle type.

II. Instructions for connecting to vehicle

1. Need the appropriate accessories for the diagnostic scanner.

1.1 BMW Key 46 Chip System Connection Method:

The main test cable is connected to the diagnostic scanner.

(Step One)

The other end of the main test cable is connected to the K-005 adapter.

(Step Two)

The K-005 adapter connects to the motorcycle diagnostic base on the one end via 6-001 and to the key programmer K-006 on the other end.

(Step Three)

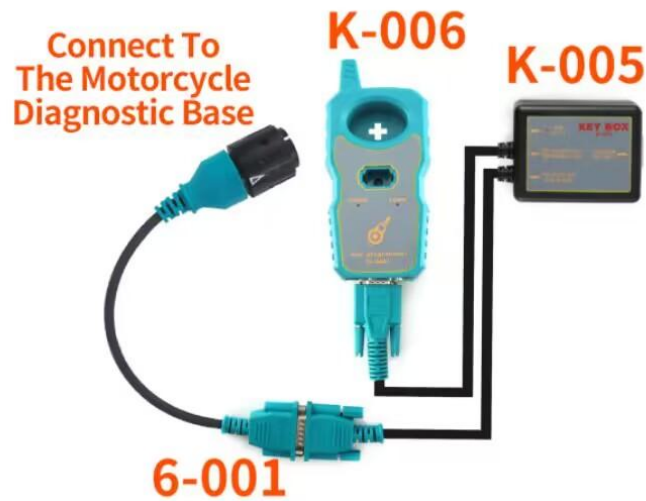## 1.2 BMW Key 4D/8A Chip System Connection Method:

The main test cable is connected to the diagnostic scanner.

(Step One)

The other end of the main test cable is connected to the K-007 adapter.

(Step Two)

One end of the K-007 adapter is connected to the motorcycle diagnostic base through 6-001 or 6-003.
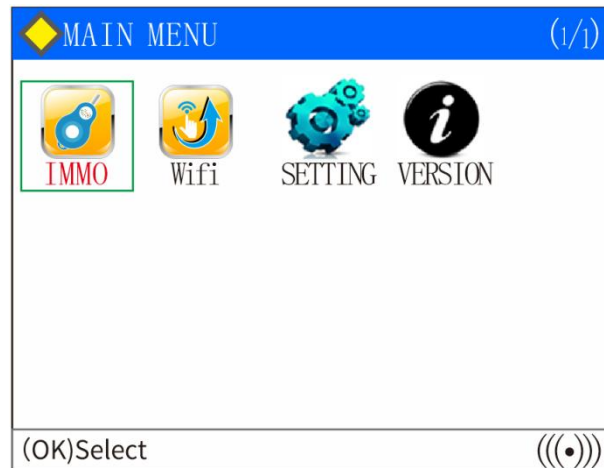
(Step Three)

III. Operation instruction

1. Connect the diagnostic scanner:

Please follow the steps in "Instructions for connecting to vehicle" to connect the diagnostic scanner to the motorcycle.

2. Functional options:

When the motorcycle ignition switch is turned on (the flameout switch also needs to be turned on for the model with flameout switch) and the diagnostic scanner is powered on, the following interface will appear. As the screenshot shown below:

Anti-theft: Key matching of motorcycle anti-theft function, including 46 chip, 4D chip and 8A anti-theft system.

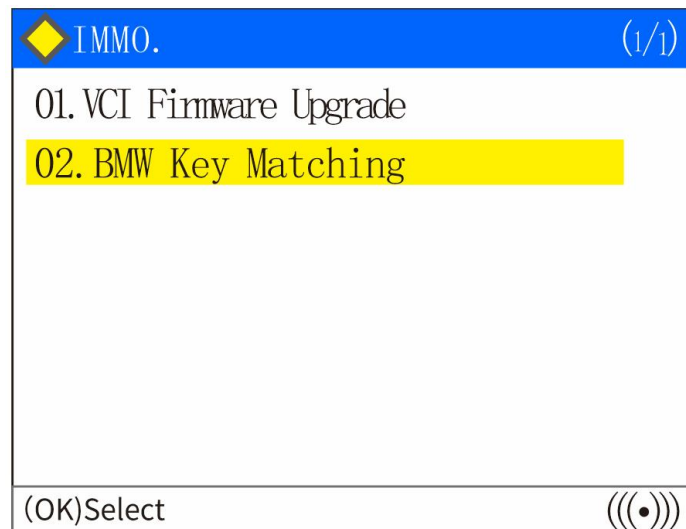One-click Upgrade: Connect WIFI to the company server and update data.

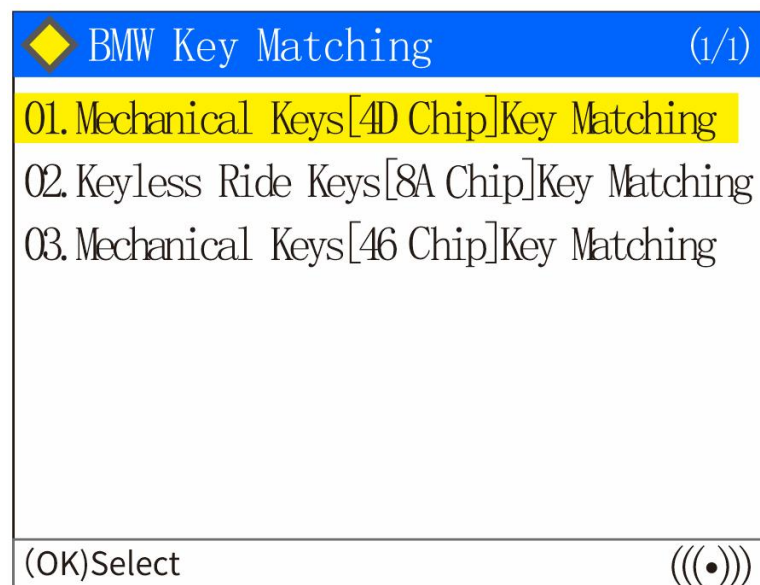System Setup: Set language, buzzer and scanner module check.

Version Information: Display the serial number, software version, hardware version, MFG and other information.

3. Anti-theft matching:

Select "Anti-theft", press the [OK] button, read the disclaimer, and press the [OK] button to proceed to the next step. As the screenshot shown below:

```
┌─────────────────────────────────────────┐
│ ◆ IMMO.                          (1/1)   │
├─────────────────────────────────────────┤
│   01. VCI Firmware Upgrade               │
│  ┌────────────────────────────────────┐  │
│  │ 02. BMW Key Matching               │  │
│  └────────────────────────────────────┘  │
│                                          │
│                                          │
│                                          │
│                                          │
│ (OK)Select                      (((•))) │
└─────────────────────────────────────────┘
```
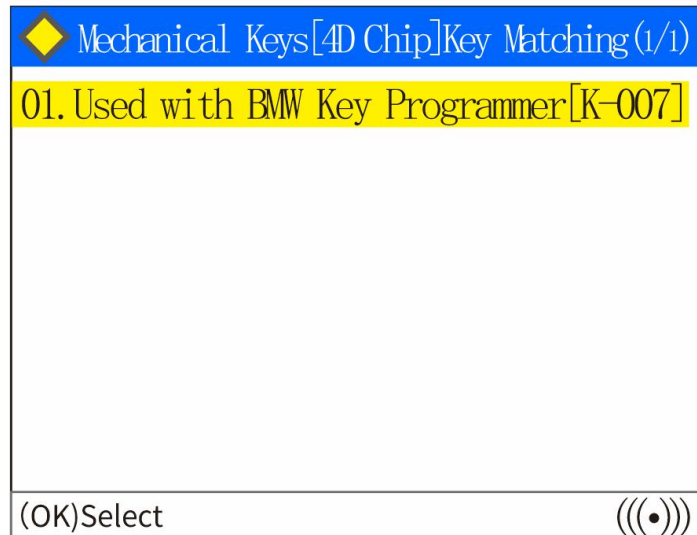
Select "02 BMW Key Match". The following screen appears. You can select the type of the tested system, such as the system type of Mechanical Key 4D, Keyless Start 8A or Mechanical Key 46 chip. As the screenshot shown below:

```
┌─────────────────────────────────────────┐
│ ◆ BMW Key Matching               (1/1)   │
├─────────────────────────────────────────┤
│ ┌─────────────────────────────────────┐ │
│ │01. Mechanical Keys[4D Chip]Key Matching│
│ └─────────────────────────────────────┘ │
│ 02. Keyless Ride Keys[8A Chip]Key Matching│
│ 03. Mechanical Keys[46 Chip]Key Matching │
│                                          │
│                                          │
│                                          │
│ (OK)Select                      (((•))) │
└─────────────────────────────────────────┘
```
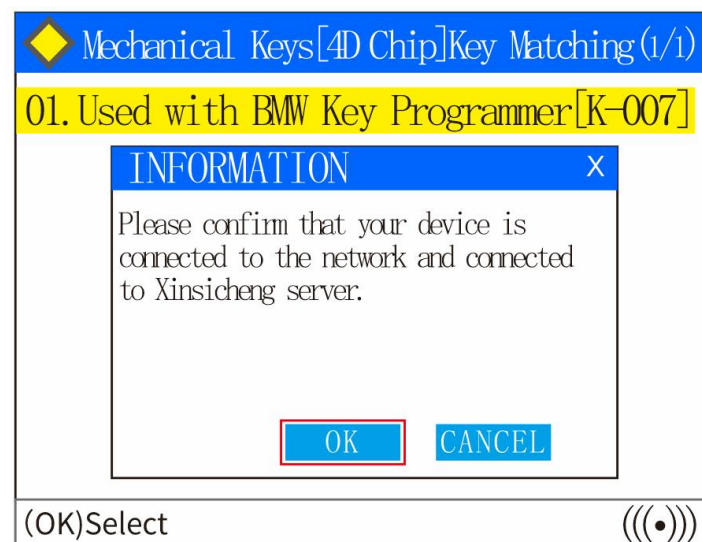
Select the corresponding system menu according to the type of anti-theft key, and execute according to the operation prompts of the diagnostic scanner.
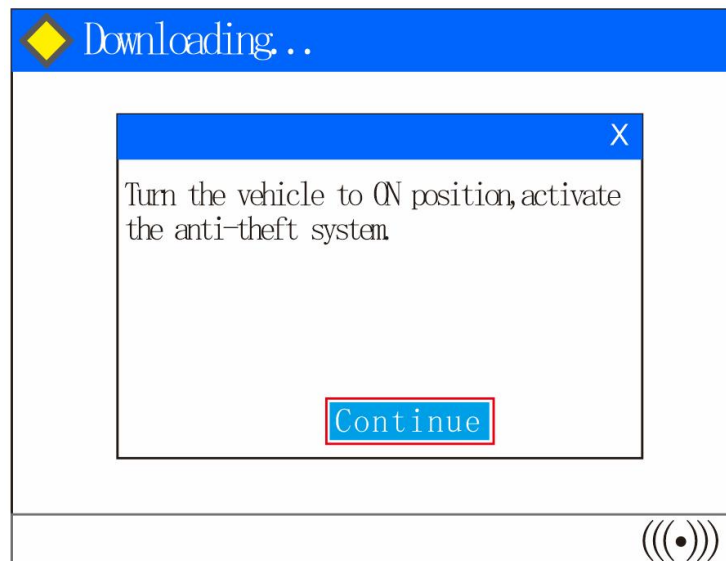
For example: If you select the "01 Mechanical Key 4D Chip Key Match" from the menu, and press the [OK] key to continue. The diagnostic scanner will prompt you to use the corresponding key programmer to connect correctly, as the screenshot shown below:
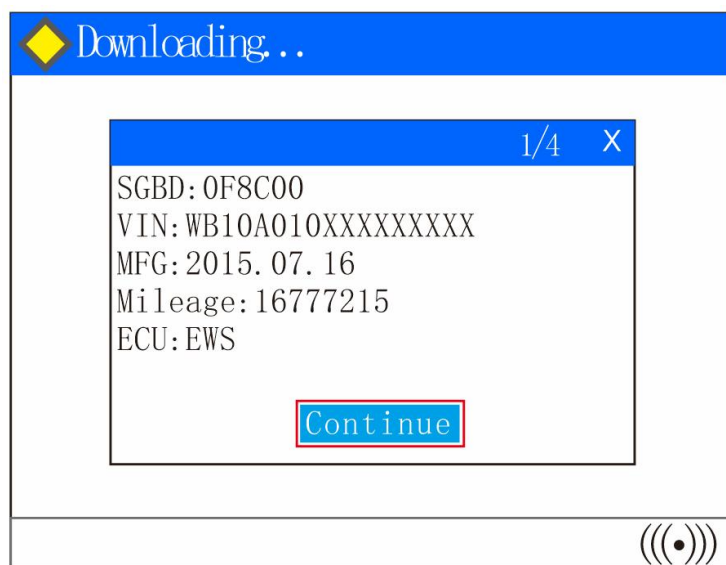
```
┌─────────────────────────────────────────┐
│ ◆ Mechanical Keys[4D Chip]Key Matching(1/1) │
├─────────────────────────────────────────┤
│ 01.Used with BMW Key Programmer[K-007]   │
│                                           │
│                                           │
│                                           │
│                                           │
│                                           │
│                                           │
│                                           │
│                                           │
│ (OK)Select                       (((•)))  │
└─────────────────────────────────────────┘
```

Press the [OK] button to proceed to the next step, and the
diagnostic scanner will prompt you to connect to a WiFi.
[see "V. WIFI connect and upgrade instructions" for
details] As the screenshot shown below:

```
┌─────────────────────────────────────────┐
│ ◆ Mechanical Keys[4D Chip]Key Matching(1/1) │
├─────────────────────────────────────────┤
│ 01.Used with BMW Key Programmer[K-007]   │
│   ┌─────────────────────────────────┐    │
│   │ INFORMATION                  X  │    │
│   ├─────────────────────────────────┤    │
│   │ Please confirm that your device is │  │
│   │ connected to the network and connected │
│   │ to Xinsicheng server.           │    │
│   │                                 │    │
│   │      ┌──────┐   ┌────────┐      │    │
│   │      │  OK  │   │ CANCEL │      │    │
│   │      └──────┘   └────────┘      │    │
│   └─────────────────────────────────┘    │
│ (OK)Select                       (((•)))  │
└─────────────────────────────────────────┘
```

If the WIFI has been connected, press the [OK] button to
continue the next step. The diagnostic scanner prompts to
turn on the ignition switch and activate the anti-theft
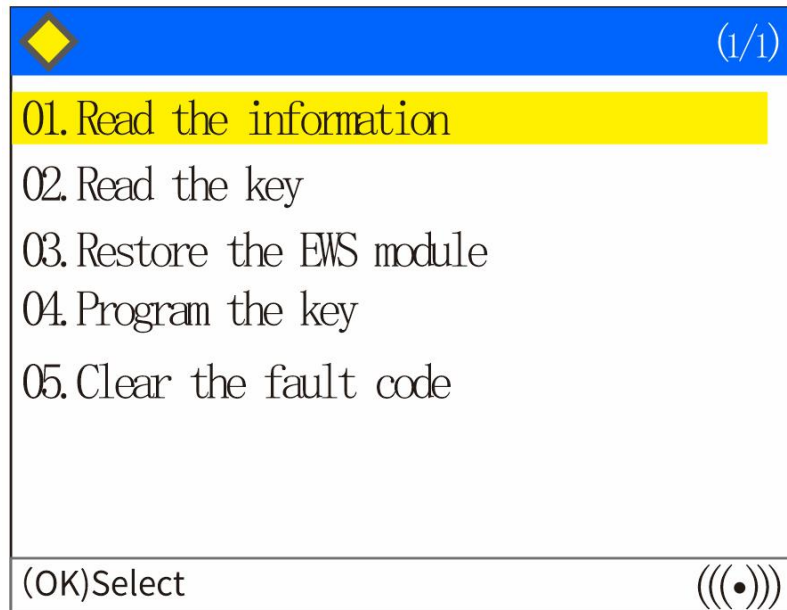system, as the screenshot shown below:

Press the [OK] button to proceed to the next step. After
the diagnostic scanner is correctly connected to the anti-
theft system, the relevant information of the ECU will
appear. As the screenshot shown below:

If the diagnostic scanner prompts communication failure,
can not connect to the ECU, please check the reason for
such communication failure: such as whether the ignition
switch is opened correctly, anti-theft system type
selection is correct and so on.

Press the [OK] button to proceed to the next step, and the
related function menu of ECU will appear. As the
screenshot shown below:

01. Read the information

02. Read the key

03. Restore the EWS module

04. Program the key

05. Clear the fault code

(OK)Select   (((•)))

01 Read Information: Use for reading ECU related information, such as VIN, software number, and so on.

02 Read The Key: Use for reading the key channel information, you can get the number of keys have been matched and so on.

03 Restore The EWS Module: Use for restoring the damaged EWS module.

04 Key Programming: Use for adding a new activate key or deleting an existing key.

05 Clear Fault Code: Use for clearing the fault code of the EWS module.Select the corresponding functions from the menu and follow the prompts of the diagnostic scanner to operate. If you have any questions, feel free to contact our technical support.

4. System setting

Select "System Settings" from the main menu and press the (OK) button. The following interface will appear:
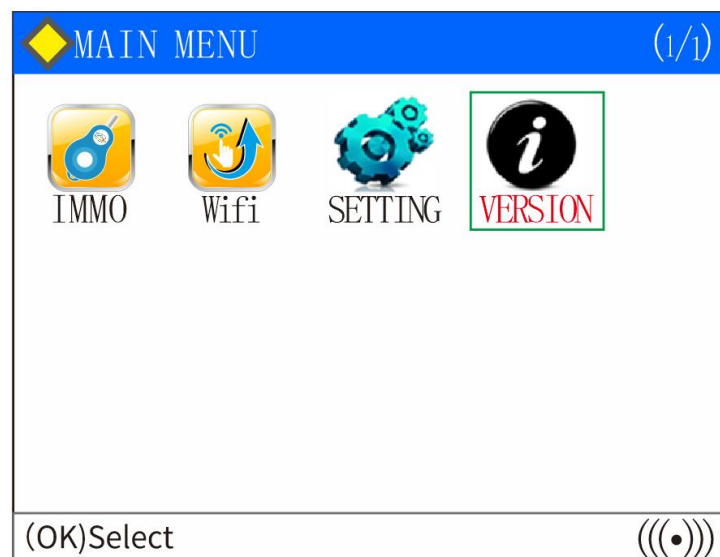
01.Basic setup

This function can set whether the keystroke will make sound and modify the current language.

Press [↑] [↓] button to select an item, and press [←]
[→] button to modify the value.(Note: Language can be
configured according to different countries, but the
factory setting is limited to one single language)

5.Version information

Select "Version Information" from the main menu,

After you press the (OK) button, the following screen will
be displayed: You can view the serial number, software
version and other detail information of the product.

```
◆VERSION                                    (1/1)
SN:M09H21XXX-6C6C68
S/W:V9.00E-MOTOR-B
H/W:V6.0
SN of Lib Auth:M09H21XXX-6C6C68
Type of Lib： MST-900H
Ver. of Lib： V9.00AXB
Date of Lib： 20XX.12.03
Factory Date： 20XX.12.03
(ESC)Exit
```

IV. Performance parameter

Product introduction: OBDEMOTO-900PRO diagnostic scanner is mainly used for key match during motorcycle repair process.

Product characteristics:

01. Applicable test vehicle model: BMW, details please refer to the configuration table of the diagnostic scanner.
02. This product is portable, convenient and practical, which is easy to carry.
03. Software update is simple, just write the program upgrade package into the SD card, you can easily complete the software update process.
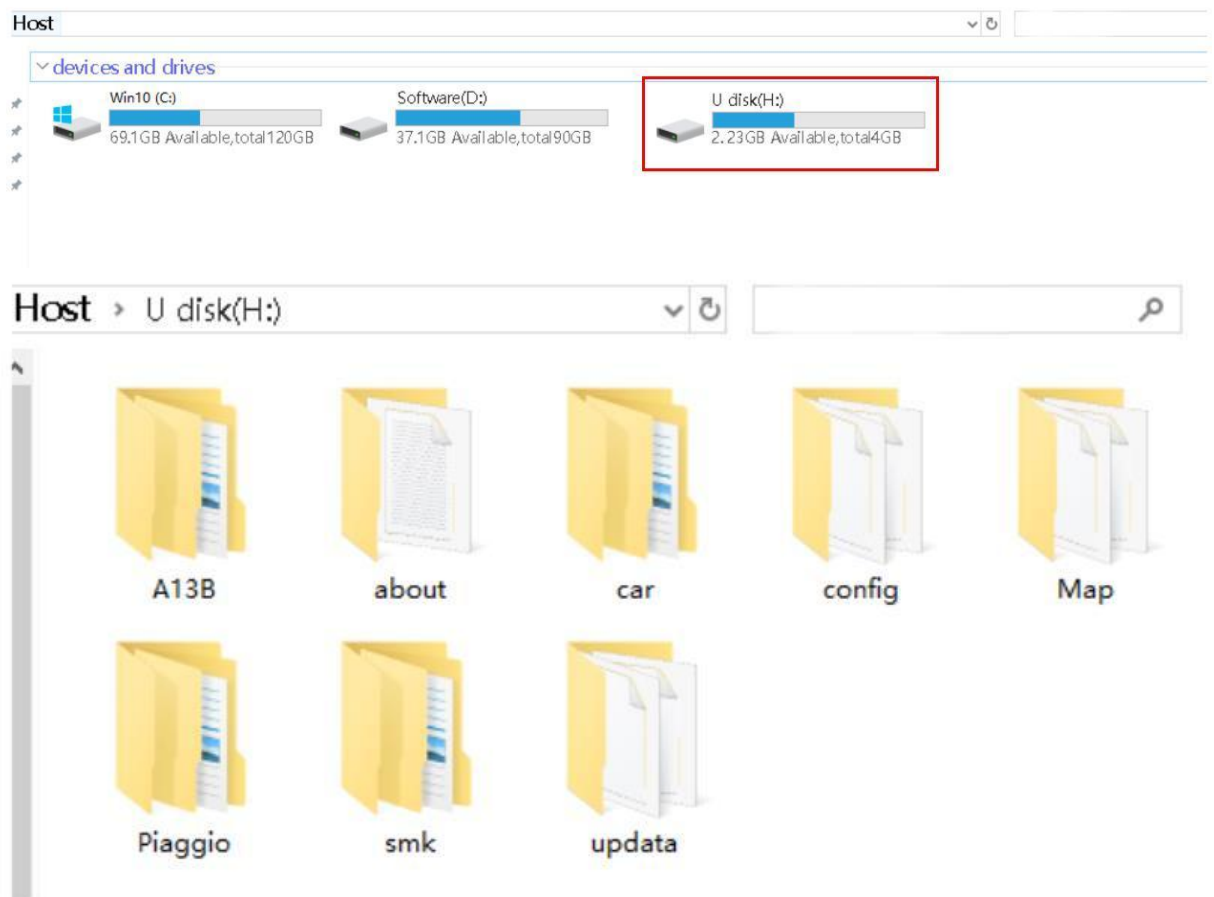
Technical parameter:

01. Supported languages: Multi-language optional: Simplified Chinese, Traditional Chinese, English, Vietnamese, Indonesian, Spanish; The same diagnostic scanner will not be equipped with all languages.

02. Upgrade method: Online SD card upgrade.

03. Power supply voltage: 10-18V

04. Operating current: less than 200mA

05. Operating temperature:-20℃—50℃

V. WIFI connect and upgrade instructions

Software upgrade:

1. Obtain the corresponding upgrade file according to the serial number of the diagnostic scanner, and save it to your local PC.
2. Unzip the upgrade package to a new folder.
3. Connect the computer through a SD card with SD card reader, click my computer, find the U disk(SD card), and click enter.
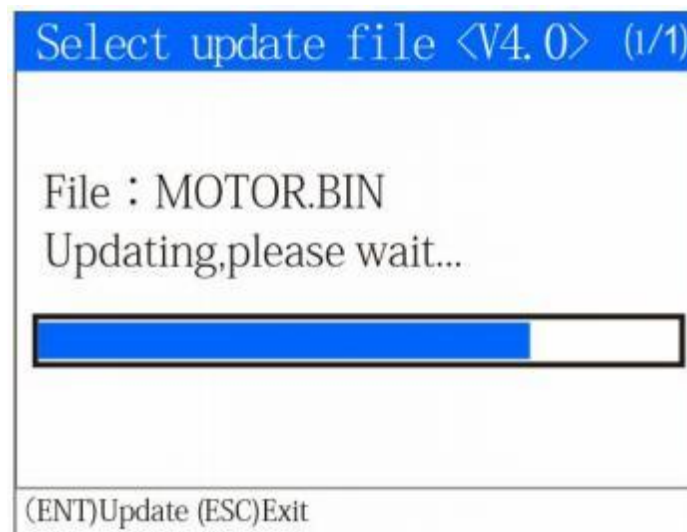
4. Copy the contents of the unzipped folder to the U disk(SD card).
5. Insert the SD card back into the diagnostic scanner and power on.
6. The following screen will be displayed after the diagnostic scanner is started:

Picture(1)

Press the OK button to start the upgrade process:

Picture(2)

Once the upgrade process has been finished, the diagnostic scanner will start normally. If the upgrade process failed, repeat the preceding steps.

※Note: 1. The format of SD card used by the diagnostic scanner is FAT32. Please pay attention when formatting the SD card, otherwise the diagnostic scanner will not work normally。
2. Only when the the serial number of the diagnostic scanner is the same as the serial number of the software can be upgraded. If the serial numbers of the diagnostic scanner and the software are
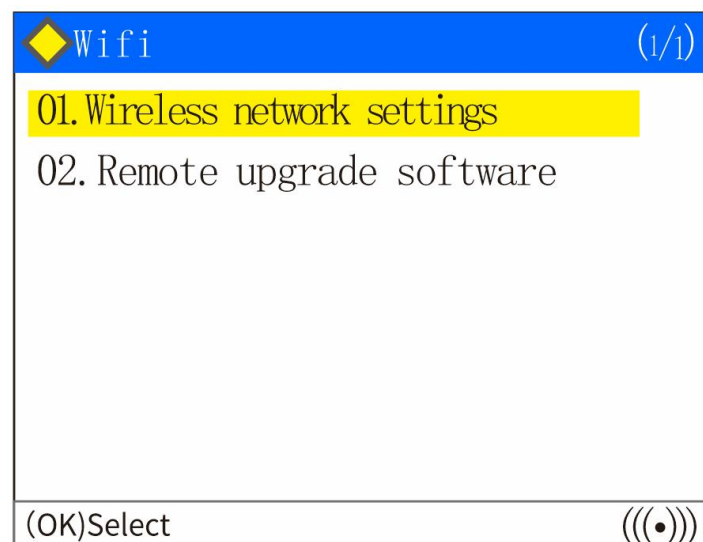
different , the software will not work normally or able to upgrade the diagnostic scanner.

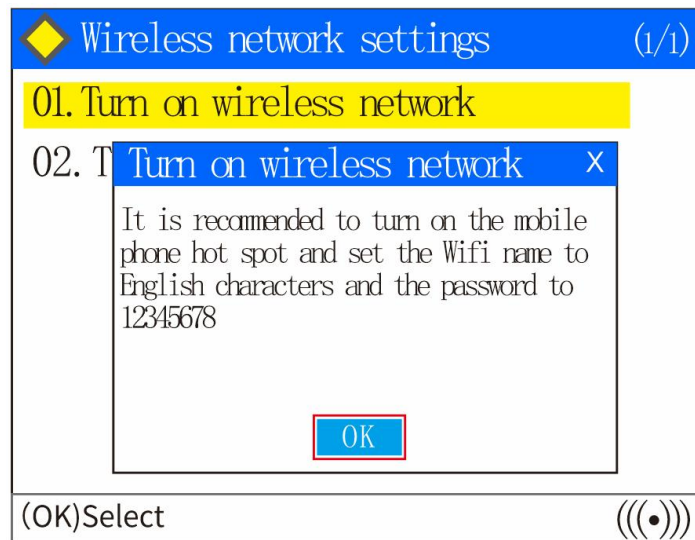# Method 2: WIFI connect method and software upgrade

1. The diagnostic scanner is connected to the external power supply. After the diagnostic scanner is powered on, click the "One-click Upgrade" icon on the home screen.
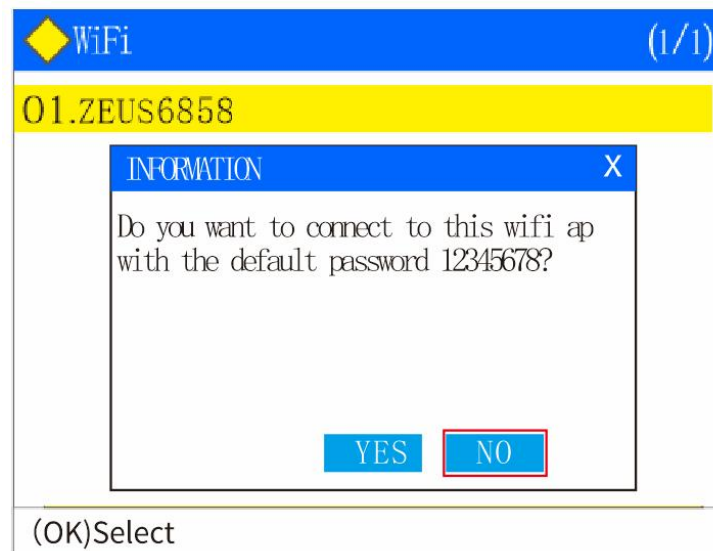
```
◆MAIN MENU                        (1/1)



         Wifi




(OK)Select                        (((•)))
```

2. Enter the one-click upgrade page.

```
◆Wifi                             (1/1)

01.Wireless network settings
02.Remote upgrade software






(OK)Select                        (((•)))
```

3. Select "Wireless Network Settings" to enter, and select the "Turn On Wireless Network" option. Select "OK" to enter.

◆ Wireless network settings　　　(1/1)

01.Turn on wireless network

02. T┌Turn on wireless network　　X┐

It is recommended to turn on the mobile phone hot spot and set the Wifi name to English characters and the password to 12345678

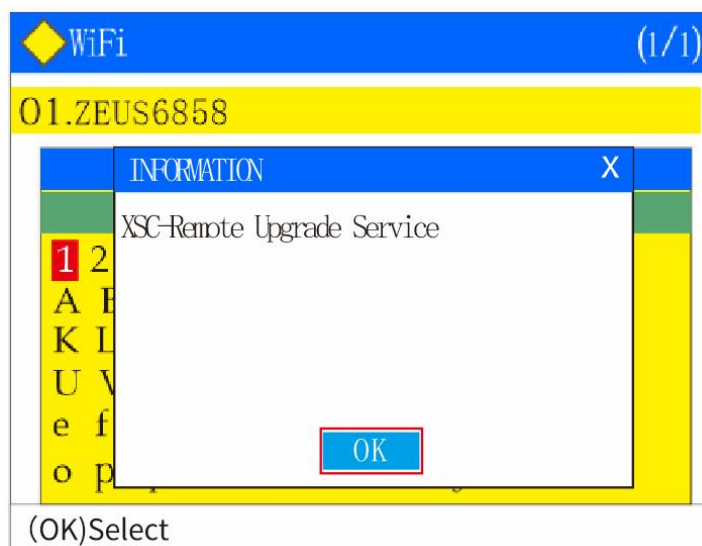OK

(OK)Select　　　　　　　　　(((•)))

4. After finding your network option, you can select "Yes", but you need to change the connection password through the hotspot on your personal phone to use the default password [shortcut for WiFi link]; If you select "No", you will need to enter the WIFI connection password by selecting "No".
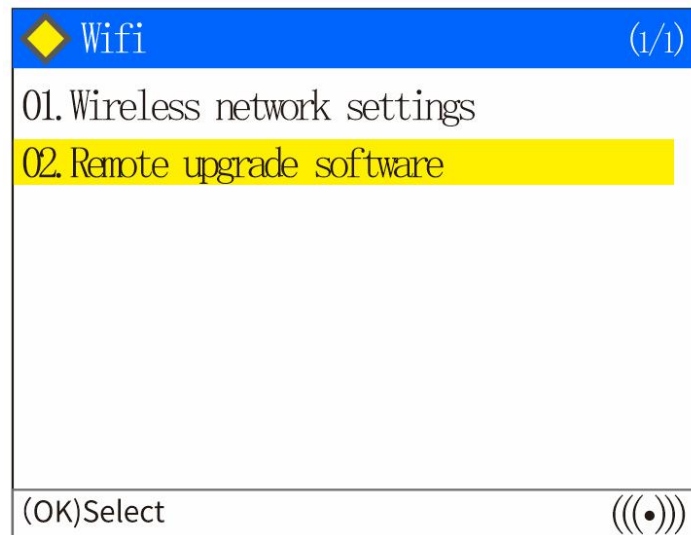

◆WiFi　　　　　　　　　　　(1/1)

01.ZEUS6858

┌INFORMATION　　　　　　　X┐

Do you want to connect to this wifi ap with the default password 12345678?

YES　　NO

(OK)Select

5. Press up "▲", down "▼", left "◀" and right "▶" arrow button to select the alphabet character and Arabic numerals corresponding to your WIFI password. F1 button is for confirming the selection. Enter the complete password and press "OK" button, the diagnostic scanner will indicate that the connection is successful.
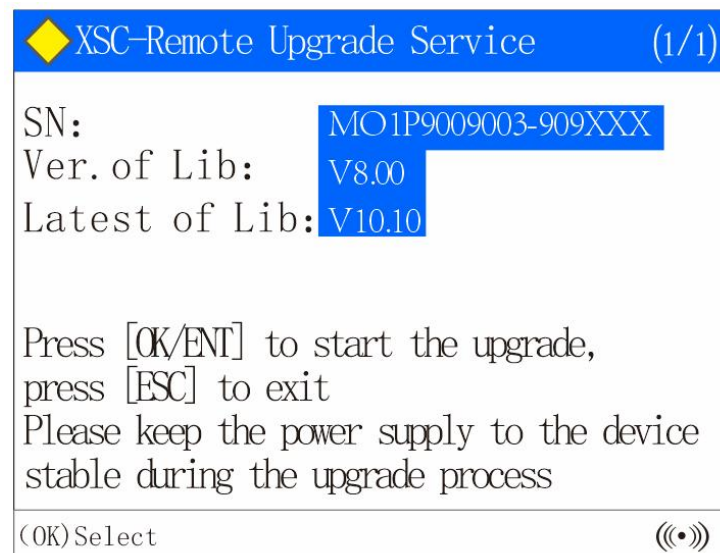
6. After the diagnostic scanner prompts that the network connection is successful, it will enter the "Xinsicheng – Remote Upgrade Service System". After the WIFI connection is successful, select "OK".
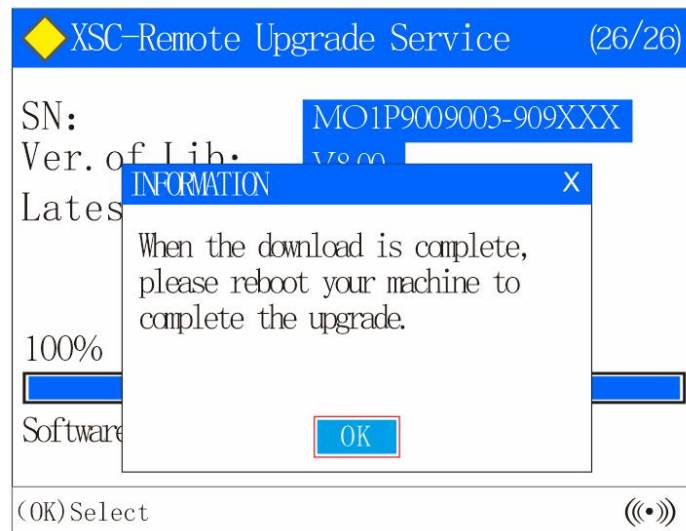

7. The one-click upgrade page is displayed. To upgrade the software, select "Remote Upgrade Software". Press the return button to exit, if you do not need to upgrade the software.

```
◆ Wifi                                    (1/1)
01. Wireless network settings
02. Remote upgrade software
(OK)Select                                (((•)))
```
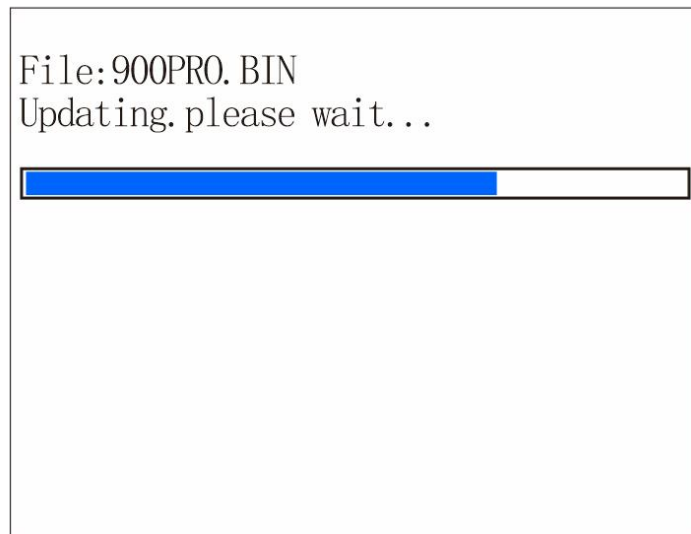
8. If you select "Remote Upgrade Software", the diagnostic scanner will display the machine serial number, current software version, and latest software version, and press "OK" to start the upgrade process.


```
◆ XSC-Remote Upgrade Service              (1/1)
SN:              MO1P9009003-909XXX
Ver.of Lib:      V8.00
Latest of Lib:   V10.10


Press [OK/ENT] to start the upgrade,
press [ESC] to exit
Please keep the power supply to the device
stable during the upgrade process
(OK)Select                                (((•)))
```

9. Wait for the download process display bar reaches 100%, the diagnostic scanner will prompt you that the download process is complete. select "OK" to restart the diagnostic scanner to update the software [power off/then power on again].

SN: MO1P9009003-909XXX
Ver. of Lib: V8.00

INFORMATION   X

When the download is complete,
please reboot your machine to
complete the upgrade.

100%

Software

OK

(OK)Select   (((•)))

10. Wait for the display bar to finish and the software update is complete.

File:900PRO.BIN
Updating.please wait...

If there is any doubt about the use of the diagnostic scanner, please contact the technical support department, thank you!