



# H6E

## Diagnosis System

User Manual



## Declaration

1. This manual is designed for the usage of H6E, applying to H6E automotive diagnosis platform.

No part of this manual can be reproduced, stored in a retrieval system or transmitted, in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), without the prior written permission of Xtool.

2. This electronic control system diagnostic unit is designed for professional vehicle maintenance technicians. It has a certain reliability, however, it can not exclude vehicle damage and loss caused by customer technical problems, vehicle problems or other factors, so users need to take risks.

3. Use the device only as described in this manual. The user will be responsible solely for the after-effects of violating the laws and regulations caused by wrongly using the product or its data information, Xtool will not bear legal responsibility for that.

4. Xtool shall not be liable for any incidental or consequential damages neither for any economic consequential damages arising from the accidents of individual users and the third parties, misusing or abusing of the device, unauthorized changing or repairing of the device, or the failure made by the user not to use the product according to the manual.

5. All information, specifications and illustrations in this manual are based on the latest configurations and functions available at the time of printing. Xtool reserves the right to make changes at any time without notice.

6. **XTOOL** is the registered trademark of Shenzhen Xtooltech Co., Ltd.

7. In countries that the trademarks, service marks, domain names, logos and the name of the company are not registered, Xtool claims that it still reserves the ownership of the unregistered trademarks, service marks, domain names, logos and the company name. All other marks for the other products and the company's name mentioned in the manual still belong to the original registered company. You may not use the trademarks, service marks, domain names, logos and company name of Xtool or other companies mentioned without written permission from the trademark holder.

8. Please visit <http://www.xtooltech.com> for more information about H6E.

9. Xtool reserves the right for the final interpretation of this manual content.

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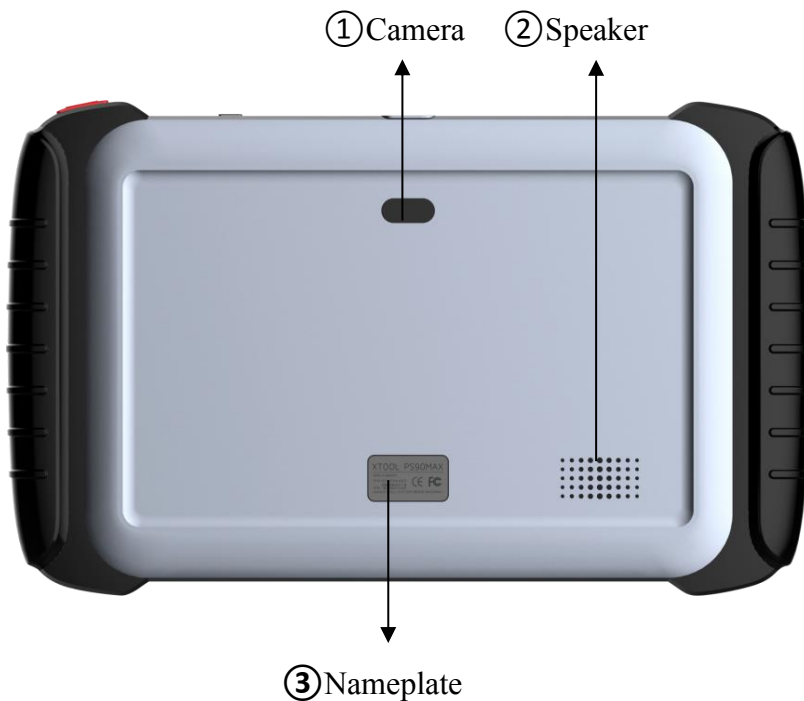
## Chapter I. About H6E

### 1.1 Appearance

#### 1.1.1 Front view

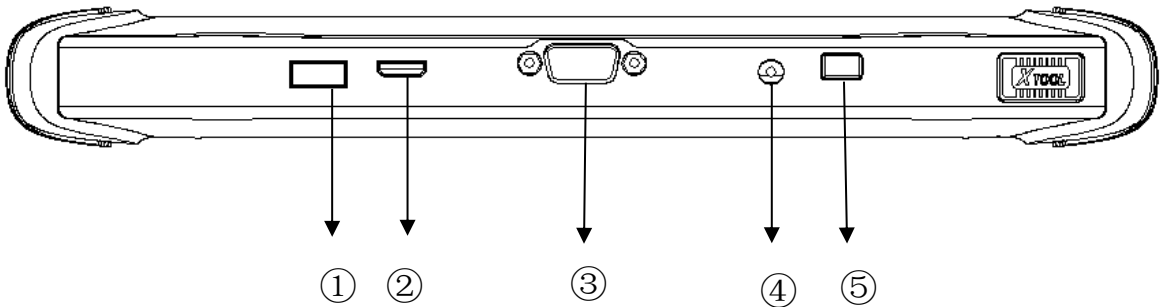


#### 1.1.2 Back view



## 1.2 Interface of tablet

### 1.2.1 Top View



①USB3.0 interface: Wired data transmission

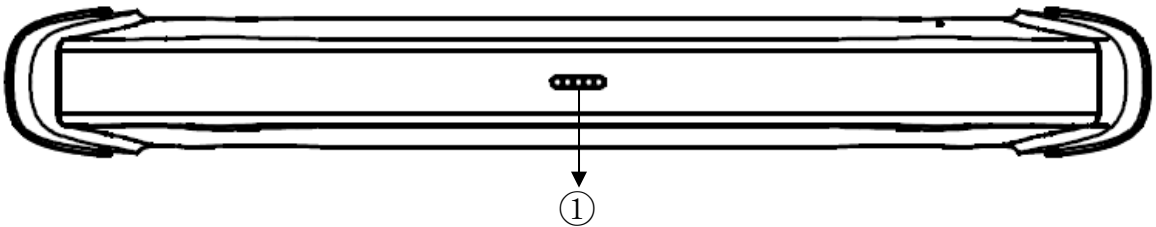
②Mini HDMI interface: Audio and video transfer

③DB15 interface: Extended reservation port

④DC charging port: Device Charging

⑤Power Button: Power on / off

### 1.2.2 Bottom View



①Charger Interface: A reserved charger interface

### 1.2.3 H6E Technical Parameters

Operating System: Android

Processor: Quad core processor 1.8GHz

Memory: 2GB RAM, 32GB ROM

Display / touch screen: 1024\*768 resolution, 8 inches LED Compatible touch screen

Camera: rear camera, 8 millions pixels, with flash autofocus.

Sensor: gravity sensor

Audio input / output: microphone/speaker.

Interface: USB3.0, DC charging port, MINI HDMI, DB15 interface.

Battery: 10000mAh 3.7V lithium polymer battery

Input voltage: +9~+12V DC

Working temperature: -20°C to 50°C (-4°F to 126°F)

Relative humidity: <90%

Appearance size: 275\*183\*33.9 (mm)



## Chapter II. How to use H6E

### 2.1 Main Interface


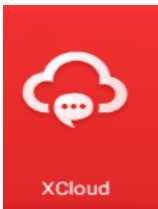


#### 2.1.1 Main Interface






#### 2.1.2 Interface Icon






| Functional Buttons   | Functional Descriptions                                      |
|--|--|
|  <p>Diagnosis</p> | <p><b>【Diagnosis】</b> Read vehicle diagnosis information</p> |
|  <p>Report</p>    | <p><b>【Diagnose report】</b> Read vehicle report</p>          |



|  |   |
|--|---|
|   | <p><b>【Setting】</b> Language, unit, Bluetooth</p>                         |
|   | <p><b>【Xtool cloud】</b> Online chatting</p>                               |
|   | <p><b>【One-click upgrade】</b> Upgrade software</p>                        |
|  | <p><b>【Remote control】</b> Xtooltech support center and function keys</p> |

### 2.1.3 Interface Taskbar

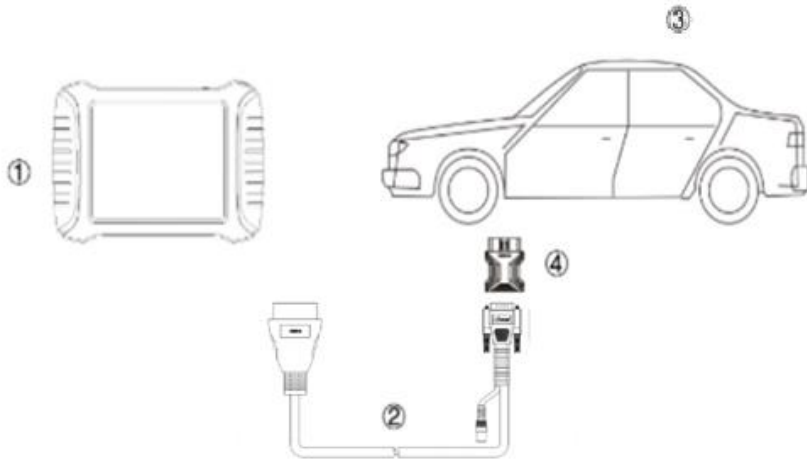
| <b>Functional Buttons</b>   | <b>Descriptions</b>                              |
|---|--|
|  | <p><b>【Return to the previous interface】</b></p> |
|  | <p><b>【Decrease the volume】</b></p>              |
|  | <p><b>【Increase the volume】</b></p>              |

|   |   |
|---|---|
|  | <b>【Return to the main interface of Android】</b>  |
|  | <b>【Show recently used programs】</b>  |
|  | <b>【Screenshot】</b>   |
|  | <b>【Back to the diagnosis model interface】</b>  |
|  | <b>【Click to record the data, click again to send your feedback to XTOOL service center.】</b> |

## 2.2 Connection Diagnosis

### 2.2.1 Vehicle Connection [①→②→④→③]

- 1) The H6E machine is connected to the vehicle through the main cable.
- 2) Turn on H6E machine and the car ignition switch to start diagnosis.



- ① H6E Tablet
- ② Main cable
- ③ Measured vehicle
- ④ OBDII-16 Adapter (Select other adapters if needed)

### 2.2.2 Precautions Before Use

- 1) Battery voltage range on the car: +9~+12V DC.
- 2) When the test harness is unplugged, the application hand pinch the head of the front end of the wire harness to unplug, do not pull the middle segment of the wiring bundle, and the plug connection beam sees the direction of the corresponding interface flat plug, and do not let it be inserted to avoid damaging the terminal.
- 3) When carrying out some special functions tests, users are required to operate the device according to operating instructions. For some tests the

vehicle has to meet certain requirements, for example: engine temperature 80°C /105°C, turn off loads (such as headlights, air-conditioner, etc.), put accelerator pedal in released position, etc.

4) As the domestic models equipped with the electronic control system is messy, such as the failure to test or test data is not correct, consider the selected menu and the measured electronic control system is appropriate, you can find the vehicle ECU, through the ECU sticker model for menu selection.

5) You may not have a software upgrade or consult with the company's technical services when you do not find the vehicle or electronic control system in the H6E test menu.

6) It is forbidden to use the wiring harness which is not from Xtool to test the connection to avoid suffering unnecessary loss.

7) In H6E and vehicle communication, the direct shutdown is prohibited. You should cancel the task before returning to the main interface for shutdown.

8) The use of H6E should be lightly handled, as far as possible to avoid vibration or impact. To ensure the service life of the touch screen, touch the screen gently.

9) During long period of non-use, please disconnect the power and then turn off the H6E unit.

## 2.3 Diagnosis

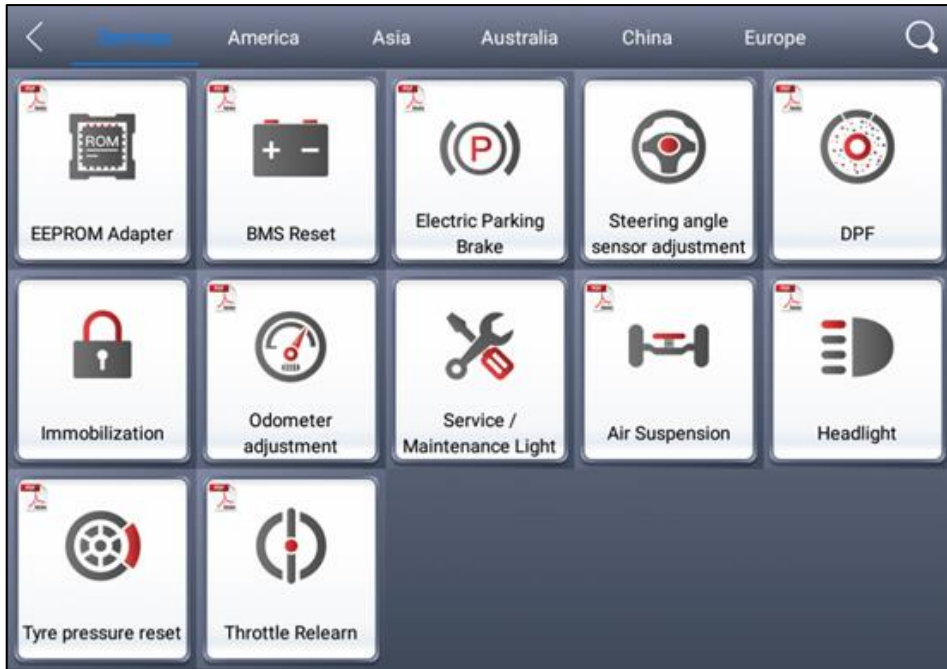
### 2.3.1 Menu selection

1) After the H6E machine is successfully connected to the vehicle, you can choose your vehicle type on the menu shown as follows:



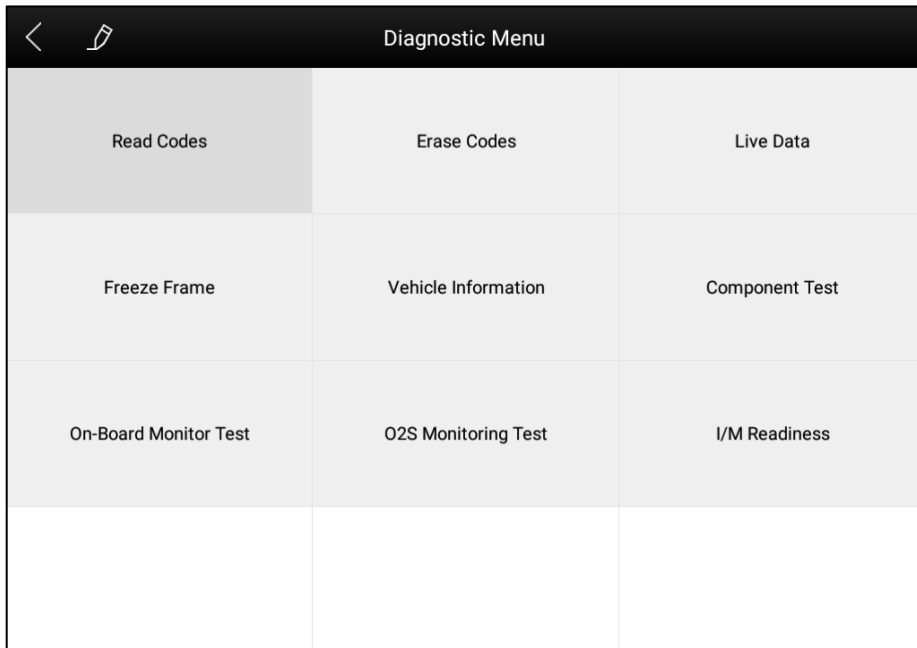
2) According to your needs to choose [special function] [European car] [Asian car] [American car] [Australian car] [Chinese car] for diagnosis, and click on the search icon in the upper right corner, for a quick search of your module type.

3) For quick troubleshooting on some special functions, there are also a range of special diagnostic functions for some vehicles as follows:



### 2.3.2 Diagnostic Function

Take "BMW car" as an example, click and enter into the following Diagnostic Menu page:

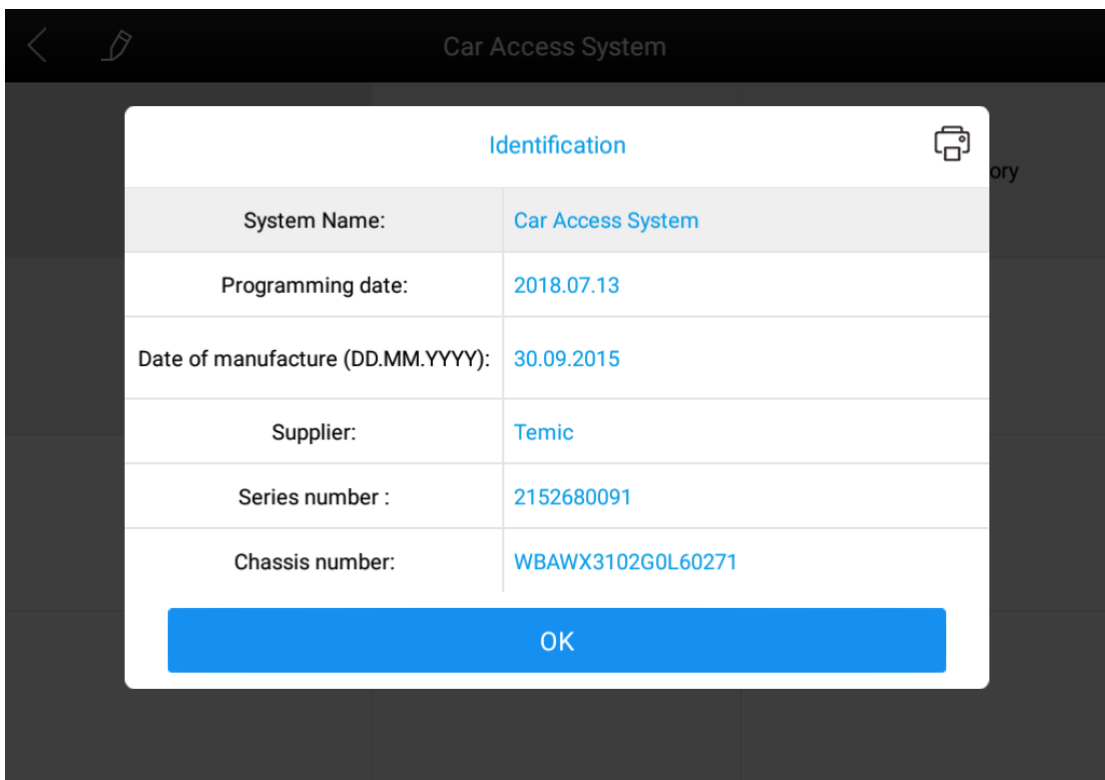


(The main function menu for different cars is slightly different, and the following options are included in the common main features menu)

[Read ECU version information], [Read ECU], [Read DTCs], [Clear DTCs], [Read live data], [Actuation components test], [Special Functions]

### 2.3.3 Read ECU

1) This function is to read the ECU version information, in some of the electronic control displayed as "System identification" or "System Information" menu, the meaning is the same. It reads the ECU related software, hardware version, part number and other information, shown as follows:



### 2.3.4 Read DTCs

Select the "Read fault code" function to read the fault code stored in the ECU, fault codes that are successfully read will be shown. ▼

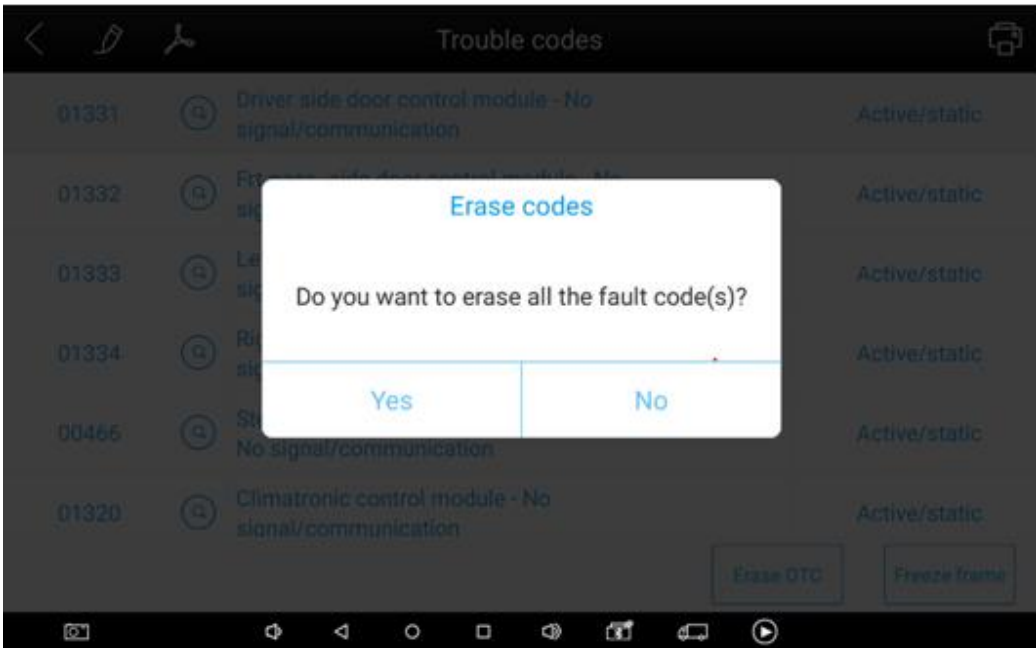
| Automatic selection | Manual selection | Manual operation |
|---------------------|------------------|------------------|
|                     |                  |                  |
|                     |                  |                  |
|                     |                  |                  |

### 2.3.5 Clear DTCs

- 1) Select the "Clear Code" icon to clear the fault codes that are read.

As shown in the following figure.





2) Click "Yes" to clear the fault codes.

### 2.3.6 Read live Data

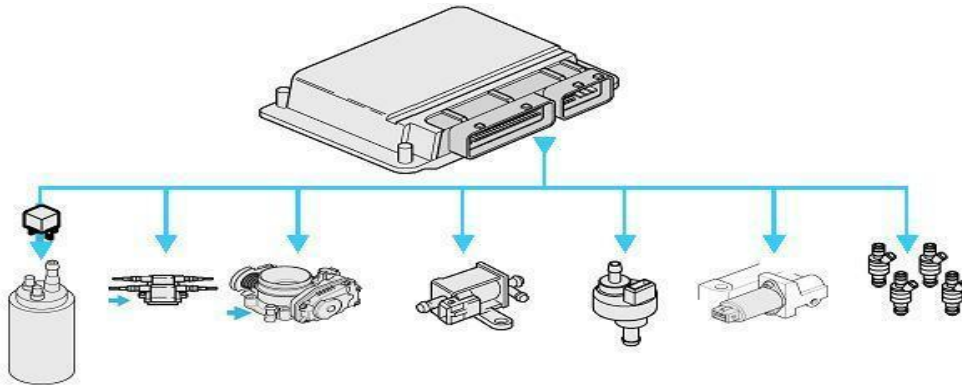
By reading the data stream function, it is possible to read the data value of the control unit. Click icon on the top, you can save the current data stream of this system for your better reference later.

### 2.3.7 Special functions

The special functions in different vehicle systems will also be different.

### 2.3.8 Actuating components test

Test conditions: Follow the instructions, for example: The engine is not running and the ignition switch is turned on. If the engine is started or the speed signal is recognized, the motion test diagnosis is interrupted.



1) Return the menu to "dynamic diagnostic data" to see the "Action test" function menu, choose to display the system can be used to perform action test of the Actuator component menu.

Tip: The "Action test" function is a part of the system to perform functional testing of components, when performing this function, the diagnostic instrument will simulate the ECU signal to carry out the action of the component to determine whether the actuator or line is good.

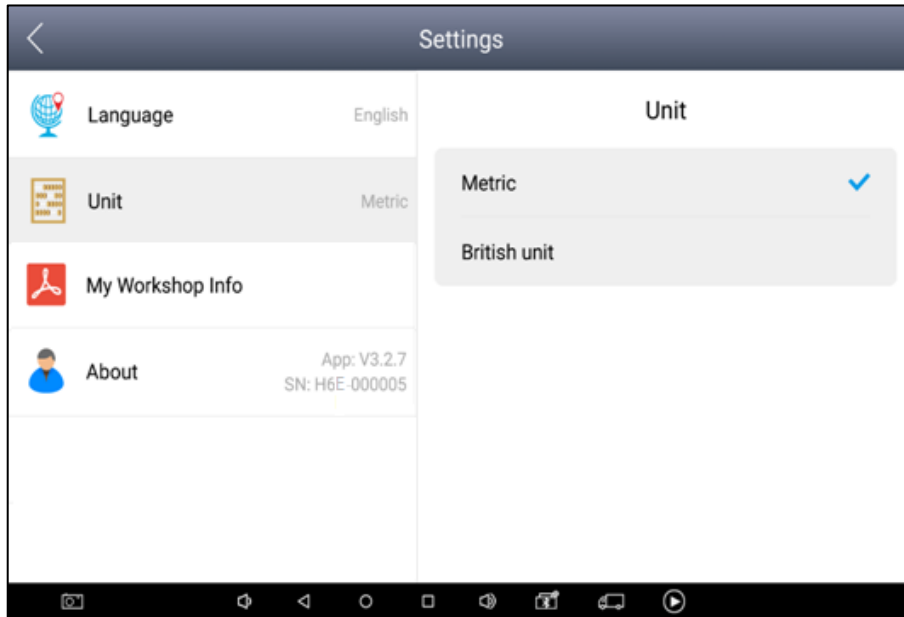
2) Return the menu to "dynamic diagnostic data" to see the "Action test" function menu and select the Actuator component menu that will display the system for action testing.

## 2.4 Setting

Enter the "Settings", you can do the selection on language units and system-related options, etc.

1) Language: Select the language and select the desired language in the language options list on the right.

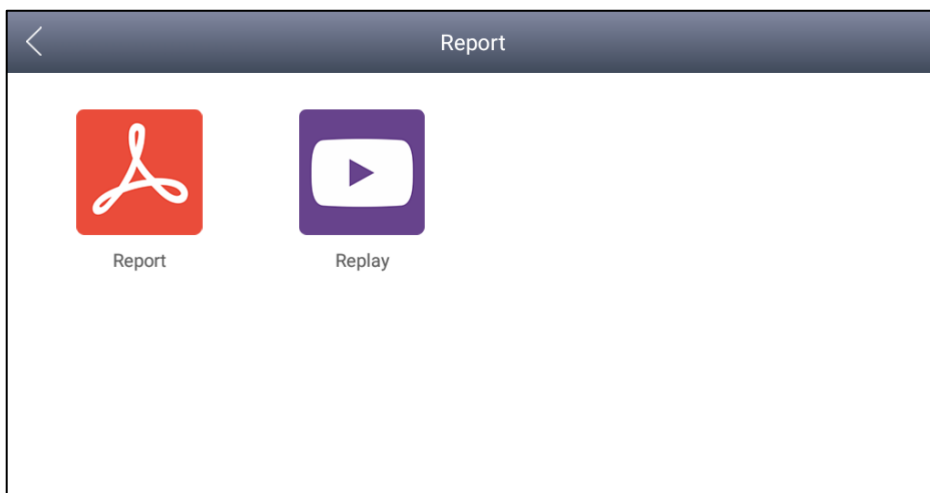
2) Units: Select units of measure, "Metric" or "British unit".



## 2.5 Diagnose report

### 2.5.1 Diagnose report

Diagnostic Report is used for re-viewing and printing the saved files, such as Live Data, Trouble Codes or pictures generated in the process of diagnosis, users also can view a record of which cars have been previously tested. It includes three parts: PDF Files, Pictures and Data Playback.



The data stream, fault code..etc. in the course of the vehicle diagnosis is generated into a PDF report.



### 2.5.2 Data playback

The Data playback feature lets you see which cars, which systems, and playback of recorded data streams and freeze frames.

### 2.6 One-click upgrade

The H6E device no longer requires a card to be upgraded, just open the app and click Upgrade Icon, it makes upgrade convenient and fast!

|   |                             | Update |                     |                             | Update all |
|---|-----------------------------|--------|---------------------|-----------------------------|------------|
| 1 | SERVICE LIGHT RESET-ASIA    | V16.81 | 2018-09-26 03:04:57 | <input type="checkbox"/> 0% | Update     |
| 2 | SERVICE LIGHT RESET-CHINA   | V18.51 | 2018-09-26 03:04:59 | <input type="checkbox"/> 0% | Update     |
| 3 | SERVICE LIGHT RESET-EUROPE  | V18.21 | 2018-09-26 03:05:01 | <input type="checkbox"/> 0% | Update     |
| 4 | SERVICE LIGHT RESET-AMERICA | V16.21 | 2018-09-26 03:05:02 | <input type="checkbox"/> 0% | Update     |
| 5 | DIAGNOSIS-NISSAN PIN DATA   | V5.0   | 2015-04-27 19:55:11 | <input type="checkbox"/> 0% | Update     |
| 6 | DIAGNOSIS-OBDDII            | V20.91 | 2017-07-26 23:07:02 | <input type="checkbox"/> 0% | Update     |
| 7 | DIAGNOSIS-BUICK             | V10.51 | 2018-05-12 08:46:07 | <input type="checkbox"/> 0% | Update     |
| 8 | DIAGNOSIS-CHEVROLET         | V10.51 | 2018-05-12 08:46:07 | <input type="checkbox"/> 0% | Update     |
| 9 | DIAGNOSIS-CADILLAC          | V10.51 | 2018-05-12 08:46:07 | <input type="checkbox"/> 0% | Update     |

## 2.7 Xtool Cloud System

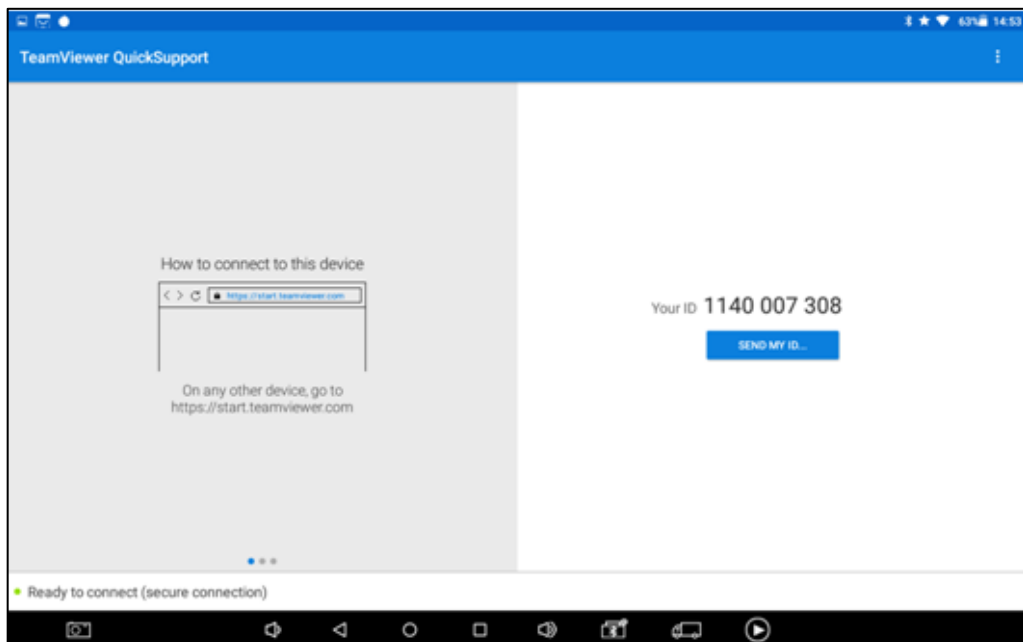
All vehicle maintenance technicians using our equipment can easily inquire the maintenance information we put on the cloud service platform, and communicate with other Xtool users on the Forum there. you have access to online database that provides you extensive repair and diagnostic techniques as well as vehicle maintenance programs.

## 2.8 Remote control

If the service technician has encountered problems during the repair process, you can open this application for remote assistance and accept support from the Xtool Tech-Support Center.

- 1) Enter the Diagnosis App, enter [Remote];
- 2) Click the [Remote Control] icon to generate and display the device ID;
- 3) Provide your ID to after-sales technical support staff;
- 4) The system pops up a window and allows the other party to remote control for your machine.

\*\* please do not operate the equipment during the time it is being remote controlled.



## FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### RF Exposure Information

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

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