



AutoProPad Basic Programmer Platform


User Manual

Declaration

1. This manual is designed for the use of the AutoProPAD Basic, a smart automotive key programmer platform. No part of this manual can be reproduced, stored in a retrieval system, transmitted, in any form, or by any means (electronic, mechanical, photocopying, recording, or otherwise), without the prior written permission of Xtool.

2. Use of this device only as described in this manual. Xtool shall not be liable for any incidental, economic, or consequential damages arising from the accidents of individual users and the third parties, misuse or abuse of the device, unauthorized change, repair of the device, change of data information, or the failure made by the user not using the product per the manual.

3. 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.

4.  is a registered trademark of SHENZHEN XTOOLTECH CO., LTD and XTOOLTECH (USA) INC.

5. 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.

7. Please visit www.xtooltech.com for more information on the AutoProPAD Basic.

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

Xtool AutoProPAD Basic User Manual Instructions

Please read this user manual carefully before using the scanner.

When reading the manual, please pay special attention to the words “Note”, “Caution” or “Warning”, read them carefully for appropriate operation.

**Xtool AutoProPAD Basic Key Programmer System Main Unit
Maintenance**

Avoid shaking or dismantling the unit as it may damage the internal components.

Do not use hard or sharp objects to touch the LCD screen.

Do not use any excessive force.

Do not expose the screen to strong sunlight for a long period.

Caution: Keep it away from water, moisture, high temperature, or very low temperature.

Keep the main unit away from strong magnetic fields.

Operation Instructions

For safe operation, please follow the instructions below:

Keep the scanner away from heat or fumes when using it.

If the vehicle battery contains acid, please avoid any skin contact and keep fire sources away from the battery during testing.

Exhaust gas of vehicle contains harmful chemicals, please ensure adequate ventilation.

Do not touch the cooling system components or exhaust manifolds when engine is running due to the high temperatures.

Make sure parking brake is engaged, Vehicle is in Neutral or Park to prevent the vehicle from moving when engine starts.

Make sure the (DLC) diagnostic link connector is functioning and connected properly before starting the test to avoid damage to any of the ECUs.

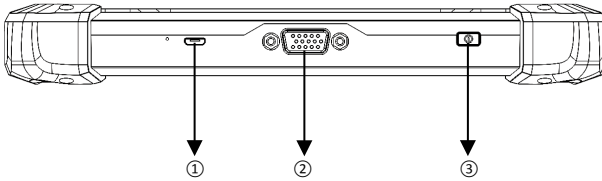
Do not switch off the power or unplug the connectors during testing, otherwise you may damage the ECUs.

Contents

| | |
|--|----|
| CHAPTER I About AutoProPAD Basic | 4 |
| 1. Appearance | 4 |
| 2. Layout of AutoProPAD Basic Tablet | 5 |
| 3. AutoProPAD Basic Technical Parameters | 5 |
| CHAPTER II How to Use the AutoProPAD Basic | 6 |
| 1. AutoProPAD Basic Activation | 6 |
| 2. AutoProPAD Basic Main Interface and Functional Buttons Descriptions | 6 |
| 3. Vehicle Connection Key Programming | 9 |
| 3.1. Vehicle Connection Test | 9 |
| 3.2. Precautions before Use | 9 |
| 4. Key Programming and Special function | 10 |
| 4.1. Menu Options | 10 |
| 4.2. Key Programming Function (Immobilizer, Smart Key, Remote &etc.) | 11 |
| 5. Settings | 29 |
| 6. XCloud (English version is coming soon) | 30 |
| 7. Update | 30 |
| 8. Report | 31 |
| 8.1. PDF Files | 31 |
| 8.2. Pictures | 32 |
| 8.3. Data Replay | 32 |
| 9. Remote | 32 |
| CHAPTER III Examples of Diagnostic Link Connector Locations | 34 |
| 1. Diagnostic Link Connectors Locations of Various Vehicle Models | 34 |
| 2. Location Diagram of Vehicle OBDII Connectors | 34 |
| 3. Diagnostic Link Connectors Terminal Definition and Communication Protocols | 35 |
| 3.1. Standard OBDII Diagnostic Link Connector | 35 |

CHAPTER | About AutoProPAD Basic**1. Appearance****1.1. Front View****1.2. Back View**

2. Layout of AutoProPAD Basic Tablet



- ① Micro USB: Battery charge or data synchronization with PC
- ② DB15 Port: Supports wired connection with car by the cable
- ③ Power Button: Power on or power off

3. AutoProPAD Basic Technical Parameters

Operating System: Android

Processor: Quad-core 1.6GHz Processor

Memory: 1G RAM, 16G FLASH

Display: 7.0 inch touch screen with 1024×600 resolution

Sensors: Gravity sensor, Ambient light sensor

Auto Input/Output: Microphone, dual speakers, 4-band 3.5mm stereo/standard headset jack

Power and Battery: 4000mAh, 3.7V lithium-polymer battery

Power Voltage: 5V

Power Consumption: 8W

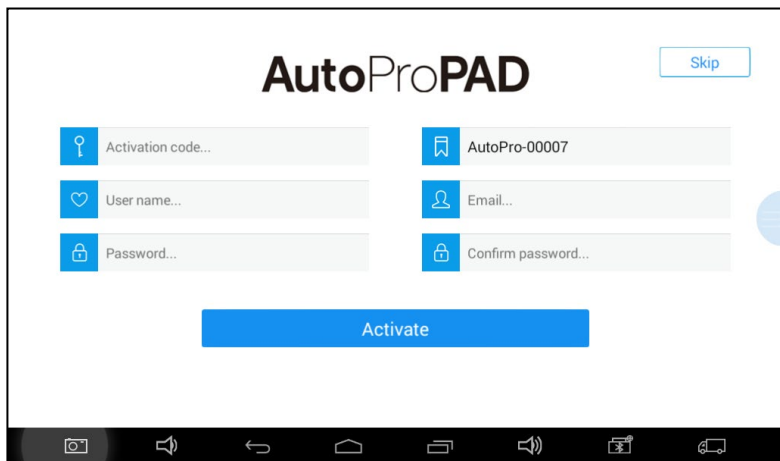
Operating Temperature: -20 to 50°C (-4 to 126°F)

Humidity: <90%

Dimension (L*W*H): 218×150×29mm

CHAPTER II How to Use the AutoProPAD Basic**1. AutoProPAD Basic Activation**

1.1. Please activate AutoProPAD Basic before you use it to test vehicles. And please connect Wi-Fi first.




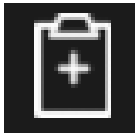
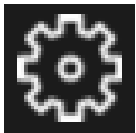
1.2. Input activation code (on the Quality Certificate cover), product serial number (each device will have a serial number and activation code), nickname (workshop's name or user's nickname), login account (can be your email address or cell phone number) and password, the system will then save it. Activation is a one time process. The diagnostic application will start after activation.




2. AutoProPAD Basic Main Interface and Functional Buttons Descriptions**2.1. Main Interface**

Tap on AutoProPAD Basic application icon, the main interface, and sub-menus will be shown as below.









2.2. Sub-menus and Function Buttons

| Function Buttons | Descriptions |
|---|--|
|  | <p>Opens the AutoProPAD Basic key programmer application. It can do key programming, read diagnostic information, view live data, and special functions.</p> |
|  | <p>Users can view all the diagnostic reports and diagnostic data generated in the process of diagnosis.</p> |
|  | <p>Select “Settings”, users can make the language setting and other system related settings.</p> |

| | |
|---|--|
|  | Online Communication platform.(Coming soon) |
|  | Provide remote assistance. |
|  | Click UPDATE after it connects with internet, then you can download the latest diagnostic software directly. |

2.3. Toolbar Function Buttons

| Function Buttons | Descriptions |
|---|--|
|  | Screen capture |
|  | Turn down the volume |
|  | Return to previous interface |
|  | Show (recently used) applications |
|  | Return to the main interface of Android System |
|  | Turn up the volume |



[Click here to return to diagnostic vehicle models interface](#)

3. Vehicle Connection Key Programming

3.1. Vehicle Connection Test

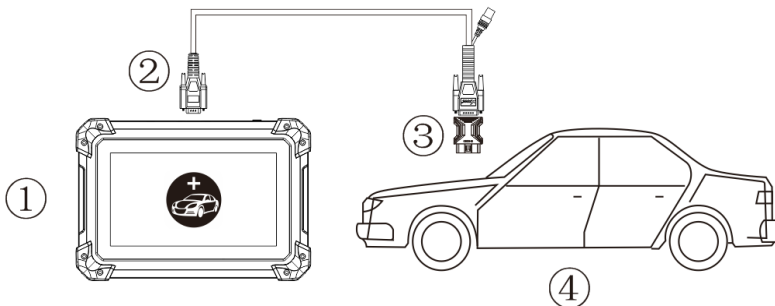
3.1.1. Wire Connection

a. Turn on AutoProPad Basic tablet.

a. Connect cables and vehicle in following order: ①→②→③→④

b. Switch on the ignition and tap on AutoProPad Basic application to test vehicles.

(shown as follows)



- ① AutoProPAD Basic Mainframe
- ② Main Test Cable
- ③ OBDII Connector
- ④ Vehicle

3.2. Precautions before Use

3.2.1. The vehicle power supply must meet the normal voltage limits DC 9-15V.

3.2.2. Users should check the position of the DLC port and ensure the OBDII 16pin connector as well as the DLC port are properly connected before attempting to communicate to vehicle.

3.2.3. When taking some special functions tests, users are required to operate the device per operating instructions. For each vehicle, it has to meet some specific requirements,

for example, the conditions that some vehicle models need to be reached are as follows: engine temperature 80°C to 105°C , turn off any loads (such as headlights, air-conditioner, etc.), put accelerator pedal in released position, and etc.

- 3.2.4. If users can not find the tested vehicle model or electronic control system in the AutoProPAD Basic test menu, they need to update the software or consult Xtool technical service department.
- 3.2.5. Please ensure that only approved XTOOL cables and connectors are used to prevent damage to the unit.
- 3.2.6. Before powering off the unit, please ensure that you cancel, complete the current task or function, and return to the main interface, then power off.
- 3.2.7. Do not use any excessive force to operate the touch screen.
- 3.2.8. During long period of non-use, please disconnect the power and turn off the AutoProPAD Basic unit.

4. Key Programming and Special function

4.1. Menu Options

- 4.1.1. After the AutoProPAD Basic main unit is connected to the vehicle via main test cable, Immobilization can be performed. The Immobilization interface is shown as below.

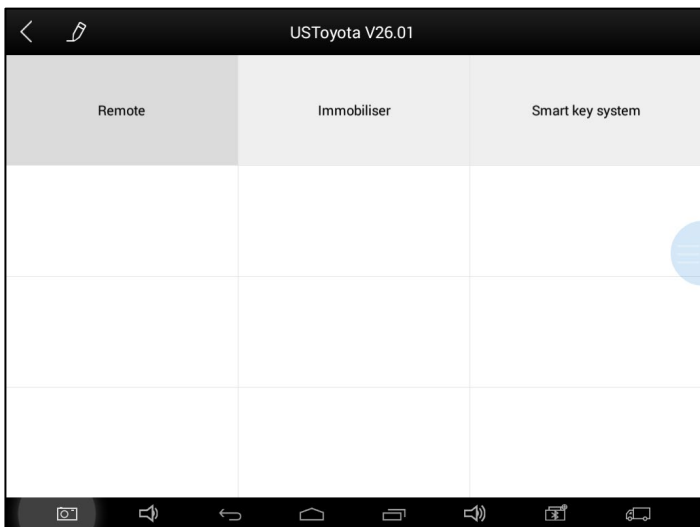


4.1.2. Besides the key programming function, AutoProPAD Basic also has special diagnostic functions for certain vehicles as follows:






4.2. Key Programming Function (Immobilizer, Smart Key, Remote &c.)

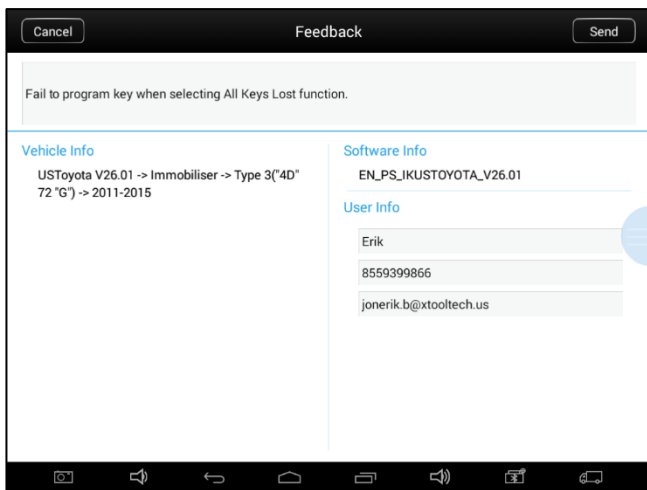
4.2.1. Using Toyota as an example, select Immobilization, then select US Toyota icon. If the icon is not showing on the screen, please swipe up or down to display it.



4.2.2. Toolbar function buttons descriptions

| Function Buttons | Descriptions |
|---|---|
|  | Return to previous interface |
|  | Print test data |
|  | Select icon to record the data log then select the icon again to send your feedback to XTOOL service center via Wi-Fi |

After selecting the data record icon for the second time the data feedback page will appear as shown below, showing diagnostic software version, vehicle being tested, and the steps performed in the diagnostic process. Users can then enter the nature of the problem and any other relevant information then send the form to the Xtool engineering department via Wi-Fi.



Cancel
Feedback
Send

Fail to program key when selecting All Keys Lost function.

Vehicle Info

USToyota V26.01 -> Immobiliser -> Type 3('4D'
72 'G') -> 2011-2015

Software Info

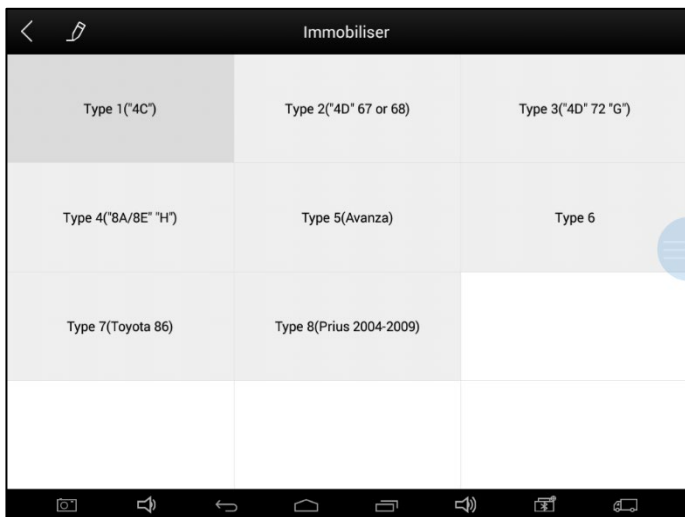
EN_PS_IKUSTOYOTA_V26.01

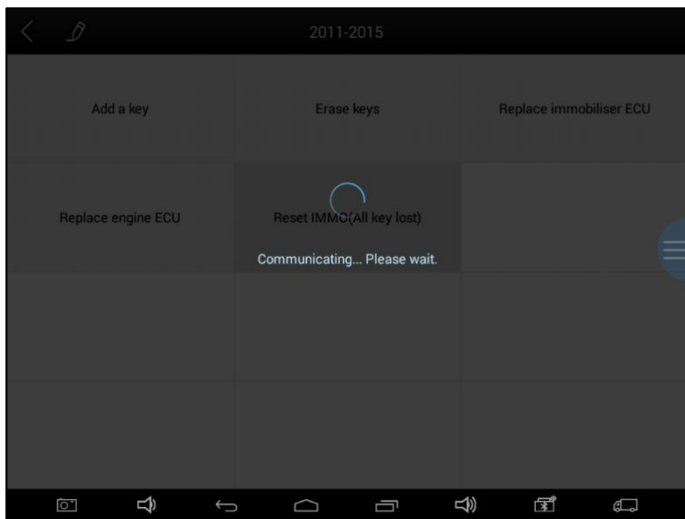
User Info

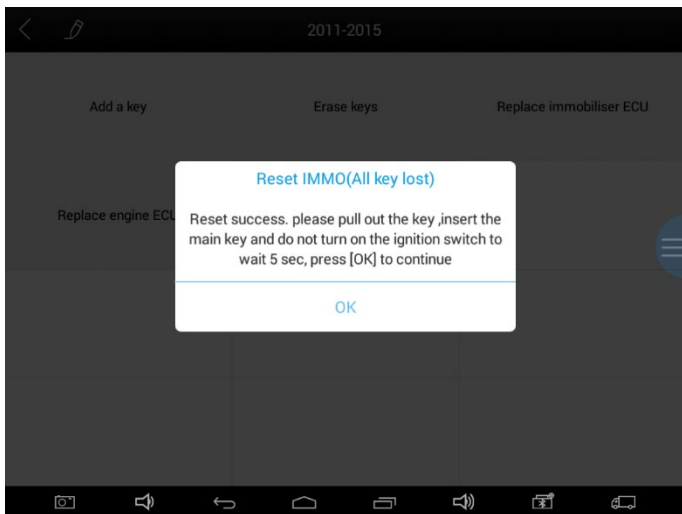
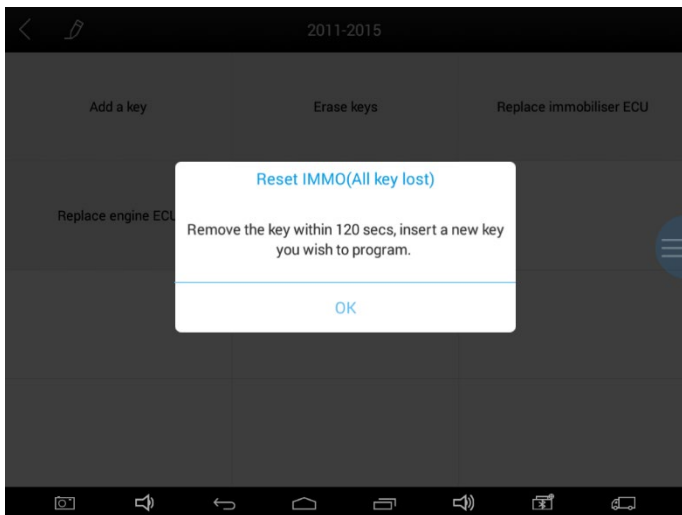
Erik

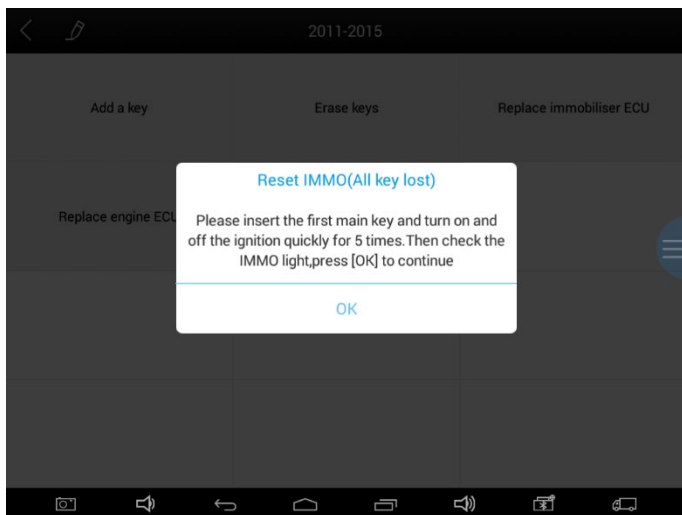
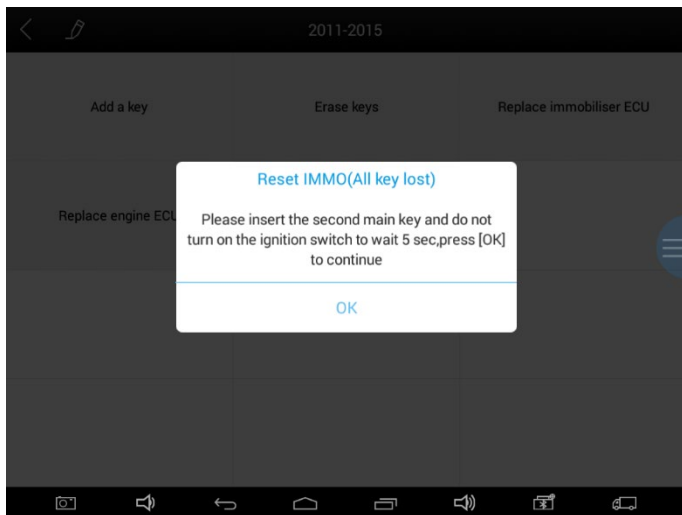
8559399865

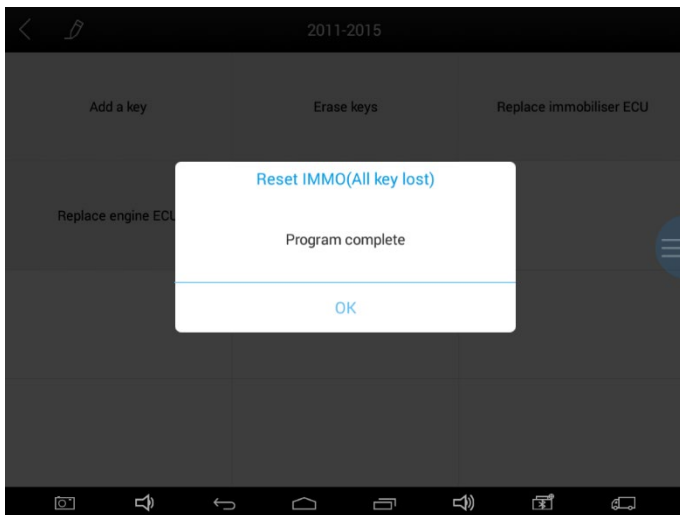
jonerik.b@xtooltech.us

4.2.3. Key Programming (US Toyota G Key All Keys Lost)



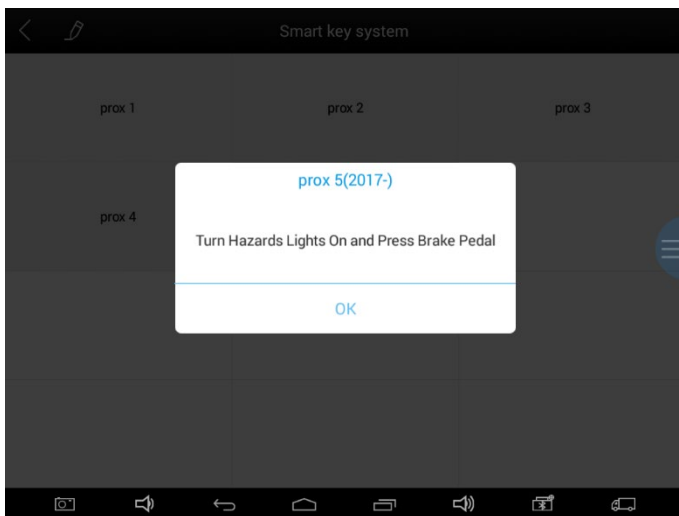


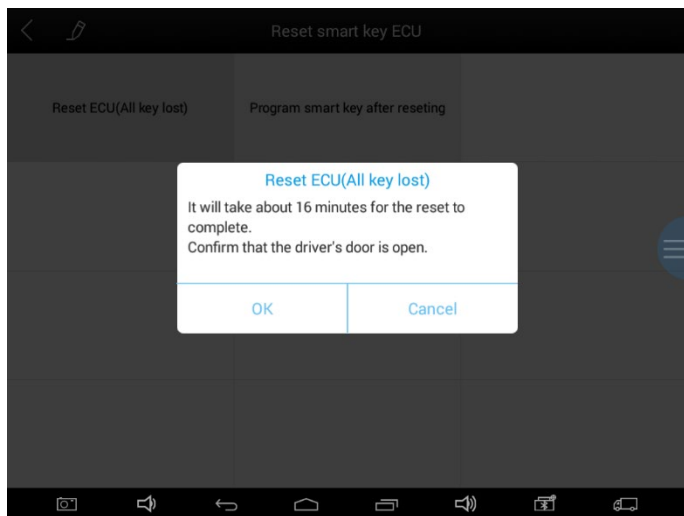
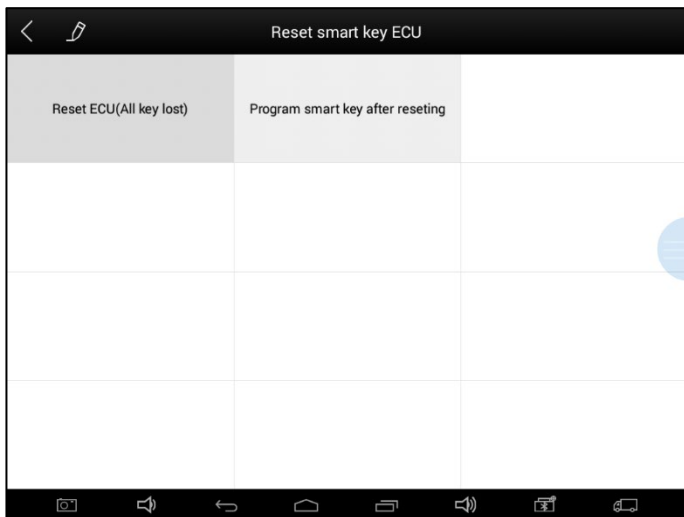


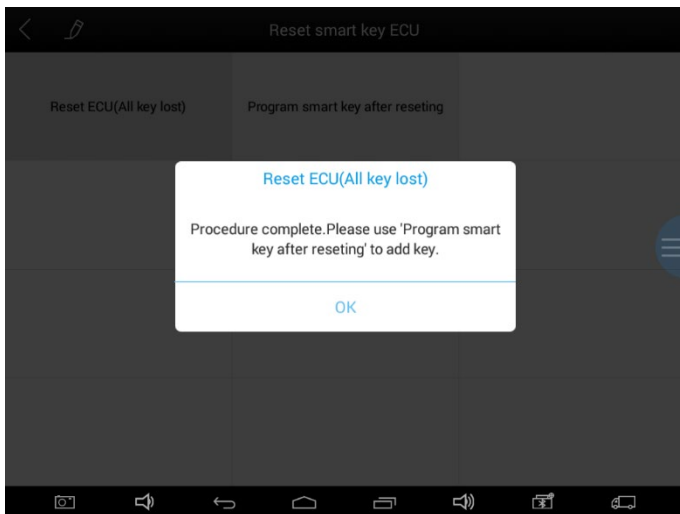
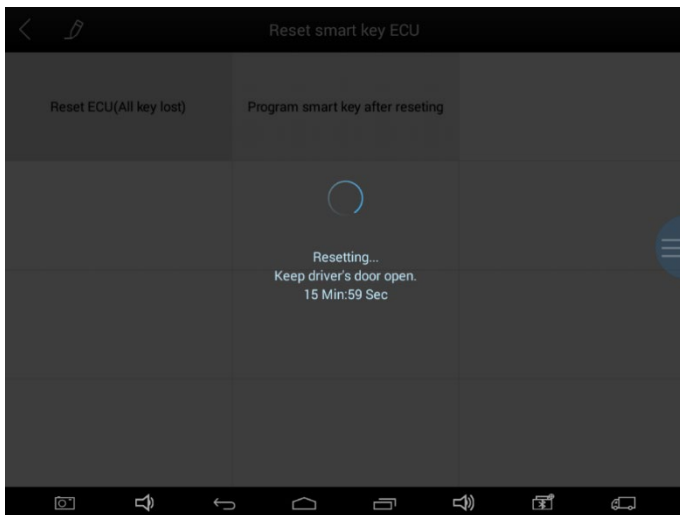


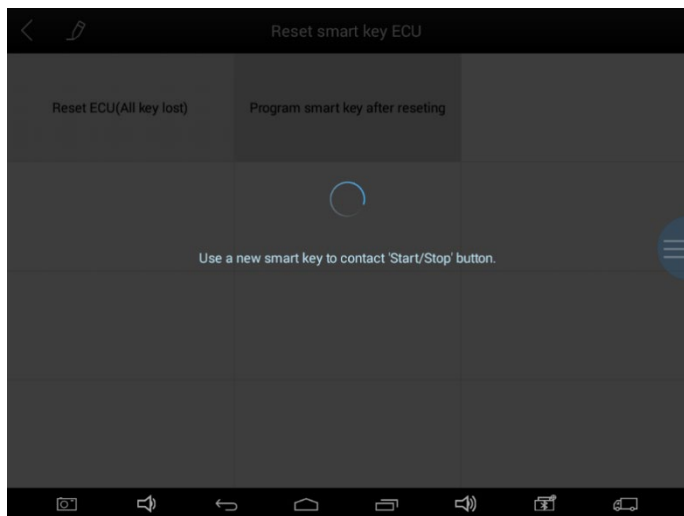
4.2.4. Smart Key Programming (Prox 3 Reset Smart Key ECU)

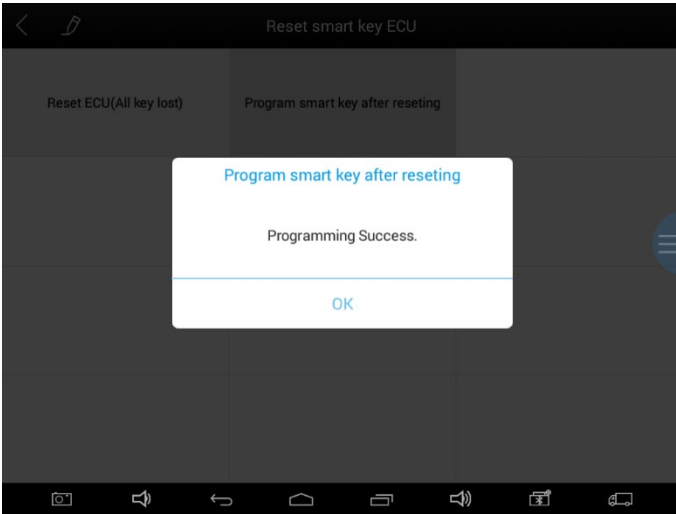






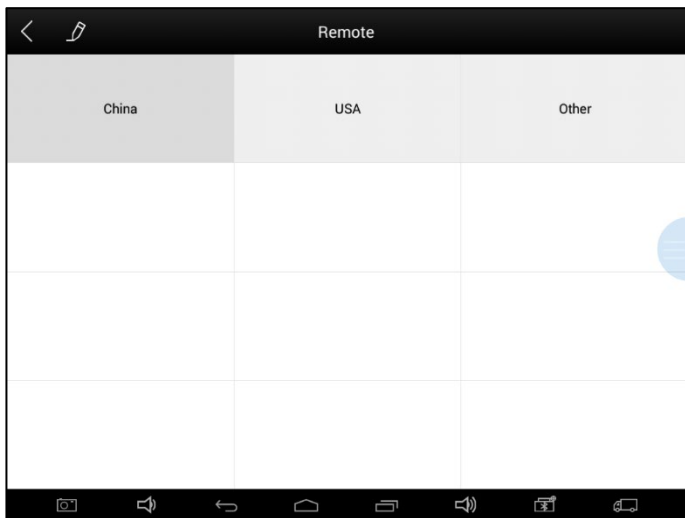


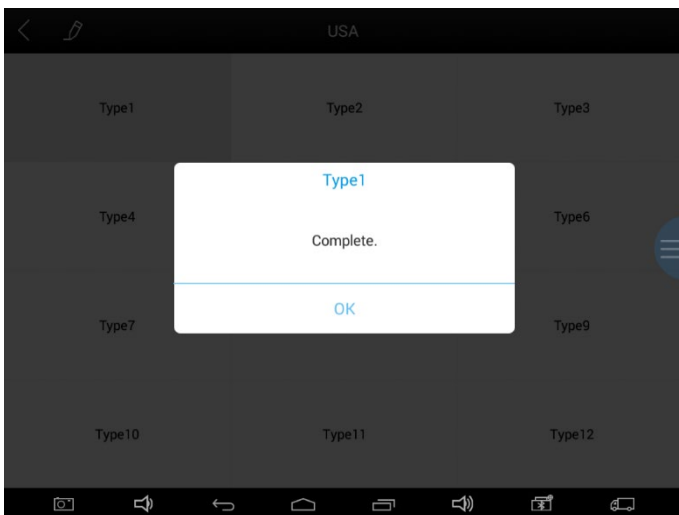
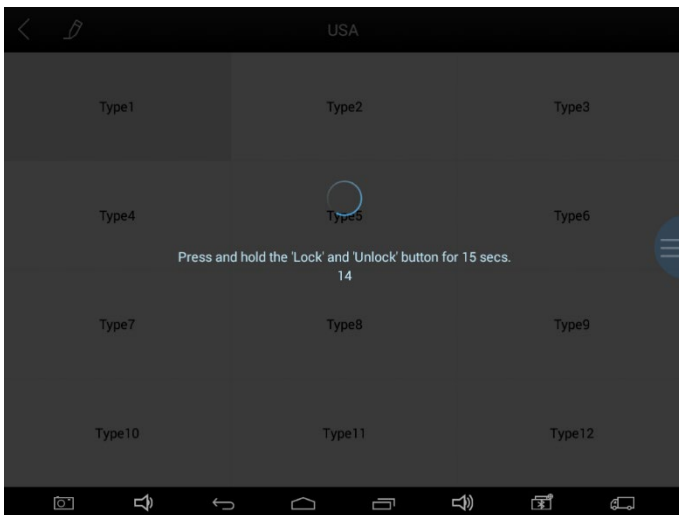




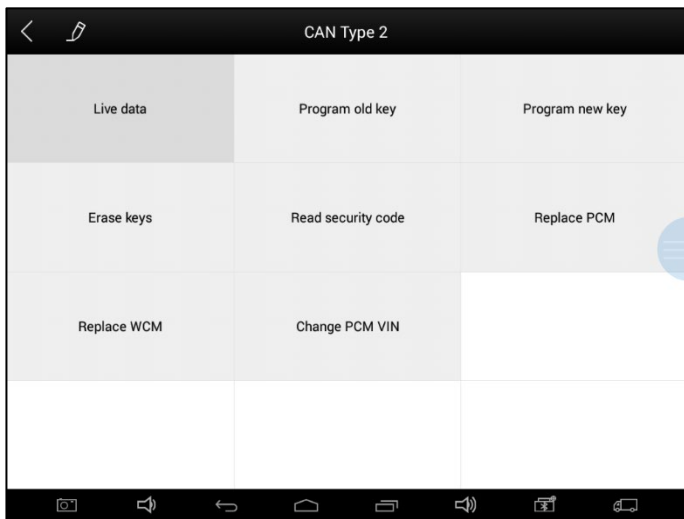
4.2.5. Remote Programming (GM Remote)

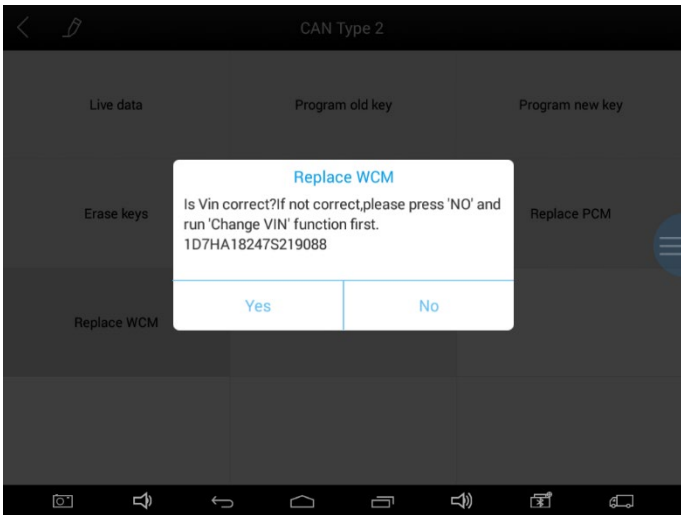
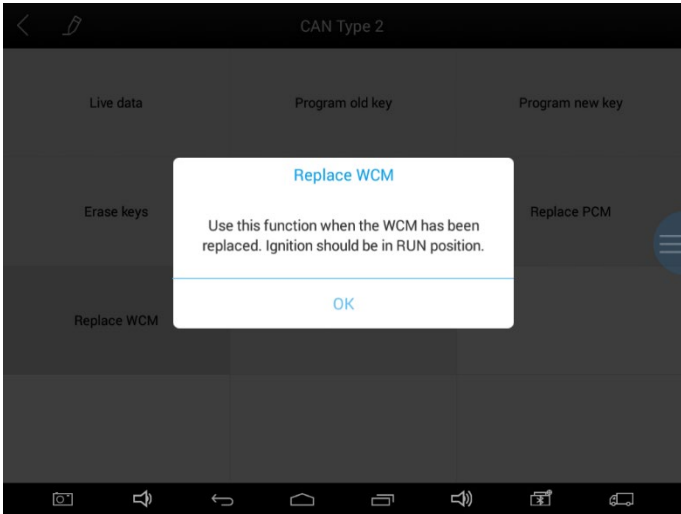


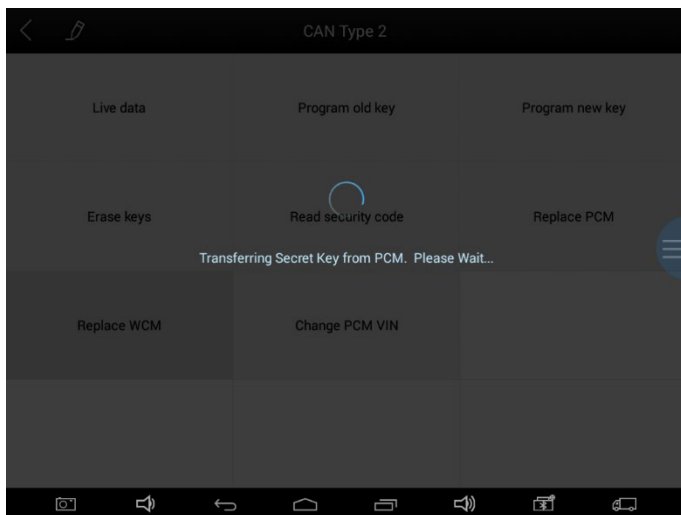
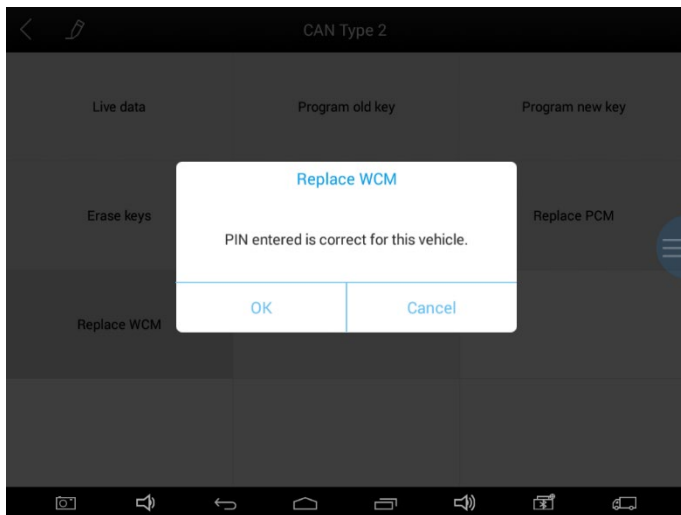


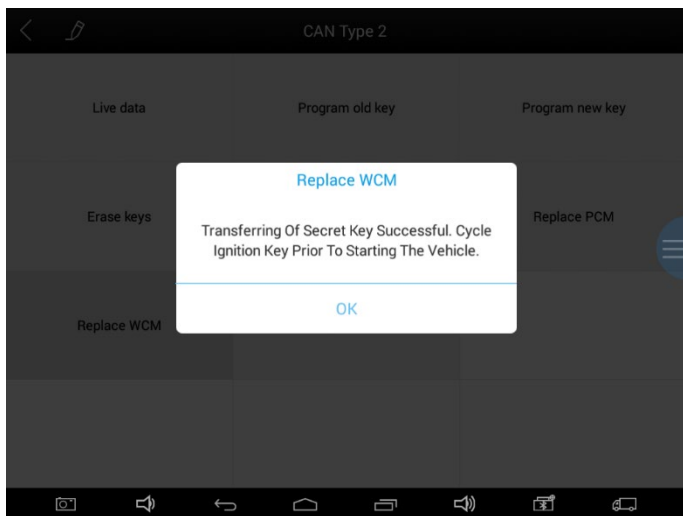


4.2.6. ECU Programming (Chrysler WCM Replace)





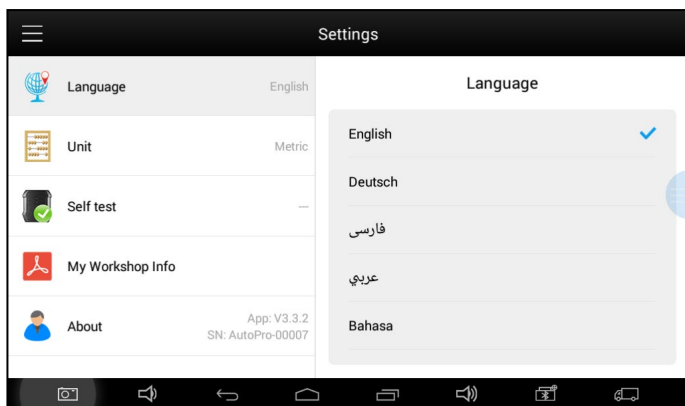




5. Settings

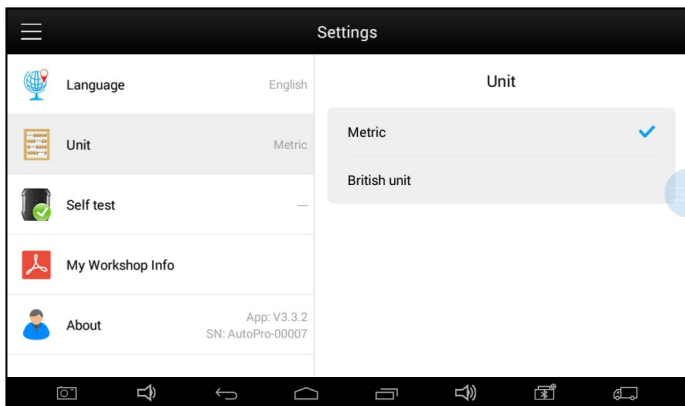
By selecting **Settings**, users can set the language, unit, and any other system related options:

Languages: select the appropriate language. Please select the required option from the multi-language options on the right.



Units: Select the appropriate unit of measurement for the vehicle you are working on. Users

can select Metric or British Unit.

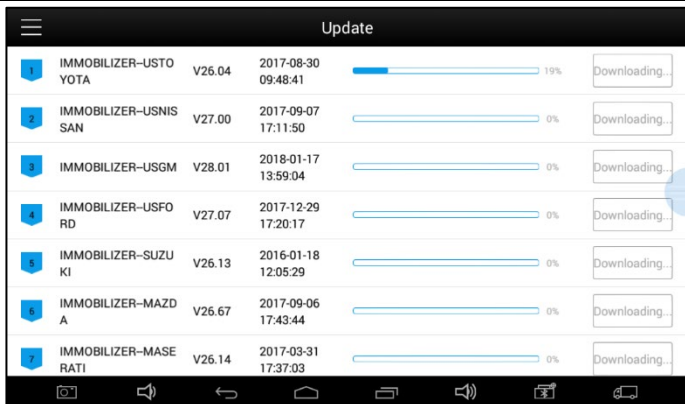


6. XCloud (English version is coming soon)

All the vehicle service technicians who use our products can look up the maintenance information that we put on our cloud service platform and combine the diagnosis result to query as well as communicate with other Xtool users in our forum, but can also access various online databases of maintenance, diagnostic skills, and vehicle maintenance plans.

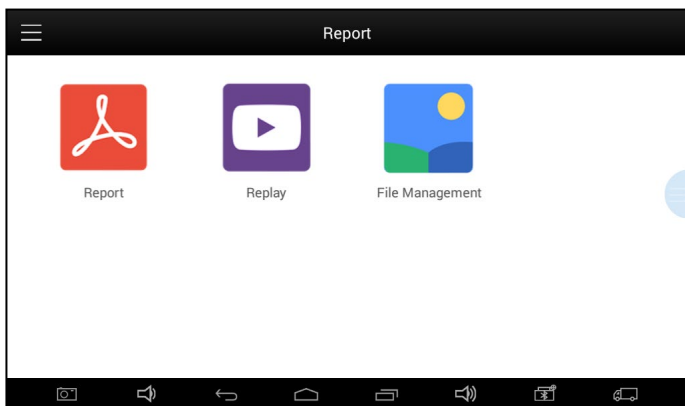
7. Update

AutoProPAD Basic updates directly via the Internet using Wi-Fi connection. To access the update application, open the AutoProPAD Basic application and click UPDATE , shown below:



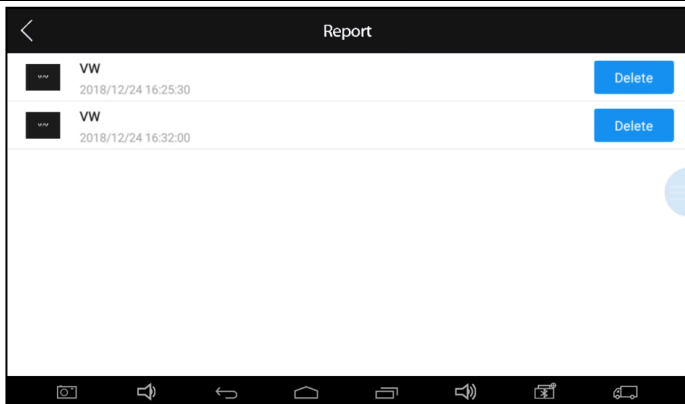
8. Report

Report is used for 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.



8.1. PDF Files

PDF files are the diagnostic reports that have been saved during diagnosis. Entering **PDF** will allow you to view and print these reports.

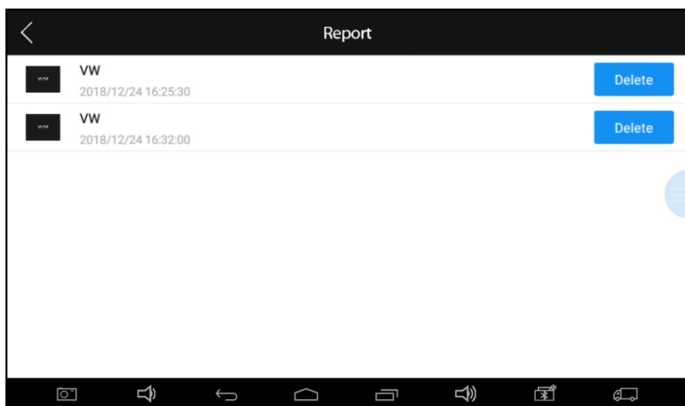


8.2. Pictures

Pictures are all the screen capture files saved in the diagnosis process.

8.3. Data Replay

With Data Playback, you can play back the recorded diagnosis data.



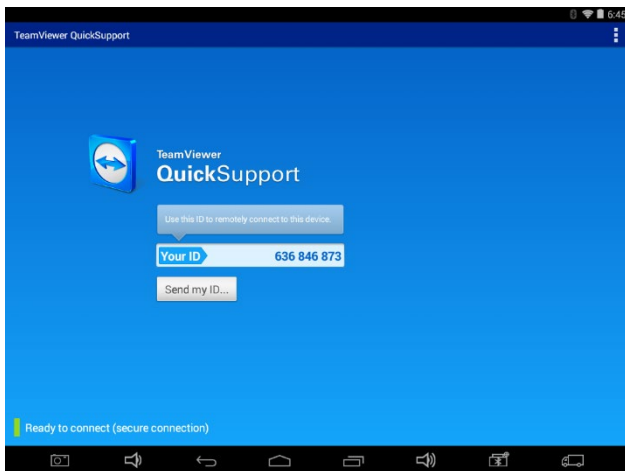
9. Remote

If users encounter problems and are not able to solve them, they can open this application and ask for remote assistance.

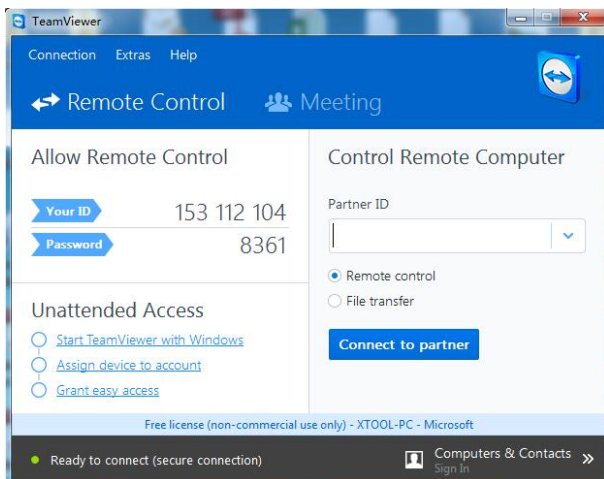
How to get remote assistance from Xtool Technical Assistance Center:

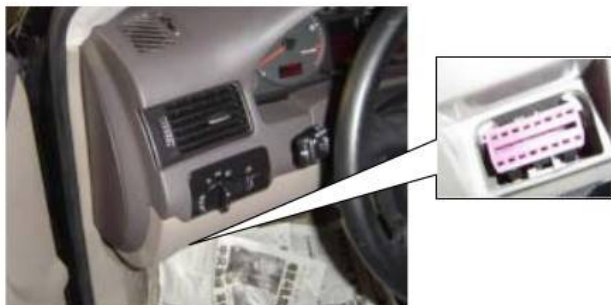
- a. Open AutoProPAD Basic application.

- b. Select **Remote** and open the **TeamViewer** interface. It will generate and display device ID.



- c. Your partner will also need to download and install **TeamViewer**.
- d. Inform your partner of your **TeamViewer** ID to enable them to begin remote access of the AutoProPAD.



CHAPTER III Examples of Diagnostic Link Connector Locations**1. Diagnostic Link Connectors Locations of Various Vehicle Models**

*AUDI A6: the OBDII plug is on the lower left side of the dashboard, use OBDII-16 connector.



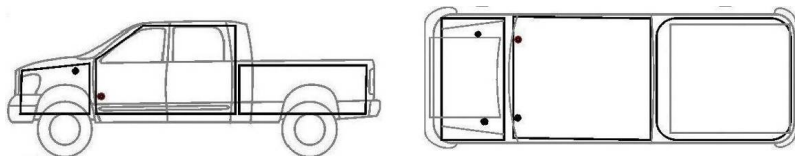
*Benz S320,220 Chassis: the OBDII plug is below the dashboard, use OBDII-16 connector.



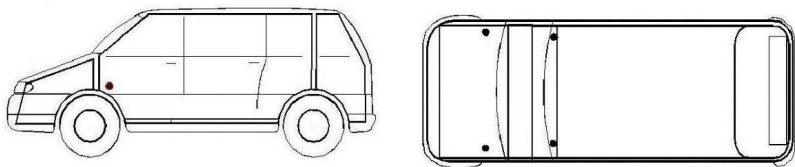
*GM Buick: the OBDII plug is below the dashboard, use OBDII-16 connector.

2. Location Diagram of Vehicle OBDII Connectors

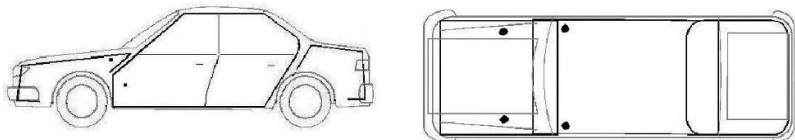
Location diagram of pick-up truck OBDII connectors:



Location diagram of utility vehicles OBDII connectors:



Link diagram of passenger car OBDII connectors:

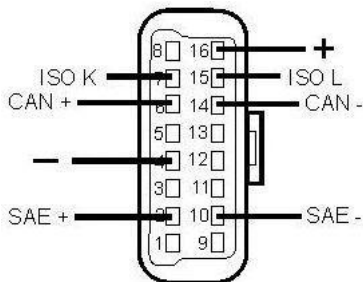


NOTE: Each vehicle manufacturer may use additional pins to diagnose a variety of systems.

Not every manufacturer uses the same standard. The function on a certain pin will vary from manufacturer to manufacturer. Verify with the manufacturer.

3. Diagnostic Link Connectors Terminal Definition and Communication Protocols

3.1. Standard OBDII Diagnostic Link Connector



Pin Definition (Reference material)

Various pin definitions as follows:

1. Manufacturer discretion
2. SAE J1850 PWM/VPW bus positive
3. Manufacturer discretion
4. Chassis Ground
5. Signal Ground
6. ISO 15765-4 defined CAN High
7. ISO9141-2 and ISO14230-4 defined K Line
8. Manufacturer discretion
9. Manufacturer discretion
10. SAE J1850 PWM bus negative
11. Manufacturer discretion
12. Manufacturer discretion
13. Manufacturer discretion
14. ISO 15765-4 defined CAN Low
15. ISO9141-2 and ISO14230-4 defined L line
16. Battery Voltage

[1] 1, 3, 8, 9, 11, 12 and 13 are defined by manufacturer.

[2] 2, 6, 7, 10, 14 and 15 are used for diagnostic communication. Unused definitions can be defined by manufacturers.

