# Specification

Applicable to the DP50-1 products

Revised 14 Jay 2020

#### I. INTRODUCTION

#### 1. PRODUCT PROFILE

This device is a new Android-based vehicle trouble diagnostic device developed for Internet applications. It inherits from OBDPROG advanced diagnosing technology and it is characterized by covering wide range of vehicles, featuring powerful function, and providing precise result. Through vehicle diagnostic OBD connector and variant mobile intelligent terminals, it achieves vehicle trouble diagnosis for full car model and full system vehicle.

Meanwhile, taking advantage of mobile Internet, this device integrates more application and service, such as Maintenance Database, remote assistant, One Key Upgrade etc.

#### 2. FEATURES

## 1. Diagnostic function:

Diagnose the electronic control system of prevailing vehicle models covering Asian, European, American and Chinese. Diagnosis functions include: Read DTCS, Clear DTCS, Read data stream, Special functions etc.

Classify special function: ABS, EEPROM Adapter, Battery match, CVT learning, EPB, Gear learning, Immobilizer, TPMS (low tire) reset, Cluster calibrate, ECU programming, steering angle reset.

Specially designed for Android platform with clear and user-friendly interface;

#### 2. Maintenance database:

Equipped with powerful database.

#### 3. Video center:

Large amount of videos help users to operate device easily.

## 4. One Key Upgrade:

Built-in WIFI mode can realize application downloading and diagnostic function by one key upgrade.

## 5. System setting:

Set VCI formation, language, unit, data logging, user information etc.

#### 6. Remote assistance:

Achieve remote assistance by this function.

## 7. Report center:

Record maintenance data logging and create reports during operation.

## **3 KNOWLEDGE OF THIS DEVICE**

#### 3.1 The whole set

This device is composed of the tablet computer, main test cable and kinds of connectors.

## 3.2 The tablet computer

## front view



reverse view



## **4 TECHNICAL PARAMETER**

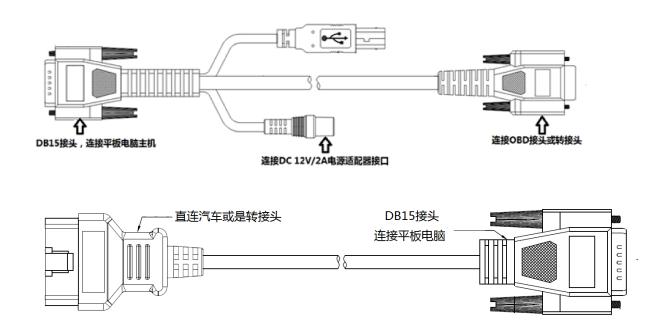
- Operation system: Android 5.1.1
- CPU: RK3128 Quad-Core , ARM Cortex

## A7@1.2Ghz

- Battery: 2600mA, rechargeable polymer lithium battery
- Extension memory card: 32G Micro SD (TF) card supported
- Memory capacity: 16GB
- LCD: 5.0 inches
- LCD resolution: 800\*480
- Touch screen: Capacitive touch screen
- Wi-Fi: supported
- Working temperature: -20°C~55°C
   (14°F~131°F)
- Storage temperature: -20°C~70°C
   (-4°F~158°F)
- Weight: about 700g
- Dimension: 140mm\*89\*mm\*18mm

## **5 ACCESSORY (Standard Configuration)**

## 5.1 Main test cable

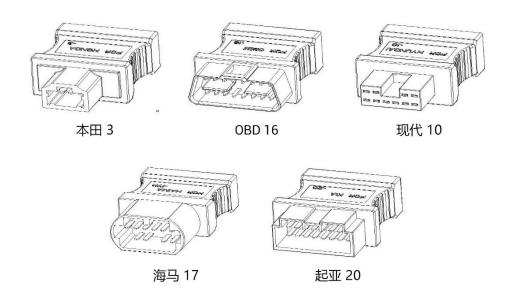


Pack different main cable according to different configurations

#### **5.2 OBD Connector**

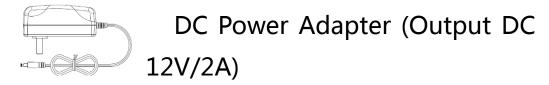
OBD I connector to connect the diagnosis port of non OBD II vehicles. To choose the connector according to the vehicle brand and models.

Common connectors are as below:



Note: Different configuration accessories may have different options

## 5.3 Others



To power up the tablet via connecting with outside power supply.

#### **6 CHARGE THIS DEVICE**

- 1. Connect the included USB cable with charger.
- 2. Plug the charger into AC outlet.
- 3. When it connects to charger, battery logo

#### indicates

, it indicates that the battery is in charging

4. When battery logo changes into

charged and then disconnect charger from AC outlet.

5. Unplug USB cable on the charger from this device.



#### **7 USING BATTERY**

- If the battery keeps unused for a long time or battery is completely discharged, it is normal if it cannot be turned on while being charged. Please charge it for a period and then turn it on.
- Using data service will cause more power consumption and shorten the stand by time.
- The charging time of battery varies with temperature condition and battery

consumption status.

• While this device has low battery, a beep will sound. If it is very low, this device will be switched off automatically.

Note: Do one of the followings to save power:

- 1. When this device keeps unattended, press POWER key to turn off the LCD.
- 2. Shorten the standby time: Enter main menu, choose "Settings" > "DEVICE" > "Display" > "Sleep" to select a shorter standby time.
- 3. Decrease the brightness of LCD display: Enter main menu, choose "Settings" > "DEVICE" > "Display" > "Brightness", and then drag the slider to adjust it.
- 4. Change "Live wallpaper" into "Gallery".
- 5. Set Bluetooth off: Enter main menu, choose "Settings" > "Wireless &Network" > "Bluetooth", and then toggle the switch to OFF.
- 6. Press VOLUME key to decrease the volume.

#### 8 POWER ON/POWER OFF THIS DEVICE

#### 8.1 Power on

Press and hold Power button for three seconds to turn on this device.

Note: Set date, time and time zone.

#### 8.2 Power off

Press and hold Power button for three seconds to turn off this device.

#### 9 ABOUT DESKTOP

The screen is shown as blow:

- A. Print screen : make a quick screenshot and save it to gallery
- B. Back button : go back to previous interface or exit program.
- C. Home button 2: return to the desktop
- D. Touch screen menu button : select desired item
- E . DP button enter diagnose and program interface

## F. VIC button VCI: enter system settings

#### 10 CUSTOMIZE YOUR DESKTOP

## 10.1 Add items on the desktop

On the main menu, hold and press the desired item, the system will automatically enter the desktop and place the icon into the circle.

Hint: If many applications occupy the desktop, hold and press the desired one to move it to other extension desktop.

## 10.2 Move items on the desktop

- 1. Hold and press the item to be moved.
- 2. After a movable circle appears on the screen, drag it to the target location.

## 10.3 Delete items on the desktop

- 1. Hold and press the desired item, "X Delete" appears in the upper middle of the screen.
- 2. Dragon the item to "X Delete".
- 3. When the item and icon turn red and then release it.

## 10.4 Change your wallpaper

- 1. Hold and press a blank area on the desktop,
- a pop-up wallpaper will be shown on the screen.
- 2. Choose desired wallpaper.
- 3. Click upper left corner √ to set wallpaper.

## 10.5 Create a folder on the desktop

- 1. Drag one icon to another icon, the system will create a folder.
- 2. Input the folder name.

#### 11 ON USING TOUCH SCREEN

- Tap: use your finger to tap desired items to confirm or open it.
- Long-press: press and hold the current interface, icon or input field to open the available operation options.
- Slide: use your finger to slide the screen horizontally or vertically.
- Drag: hold and press the desired item, then drag it to any location.

#### 12 AUTO-ROTATE THE SCREEN

To perform such operations as browsing webpage, viewing images etc., rotate this device, the screen will automatically change the display direction. To disable this function, click "Settings" and click "display" to enter. Unselect the option "Auto-rotate the screen".

Note: This product application does not support rotating screens.

## 13 LOCK&UNLOCK

#### 13.1 Lock the screen

- When Key Master is ON, press POWER key to lock the screen.
- The system will lock the screen automatically after this device remains idle for a long time.

#### 13.2 Unlock the screen

Press POWER key to activate the screen and

then drag the lock to "Unlock position."

#### 14 NOTIFACTION PANEL

The notice panel is used to display some activities, messages to remind and inform users.

## 14.1 Turn on the notification panel

- 1. When a new notification icon appears on the status bar, slide the status bar upwards to open it.
- 2. In the notification panel, click the desired notification item to open it.

## 14.2 Turn off the notification panel

Slide the panel upwards, and then specify the notifications as OFF to turn it off.

#### 15 INPUT METHOD

Set input method:

Enter main menu, and then select "Settings" -> "Language and keyboard" to Choose desired input method.

The default input method, Sogou input can support powerful word stock engine,

Intelligent Sogou input and multiple keyboard mode. Android keyboard and Google input method and make input easier.

To start text input mode, please click any text input entry.

#### 16 HOW TO SET AS AIRPLANE MODE

According to the regulations of some countries or areas, PC device must be turned off before boarding on the airplane.

The way to disable functions of this device is to set it as airplane mode. In this mode, all wireless radio waves will be disabled, including mobile network, Bluetooth and WLAN.

Do one of the followings to enable or disable airplane mode:

Press POWER key and choose "Airplane mode" from the pop-up option menu.

Access the main menu, and choose

"Settings" > "WLAN" > "More..." > "Airplane mode" .

#### II. OTHERS

#### 1 WLAN

This function enables you to enjoy surfing on the Internet and downloading data from the Internet via Wi-Fi.

#### 1.1 Set WI-FI on

- 1. Enter main menu screen, choose"Settings" > WLAN
- 2. When the WLAN sign appears blue, it indicates Wi-Fi has been activated already. Note: To prolong the battery life, please switch Wi-Fi off when it keeps unattended.

#### 1.2 Connect to WLAN

Start WLAN, if this device is within range of WLAN, it can automatically detect and connect to current WLAN, select desired network and

input password, then you can surf the Internet by WLAN.

#### 2 Browser

You can use any APP based on browse website and network.

## 2.1 Open browser

Enter main menu screen, tap to OBDPROG the browser. You can choose the desired homepage or input the website address to browse.

1. Tap to input or edit the web link

## 2.2 Browser webpage

- Open the browser.
- 2. Input the web address, and tap "Go" on the keyboard to visit the website.

Tips: Alternatively, you can also tap, and then choose "Bookmarks/History" from the pull-down list to choose the web link you want to access.

3. After a webpage is open, slide the screen with the tip of your finger to view other hidden content.

# 2.3 After a webpage is open, slide the screen with the tip of your finger to view other hidden content.

There are two ways to zoom in/zoom out while browsing a webpage.

- to zoom in so that the text on a webpage appears in a column that fits your device's screen, double-tap with the tip of your finger.
- to zoom in manually, place two fingers on the screen and then spread them apart. To zoom out, either double-tap again or place two fingers apart on the screen and then pinch them together.

## 2.4 Save favorite webpage to bookmark

1. While browsing a webpage, tap Function Menu at the top right and choose "Save to bookmarks".

- 2. Edit a label for the bookmark.
- 3. Tap "OK" to confirm and save it.

## 2.5 Open multiple pages

The browser allows you to open multiple web pages and you can toggle between these pages.

- 1. While browsing a webpage, tap the Fold Button at the top right and open new window.
- 2. Another web page will be displayed in the new window.

## 2.6 Customize Internet settings

While browsing a webpage, choose "Settings" at the top right, you can view or change browser settings, privacy & security setting and advanced setting etc.

#### **3 GALLERY**

This option is used to manage pictures and video files.

## 3.1 Open gallery

Enter main menu screen, tap "Gallery" to access it. The system searches images and videos in this device and SD card automatically, and categorizes it into corresponding folders.

## 3.2 Browse images

- 1. Enter main menu screen, tap "Gallery".
- 2. Tap the picture folder you want to view.
- 3. Tap the desired image to browse.
- 4. Swipe the screen rightwards or leftwards to view the next/previous picture.

#### **4 MUSIC**

Music files are stored into 4 categories: Artists, Albums, Songs and Playlist. Tap the desired music to display music.

Tips: While playing, tap back button to switch to other applications and the player will be running in background. Open the status bar and choose the audio file to return to the player screen.

#### **5 CALCULATOR**

You can use calculator to operate algorithm of plus, subtract, multiply and divide, and function operation of sin, cos, tan and log.

#### **6 CALENDAR**

This function lets you view calendar or create to-do events.

Enter main menu screen, tap "Calendar". Swipe up and down to switch to month; Tap someday, the followings can be done.

Tap to refresh, search, and hide control and setting.

#### 7 ALARMS

#### 7.1 Add an alarm

- 1. Enter main menu, and tap "Alarm".
- 2. Tap to add alarms.
- 3. Set the detailed information of the alarm.

4. Tap \_\_\_\_ to pack up the alarm to store the setting.

#### 7.2 Delete an alarm

- 1. Enter main menu, and tap "Alarm".
- 2. Tap the desired alarm.
- 3. Tap 🚺 to delete it.

Tips: After the alarm is deleted, you can choose to cancel delete alarm on the right side from the option menu.

## 7.3 Customize your alarm

- 1. Enter main menu, and tap "Alarm".
- 2. Tap menu button, and then choose "Settings".
- 3. Alarm volume: Set the volume of alarms.
- 4. Set the duration of alarm.
- 5. Set the duration the alarm snooze next time.
- 6. Volume buttons: set what these buttons function when pressed during an alarm.
- 7. Set default ringtone: choose the alarm ringtone.

#### 7.4 Countdown set

- 1. Enter the main menu to tap 

  to choose count down alarm;
- 2. Set the time of countdown;
- 3. Tap to add count down alarm, and tap to delete alarm;
- 4. Tap to start count down, and tap to stop count down;

Notice: after the countdown ends, the device will ring alarm sound.

## 7.5 Second clock setting

- 1. Enter the main menu to tap oto choose second clock;
- 2. Tap to start second and clock, and tap to stop second clock;
- 3. Tap 2to reset second time;
- 4. Tap on the right side to display the smaller unit counter of second clock;

#### **8 ES FILE VIEWER**

Open ES file viewer, and enter main menu.

You can manage SD card, browse by category and browse all music, picture, video, document application, package, favorites, installation package, management recommended through catalogue.

#### 9 BRIGHTNESS

- 1. Enter main menu screen, tap "Settings" > "Display" .
- 2. Tap "Brightness" to enter.
- 3. Drag the slider leftward to lower the screen brightness. Drag the slider rightward to increase the screen brightness.

#### **10 SET SCREEN LOCK**

You can set the screen lock pattern, and when the screen is locked, it will not be unlocked until you draw the right pattern.

1. Enter main menu screen, tap "Settings" > "Security" > "Screen lock".

- 2. There are several options available for your selection. To define a pattern, follow the on-screen prompts to plot your pattern.
- 3. After drawing, tap "Confirm" to save your setting.

#### 11 APPLICATION

## 11.1 View installed applications

- 1. Enter main menu screen, tap "Settings" > "Apps" to open the downloaded application list.
- 2. The following operations are available:
- Tap the desired one to view the application information.
- Tap and choose "Sort by size" from the pull-down menu, the applications will be displayed in size order automatically.
- Tap and choose "Reset app preferences" from the pull-down menu, a confirmation dialog box will appear on the screen, tap "Reset apps" to proceed; tap "Cancel" to abort.

- 3. To uninstall an application, tap it to enter the application information screen.
- 4. Tap "Uninstall" and then follow the on-screen instructions to finish it.

## 11.2 View the running applications

- 1. Enter the main menu screen, tap

  "Settings" > "Apps" . Scroll the screen from right to left to RUNNING tab to open the currently running application list.
- 2. The following operations can be done:
- View the currently running applications;
- Tap any one to stop it.

#### 12 LANGUAGE&INPUT METHOD

- Enter the main menu screen, tap
   "Settings" > "Language & input" > Tap
   language.
- 2. Tap "Language" and choose the desired language in this device.

The setting of input method

The device provides several kinds of input methods. Tap setting before the desired input method.

#### 13 SET DATE&TIME

This device is preset to use the network-provided date, time zone and time. Note: If Automatic date & time is set as Use network-provided time, date, time and time zone will not be defined.

- 1. Enter the main menu screen, and tap "Settings" > "Date & time".
- 2. Tap "Set date", and scroll the screen upwards and downwards until the desired numbers appear on the highlight area.
- 3. Tap "Select time zone", and choose the desired one from the time zone list. Scroll the screen upwards and downwards to view more.
- 4. Tap "Set time" and scroll the screen upwards and downwards to adjust the hour and minute. After setting, tap "Done" to confirm.

- 5. Select or deselect "Use 24-hour format" to switch between 12-hour format and 24-hour format.
- 6. Tap "Choose date format" to choose the desired date of this device format from the list.

# 14 RESTORE KEY MASTER TO FACTORY SETTINGS

This option enables you to restore this device to the default factory settings.

Once it is reset, all data (including downloaded applications) will be deleted.

Note: Before resetting to factory data, please back up all important data saved in your device.

- Enter the main menu screen, tap
   "Settings" > "Backup & reset" > "Factory
   data reset" .
- 2. Follow the instructions on the screen to proceed.1. Enter main menu screen, choose "Settings" > WLAN

#### 15 STORE

Enter the main menu, and tap setting> store check the store situation of the device.

Store the download content in the default browser to the download content list.

## 16 APPS INSTALLATION/ UNINSTALLATION

- 1. Install: Put the application package under the root directory of SD card, enter "File Manager" and then tap the desired package to start installing.
- 2. Uninstall: Tap "Settings" > "Apps", and choose the desired one to uninstall.

#### III. ONE KEY UPGRADE

#### 1. DETECTION SYSTEM UPGRADE

The system APK automatically detects the version. If there is a version update, a red dot is in the upper right corner of the upgrade button. Click on the upgrade button to prompt "Whether to perform software upgrade":



If not, click "No", you will directly return to the main interface. However you cannot enter the upgrade diagnosis application interface. Click on the APK upgrade and it prompts to install:



Click on the installation and perform the program installation, automatically close the program and install.

After installation, click on the program image to re-enter the DP program:



Re-enter the main interface and prompt statement.

(Notes: Ensure Internet connection is normal when updating.)

#### 2. DIAGNOSTIC FUNCTION UPGRADE

Download and upgrade software by "One Key Upgrade"



Tap main screen "batch update", start downloading and upgrading



If a software needs to be canceled, just tap the corresponding Check Box. As following photo shown:

一键升级       SN:951499990021					
	软件名称	当前版本	可下载版本	9/15	批量升级
<b>✓</b>	ABS排气		30.19	下载就绪	
<b>✓</b>	CVT学习值初始化		30.12	下载就绪	
	DPF再生功能		30.07	下载就绪	
	EPB换刹车片		30.65	下载就绪	
<b>✓</b>	OBD-II发动机		30.20	下载就绪	
	电池匹配		30.66	下载就绪	
	发动机齿讯学习		30.09	下载就绪	
<b>✓</b>	节气门匹配		30.36	下载就绪	
<b>✓</b>	喷油嘴编码		30.08	下载就绪	
	气囊复位		30.09	下载就绪	
	胎压系统归零		30.29	下载就绪	
	<b>a</b> 5	·	DP	VCI	

After the upgrade is completed, you can enter the diagnostic programming to view the upgrade version description and the version number, and you can perform related diagnostic operations and functions.

(Notes: Ensure Internet connection is normal when updating. Besides, because of many software, it may take several minutes, please wait patiently.)

#### IV. DIAGNOSIS INSTRUCTION

#### 1 CONNECT VCI CONNECTOR

Procedure to connect VCI connector:

1. Locate vehicle's DLC socket. The DLC (Data Link Connector or Diagnostic Link Connector) is the standardized 16-pin connector where diagnostic code readers interface with the vehicle's on-board computer. The DLC is usually located 12 inches from the center of the instrument panel (dash), under or around the driver's side for most vehicles, as shown below. If Data Link Connector is not located under dashboard, a label should be there telling location. For some Asian and European vehicles, the DLC is located behind the ashtray and the ashtray must be removed to access the connector. If the DLC cannot be found, refer to the vehicle's service manual for the location.



2. Plug the diagnostic connector into the vehicle' s DLC socket (It is suggested to use the OBD 2 extension cable to connect VCI connector and DLC socket.). For non-16PIN DLC socket, please select the corresponding non-16 pin connector adapter, then plug the non-16pin end of the adapter into the DLC socket, and then connect the standard 16pinend VCI connector.

#### **2 DIAGNOSIS FLOWCHAT**

For new users, please follow the 3.1 to get familiar with and start using this device.

Connect the diagnostic connector –>user registration–>user login–>download or upgrade software–>select function or vehicle type–>proceed diagnosis

#### **3 USER REGISTRATION**

### 3.1 User Registration

Click to **VCI** enter diagnostic software, select "the user information" in "Settings" menu, and then enter user registration window. As following photo shown:



Fill in the information in each field (Items with \* must be filled). After inputting, tap "OK" If you have registered to be a member, click "the user information" to enter user login page, as following picture shown:



# 4 DIAGNOSTIC SOFTWARE MAIN INTERFACE INTRODUCTION



Function menu included as follows:

Diag Program: Operate as a diagnostic tool.

Upgrade: To download diagnostic software or upgrade diagnostic software to the latest version.

Data Center: Provides abundant automotive technology, video data, handbook and repair case for your reference, and also including relevant information of this product.

Log feedback: Record maintenance data and diagnostic report.

Settings: It includes VCI information, language, unit, data records, user information, about.
Remote assistance: Realize remote hosting operation.

#### **5 START DIAGNOSING**

Tap on the main menu screen, and then choose "Diag Program" to enter the function selection and vehicle selection page. As following photo shown:



Hereinafter, take OBDII for example, to introduce how to start diagnosing.

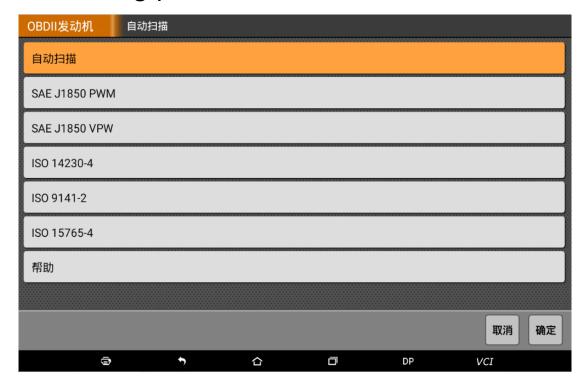
Tap "OBDII", and tap "OBDII" icon. As following photo shown:



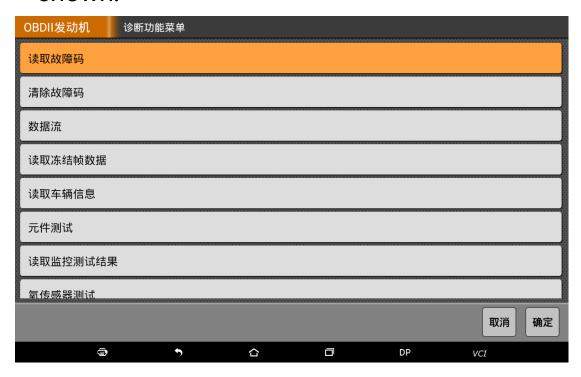
To select software version, as following photo shown:



To enter diagnostic function menu, as following photo shown:



To select AUTO SCAN, as following photo shown:



### 5.1 Read vehicle information

Tap "Read vehicle information", as following photo shown:



### 5.2 Read trouble code

Tap "Read trouble code", as following photo shown:



# 5.3 Clear trouble code



### 5.4 Read data stream





#### **6 DATA CENTER**

We have powerful maintenance database and detailed product introduction information.



#### **6.1 Video Center**

Connect the diagnosis function operation videos of the actual vehicles;

### 6.2 Car Area

Automobile data cloud platform from subsidiary products of the company Car Area;



# 6.3 Company's Official Website

Link to our website, you can view the company's product updates;

# **6.4 FAQ**

Summarize some common problems encountered in the use of the product;

### **7 SYSTEM SETTINGS**

It includes VCI information, language, unit, data records, user information and about etc.

### 7.1 VCI information



# 7.2 Language



# **7.3 Unit**



# 7.4 Data records



### 7.5 User information

It used to set and manage user's information.

# 7.5.1 User login



# 7.5.2 User registration



# 7.5.3 Forget password



# 7.5.4 Registration information



### 7.5.5 Info modification



# 7.5.6 Modify password



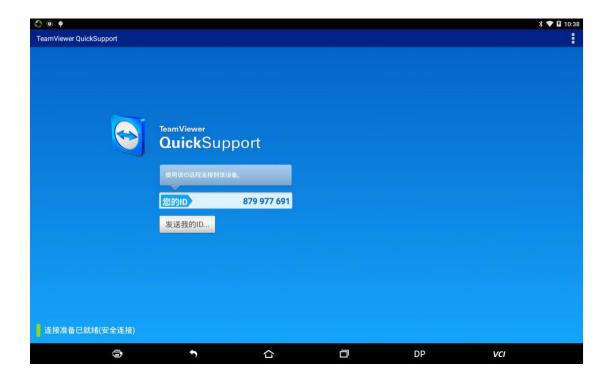
#### 7.6 About



Display software version updates and product announcements.

### **8 REMOTE ASSISTANCE**

This application can realize remote hosting operation via the Third Party's software: Quick Support.



#### 9 LOG FEEDBACK

Diagnostic Report: Each diagnosis operation will create new diagnostic report. Those reports will be grouped by Month.





Maintenance Station Information: Record related information of Maintenance Station.



#### **FCC Statement**

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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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.

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