

BYD Vehicle Diagnosis System VDS2100

Contents

VDS Introduction

- Hardware
- OBD Interface
- Tablet Introduction
- General Settings
- Registration
- Connecting to Vehicle

VDS Main Functions

- Scan diagnosis/Read data flow
- Export report/file/video recording
- App Warehouse(Only for app update)
- Replacement centre
- Save and send Screenshot

VDS Hardware



Black OBD:
For ICE
vehicles



Blue OBD:
For new
energy
vehicles

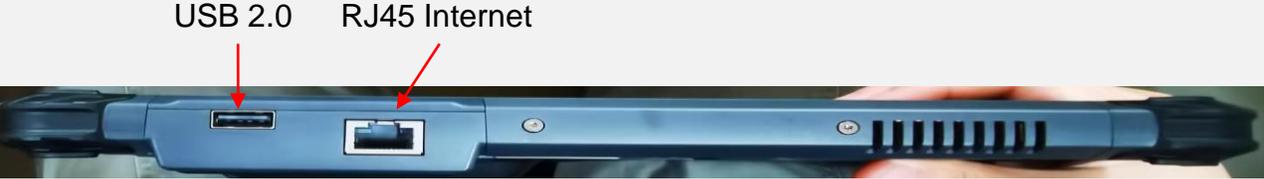


VDS Tablet Introduction

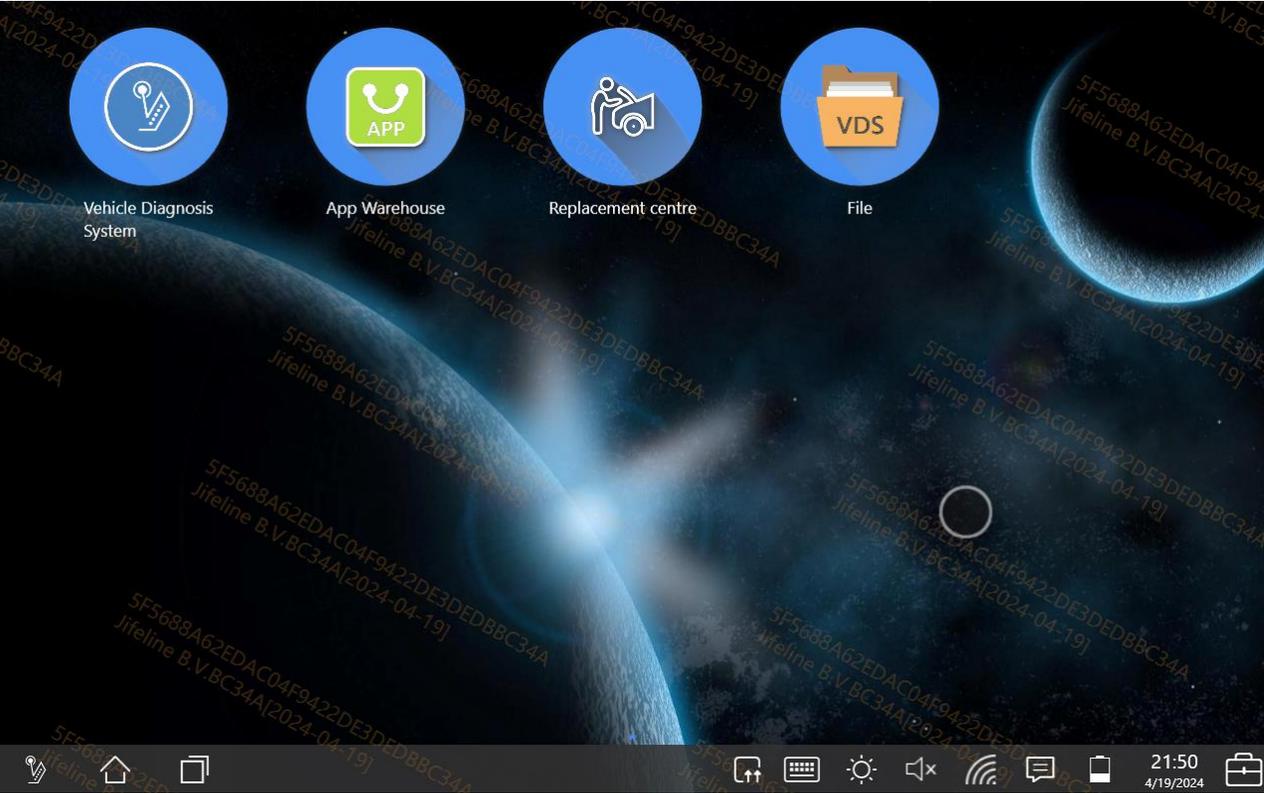
Type-C interface could also be used to charge/dock with multiple usage (Purchased locally by dealer)

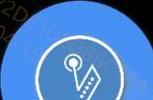


Internet Interface



USB 2.0 RJ45 Internet



- 
 Vehicle Diagnosis System
- 
 App Warehouse
- 
 Replacement centre
- 
 File

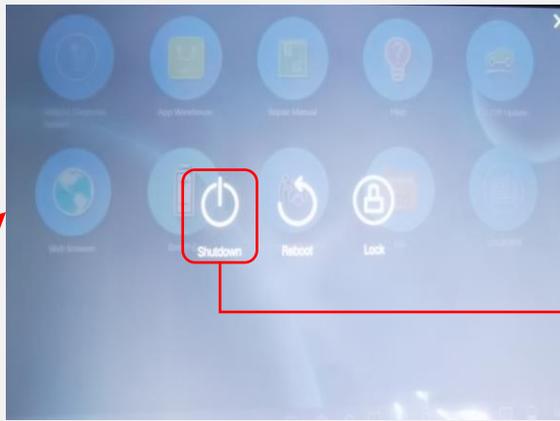
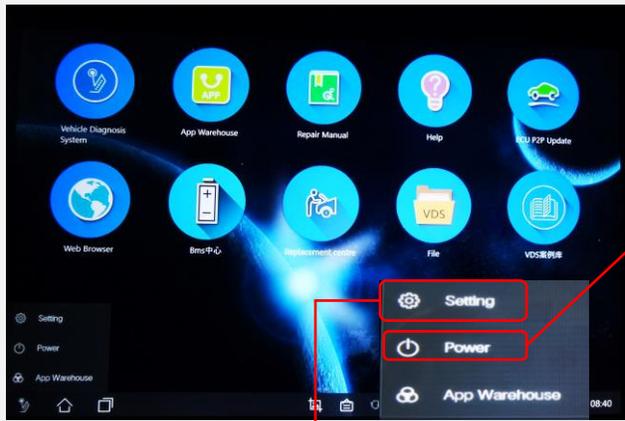


- Boot/Shutdown
- Home
- Volume +
- Volume -
- Micro HDMI
- SD Card Slot
- SIM Card Slot
- Type-C Interface
- USB3.0 (Connect VDCI)
- Charging Port

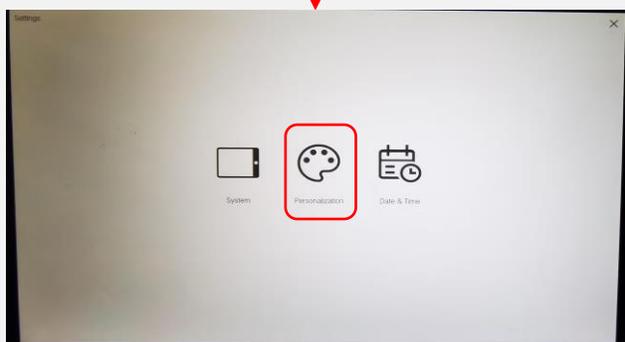
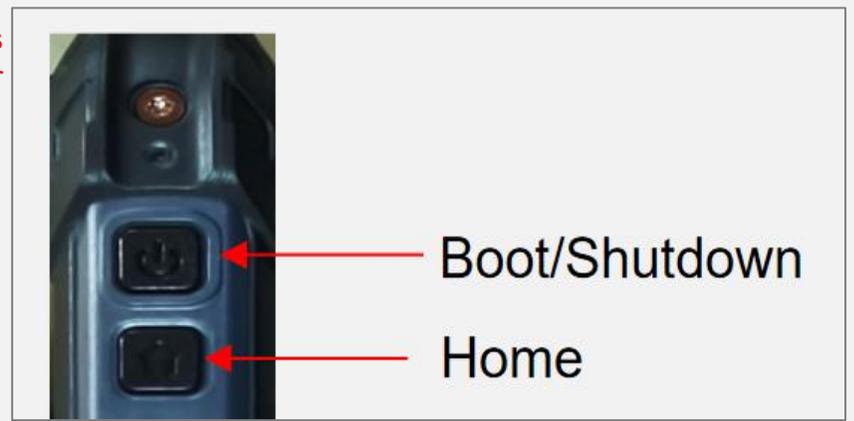
Reserved for future use



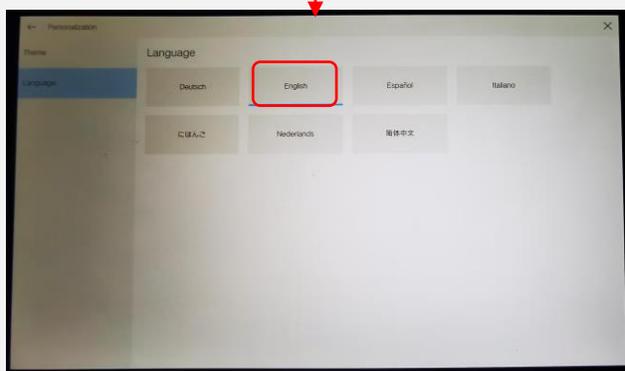
VDS Tablet General Setting & Boot/Shutdown



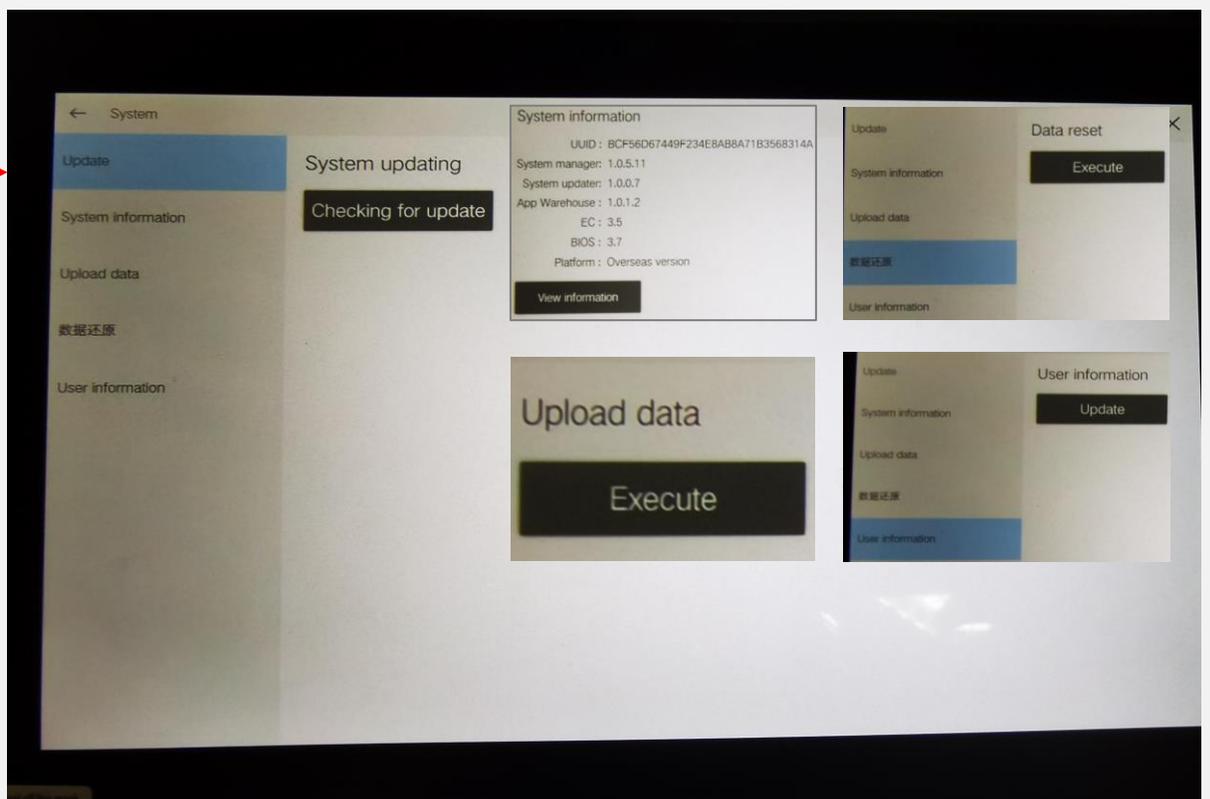
Note: Always clicking this "shutdown" icon to power off VDS instead of using the the Shutdown button at the VDS upper right side.



Note: Upgrade in setting is for VDS device version, it is not the VDS diagnosis system update.



Note: Once the language is changed, VDS will reboot



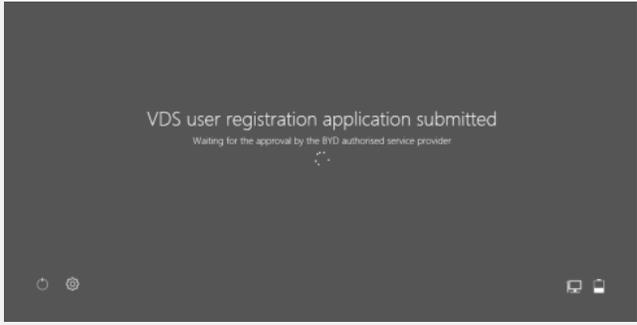
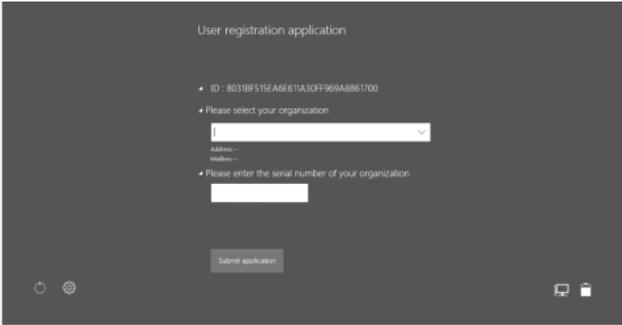
Registration

- After booting the device and changing the language, check internet connection
- Enter company and department code
- Upload application
- Wait for approval---Submit the 'VDS2100 Activation Application Form' to TIS

UUID					
Company					
Tel:					
E-mail					
Address					
Country					
Province					
City					
Application date					
Applicant					

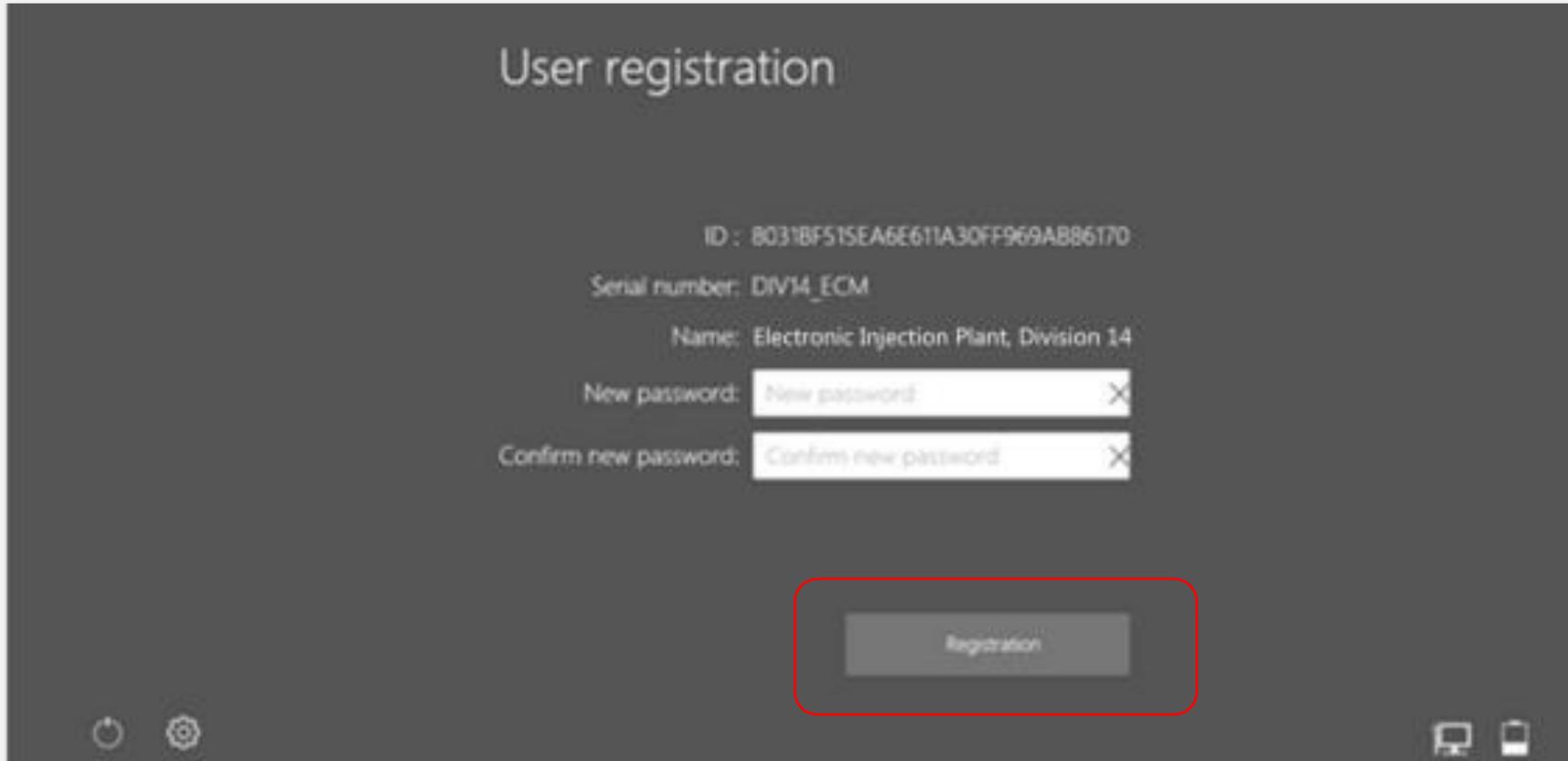


UUID is located under the bar code on the back of VDS



Registration

- Password setting --- **Password must be set as 123456**



The image shows a user registration interface with a dark background. At the top, the title "User registration" is displayed. Below it, several fields are populated with information: "ID : 8031BF515EA6E611A30FF969AB86170", "Serial number: DIV14_ECM", and "Name: Electronic Injection Plant, Division 14". There are two password input fields: "New password:" and "Confirm new password:", both containing placeholder text and a clear button (X). At the bottom center, a "Registration" button is highlighted with a red rounded rectangle. The bottom of the screen features a navigation bar with icons for home, settings, and mobile devices.

User registration

ID : 8031BF515EA6E611A30FF969AB86170

Serial number: DIV14_ECM

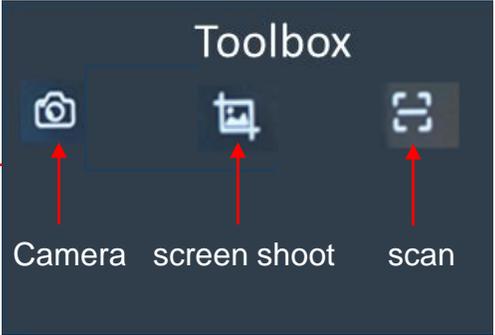
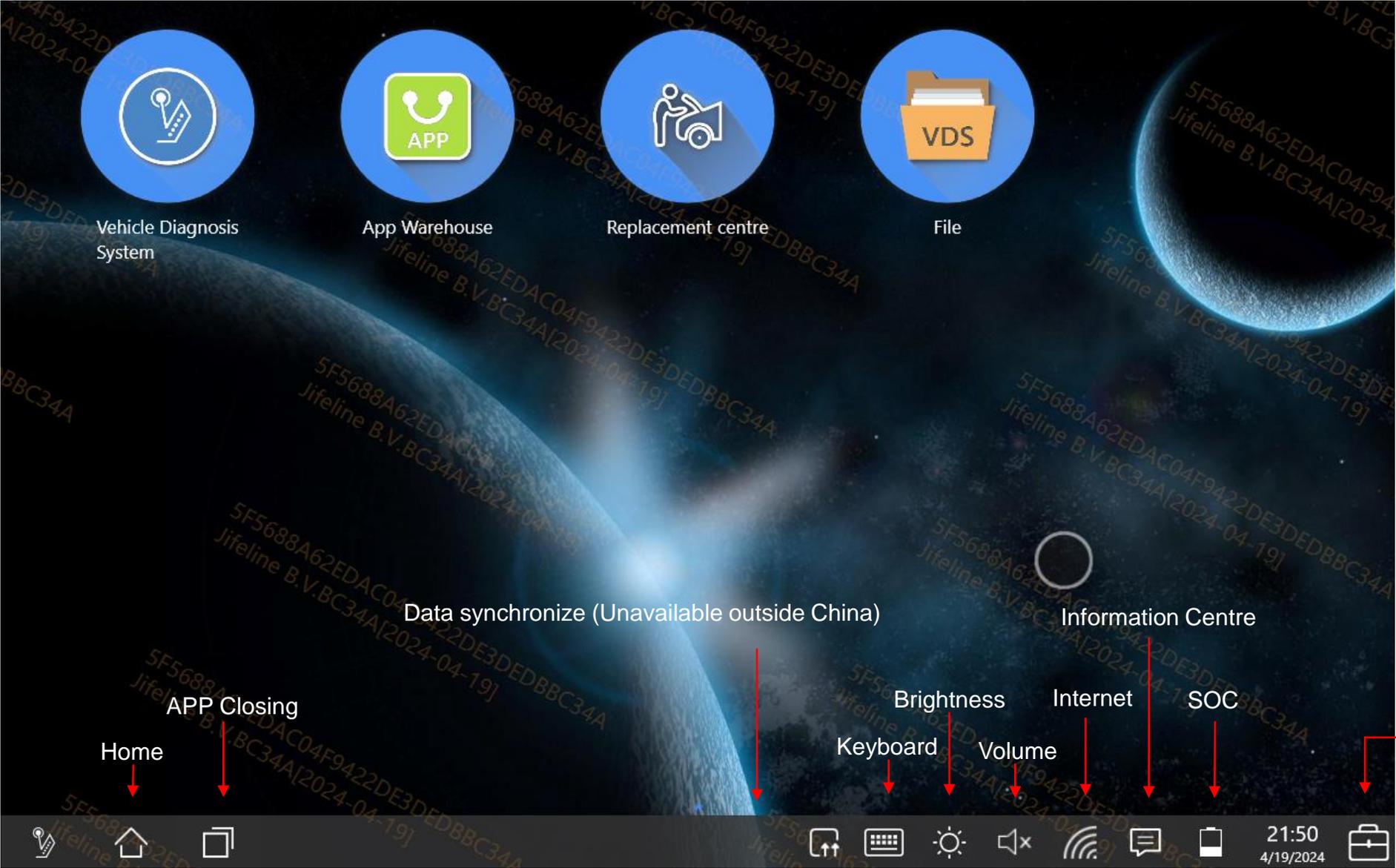
Name: Electronic Injection Plant, Division 14

New password:

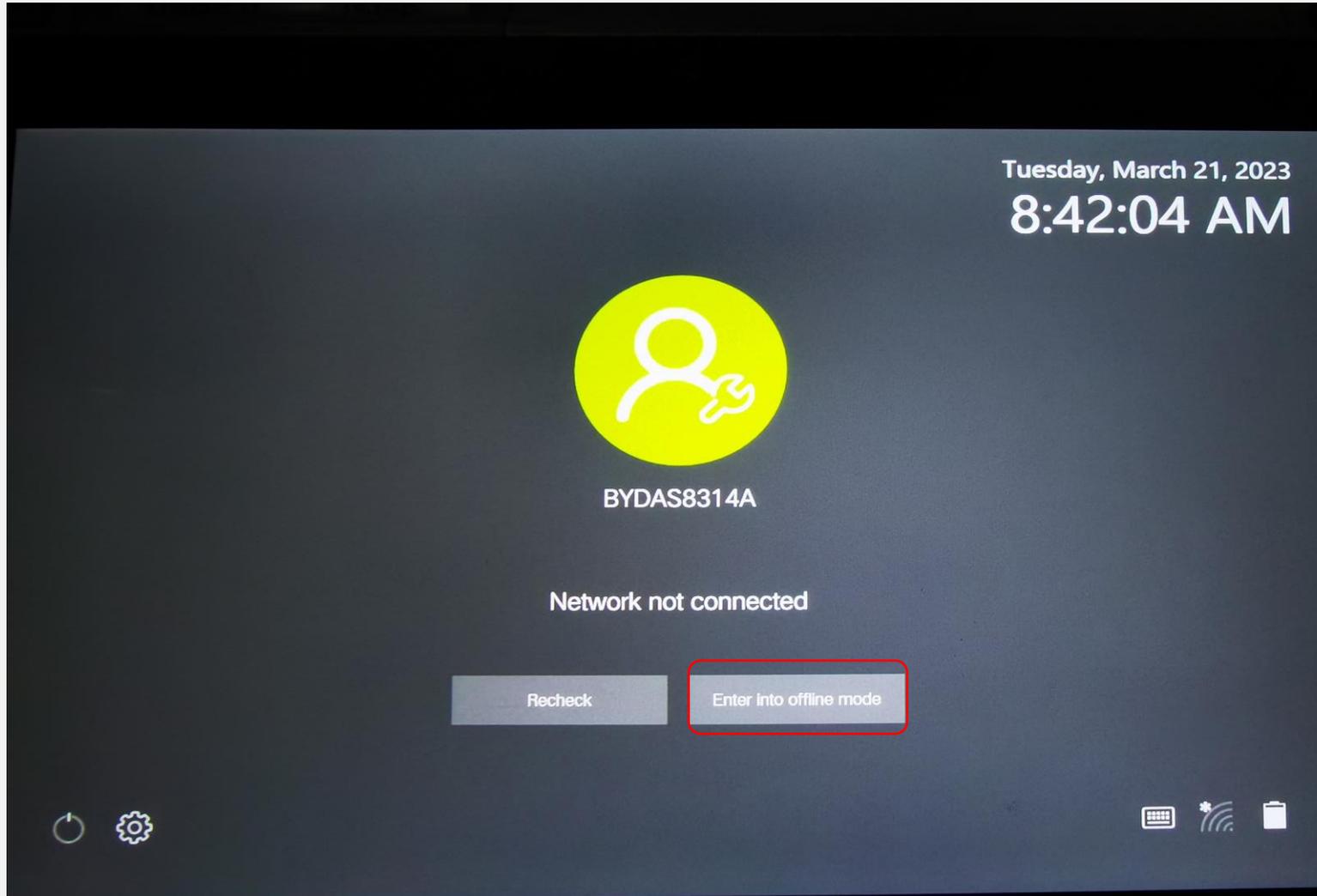
Confirm new password:

Registration

VDS Desktop Introduction



Offline Mode



Note: 'Enter with off-line mode' is recommended. Then connect internet in the desktop. **The VDS must be connect to internet every 7 days.**

In the offline mode, vehicle diagnosis system still works but functions of other apps or specific operation, internet connection is required.

Connect VDS, VDCI to vehicle

Physical cable connection between VDCI and VDS tablet



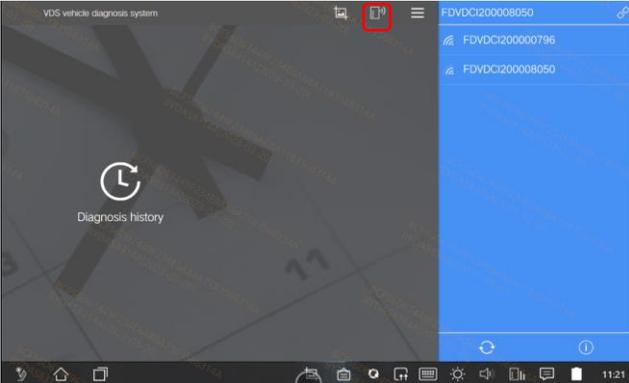
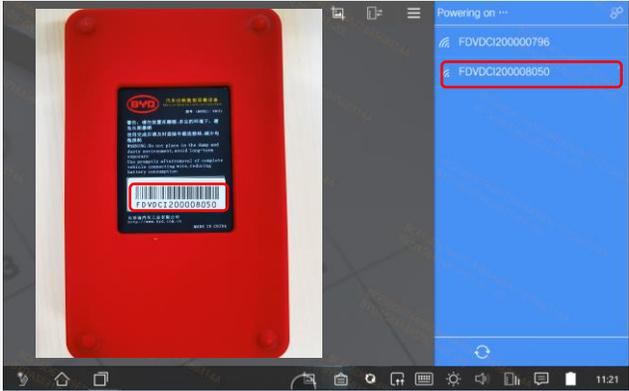
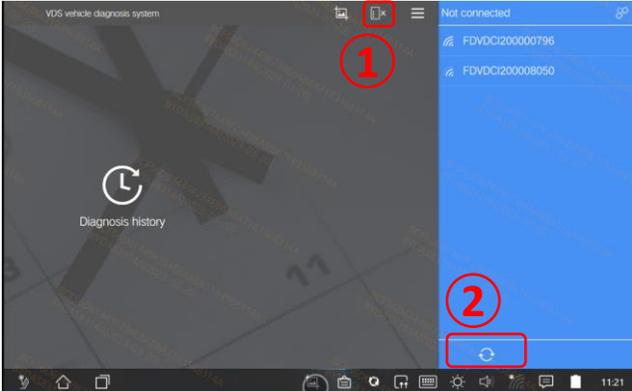
- VDCI connects with USB interface on tablet
- VDCI connects with the OBD interface on vehicle
- Click the VDCI icon in the diagnostic software to make USB mode diagnosis connection



Indicator	Function	Meaning
STATE ○ STATE	VDCI 2 state indicator	Green : normal VDCI Red: faulty VDCI
VCOM ○ VCOM	Indicator of communication between VDCI 2 and vehicle	Flashing green: communicating Continuous green: communication stopped
COM ○ COM	Diagnostic indicator	Flashing green: vehicle under diagnostics Continuous green: diagnostics stopped

Connect VDS, VDCI to vehicle

Wireless Connection between VDCI and VDS tablet



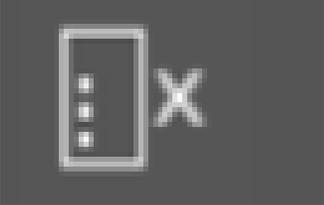
Note: Module upgrade cannot be processed under wireless connection

Connection icon of connection between VDCI and VDS tablet

Physical cable connection between VDCI and VDS tablet



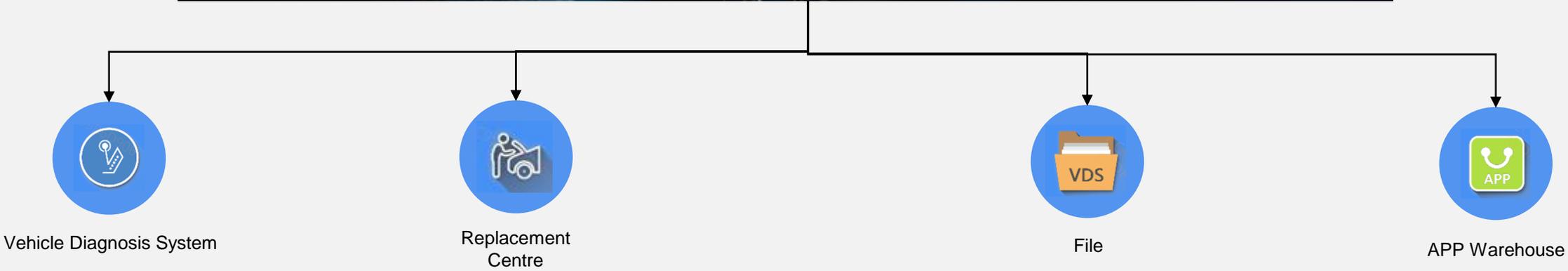
Not Connected



Wireless connection



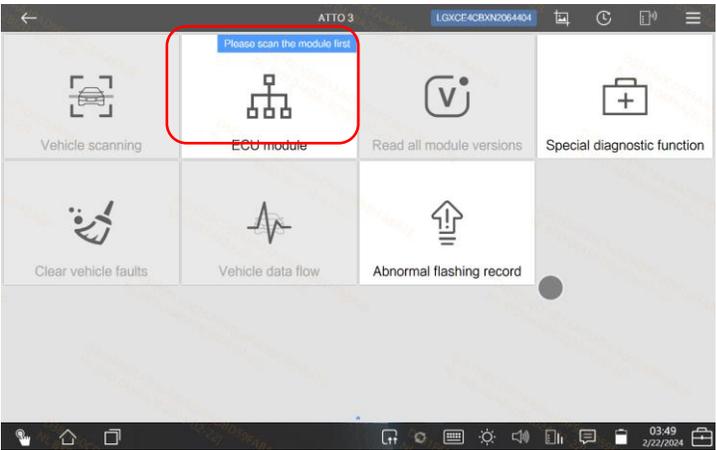
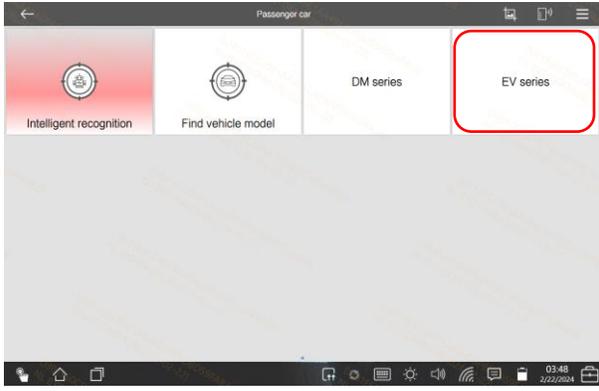
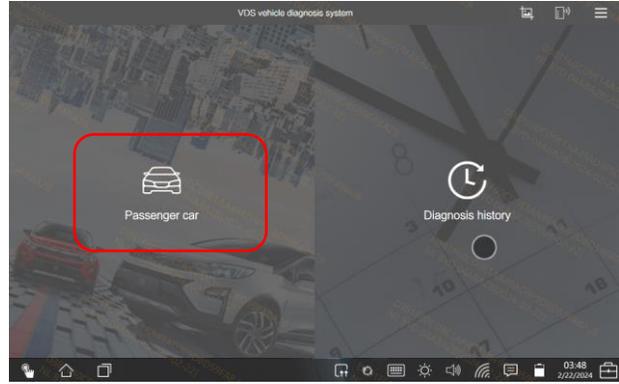
VDS Functions



Only above Apps are available in Independent Operator Version

Function - Vehicle Diagnosis System

Scan the vehicle



Item	Module Name	Part Number	Version	Current Version	Chassis Net	Status	Action
1	Airbag(BYD)	48430011561100210E	4.00.01	4.00.03	Chassis net SRS	No fault	[Data Flow]
2	air-conditioning compressor(BYD)	484400115914004500	3.00.14	3.00.20	Power net ACC	No fault	[Data Flow]
3	Battery execution and sampling unit(BYD)	4A5200115643002303	3.50.14		Power net BASU	No fault	[Data Flow]
4	Blind spot monitoring module(BYD)	545000115638000000	4.04.00		Chassis net BSD_BYD	1	[Data Flow]
5	Blind spot monitoring module(Veoneer)	545000115638000000	4.04.00		Chassis net BSD	1	[Data Flow]

Read the data flow for the module

Read upgrade information only

Clear all fault codes

Read the module with fault code only

Function - Vehicle Diagnosis System

Check module version

ID	Module Name	Part Number	Version	Status	Action
1	Airbag_RENESAS(BYD)	48430011CA11002107	4.00.10	No fault	[Icon]
2	Airbag(BYD)	48430011CA11002107	4.00.10	No fault	[Icon]
3	air-conditioning compressor(BYD)	48440010AE14004500	2.00.04	No fault	[Icon]
4	Battery execution and sampling unit(BYD)	4A5200115943002103	3.59.13	1	[Icon]
5	Combination instrument_MCU(BYD)	48450011CA25000100	3.00.05	No fault	[Icon]

Module information: electro-hydraulic brake(Bosch) LGXCF4CBXN2064404

Hardware Version : 0.0.4
Date of hardware : 21Year08Month02Day

Software No. : 32330011560B000001
Software version : 4.00.07
Date of software : 22Year09Month06Day
Times of revision : 2

Bootloader software version number/date : 2019Year26Week1Times
Software version : 1.0

33 modules exist

- Vehicle scanning
- ECU module
- Read all module versions
- Special diagnostic function
- Clear vehicle faults
- Vehicle data flow
- Fitted active safety and accident avoidance systems
- Abnormal flashing record

Programme updating: New Tang EV 2021 LC0CF4CD6M1042339

Warning for updating conditions:

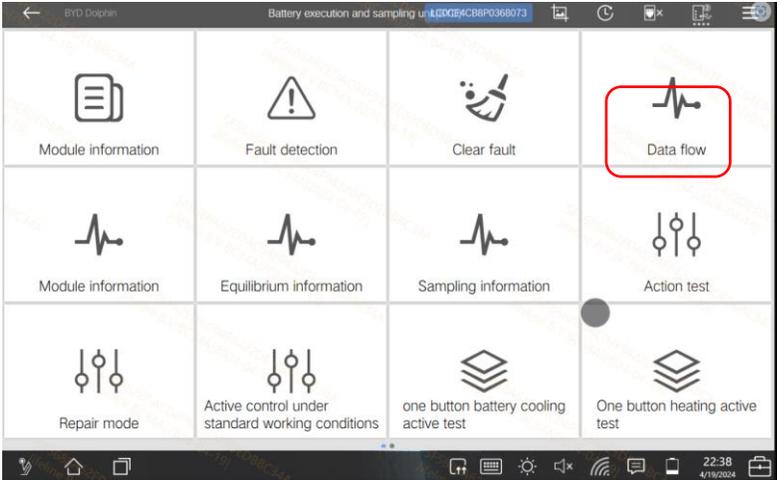
1. the vehicle in ON gear
2. Keep the device connected normally during updating.
3. If the updating fails, please perform updating again or handle as per the list of abnormalities.

Have read

Function - Vehicle Diagnosis System

Read data flow

Taking battery management system as example, find battery management system in ECU modules.



... lery execution and sampling unit(BYD) Data flow LGXCE4CBXN2064404

Data item	Current	Scope	Unit		
VIN		/			⚙️
Number of full SOC times		0/65535	Times	📊	⚙️
SOC		0/100	%	📊	⚙️
Low temperature mark		/		📊	⚙️
Quality inspection code of battery pack		/		📊	⚙️
Total voltage of battery pack at present		0/1000	V	📊	⚙️
Total current of battery pack at present		-500/1000	A	📊	⚙️
Maximum allowable charging power		0/500	kw	📊	⚙️

03:59 2/22/2024

... lery execution and sampling unit(BYD) Data flow LGXCE4CBXN2064404

Data item	Current	Scope	Unit		
VIN	LGXCE4CBXN2064404	/			⚙️
Number of full SOC times	35	0/65535	Times	📊	⚙️
SOC	99	0/100	%	📊	⚙️
Low temperature mark	Bf0.0	/		📊	⚙️
Quality inspection code of battery pack	Bf0.0	/		📊	⚙️
Total voltage of battery pack at present	419	0/1000	V	📊	⚙️
Total current of battery pack at present	2.9	-500/1000	A	📊	⚙️
Maximum allowable charging power	25.1	0/500	kw	📊	⚙️

03:59 2/22/2024

Function - Vehicle Diagnosis System

Export the diagnosis data

Click to export

1

ID	Component Name	Software Version	Status	Action
1	Airbag_RENESAS(BYD)	4.00.10	No fault	Export
2	Airbag(BYD)	4.00.10	No fault	Export
3	air-conditioning compressor(BYD)	2.00.04	No fault	Export
4	Battery execution and sampling unit(BYD)	3.59.13	1	Export
5	Combination instrument _ MCU(BYD)	3.00.05	No fault	Export

2

3

BYD vehicle diagnosis report

Vehicle diagnosis: ATTO 3
VIN: LGXCE4CBXN2064404
VCI serial number: FDVDCI200009359
Total mileage: 10966.5km
Time of diagnosis: 2024-02-22 03:51:31

ECU name	Software version	software code	Number of DTCs	Retrofit available
Airbag(BYD)	4.00.01	48430011561100210E	0	Yes
air-conditioning compressor(BYD)	3.00.14	484400115914004500	0	Yes
Battery execution and sampling unit(BYD)	3.50.14	4A5200115643002303	0	No
Blind spot monitoring module(BYD)	4.04.00	545000115638000000	1	No
Blind spot monitoring module(Veoneer)	4.04.00	545000115638000000	1	No
Combination instrument _ MCU(BYD)	3.00.10	484500115625000111	0	No
Combination instrument _ SOC(BYD)	3.00.06	484500115625000222	0	No
combination switch(KOSTAL)	3.00.01	514A0011621D000001	0	No
Communication converter(BYD)	3.00.06	4A550011568E000000	5	No

BYD vehicle diagnosis report

Vehicle diagnosis: Seal
VIN: LGXCF6CD0P2166193
VCI serial number: FDVDCI200008618
Total mileage: 3317.6km
Time of diagnosis: 2024-01-23 21:32:23

ECU name	Software version	software code	Number of DTCs	Retrofit available
A/C control module(BYD)	2.00.09	484400119114004500	0	No
Airbag_Renesas (BYD)	4.00.05	48430011C61100A111	0	No
Battery execution and sampling unit(BYD)	3.82.15	4A5200119143002910	0	No
Combination Meter(Desay)	4.01.01	503700119125000000	0	No
combination switch(KOSTAL)	3.00.02	514A0011621D000000	0	No
Communication converter(BYD)	3.00.06	4A550011568E000000	5	No

Size 407.0 KB

PDF report_20240221232424.pdf 290.8 KB

诊断云共享报告

主题标题:
主题描述:
主题备注:

4

5

6

7

8

Subject title (within 50 words)

Subject description (within 70 words)

Subject remarks (within 100 words)

Email address (A maximum of 5 email addresses are supported. Please use a semicolon (;) between each address)

eamon.huang@byd.com junsheng.lu@byd.com handel.yan@byd.com niko.Zhao@byd.com

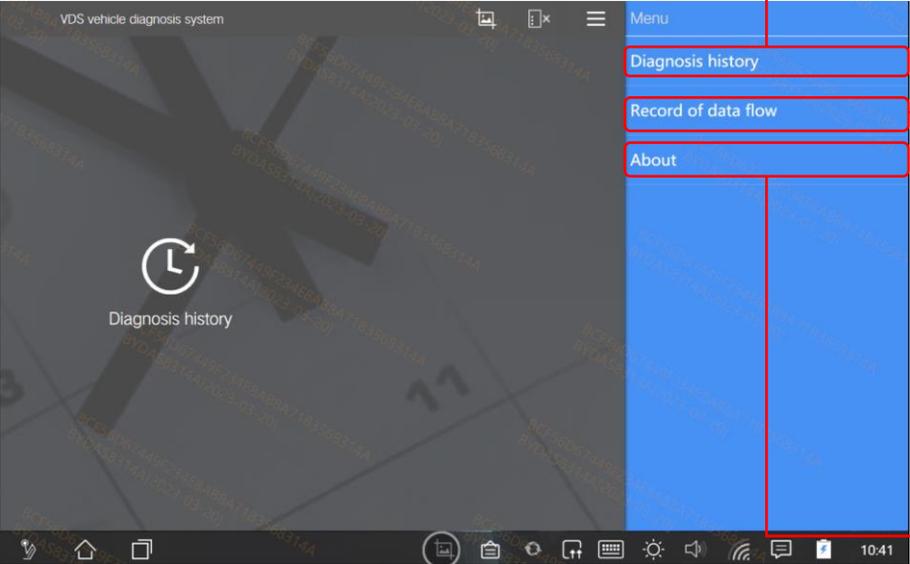
Upload subject

Browse report

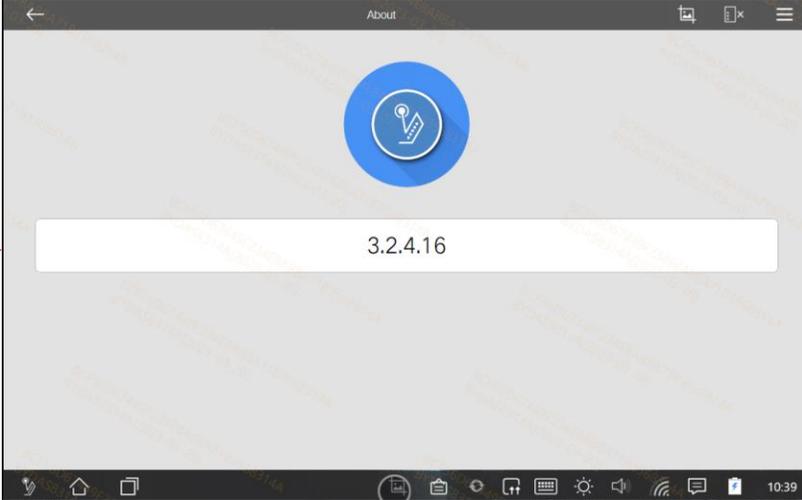
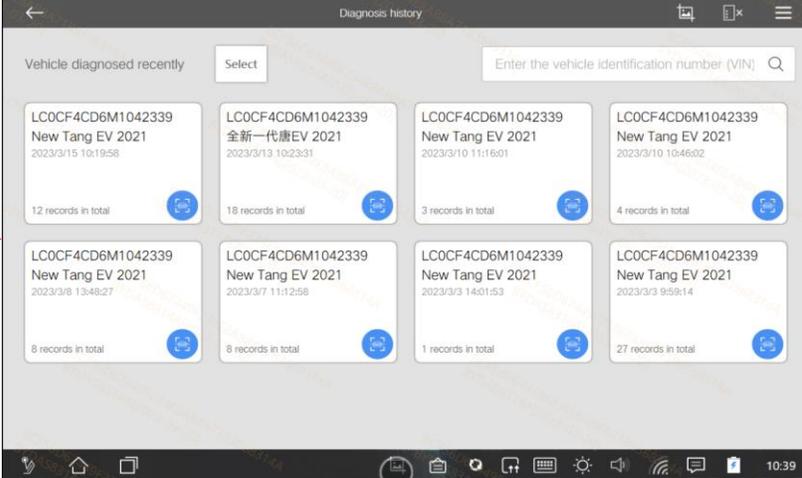
Function - Vehicle Diagnosis System



Diagnosis History and Software Version



next slide



Vehicle Diagnosis System APP version

Function - Vehicle Diagnosis System



Record data flow and review

Data item	Current	Scope	Unit	
Control state of compressor		/		
Actual state of compressor		/		
Target speed of compressor		0/10000	rpm	
Actual speed of compressor		0/10000	rpm	
Load voltage		0/2000	V	
Load current		0/31	A	
Current power of compressor		0/10000	W	
IPM/IGBT temperature		-100/155	°C	

Reading data flow

Data item	Current	Scope	Unit	
Control state of compressor	STOP	/		
Actual state of compressor	STOP	/		
Target speed of compressor	0	0/10000	rpm	
Actual speed of compressor	0	0/10000	rpm	
Load voltage	669	0/2000	V	
Load current	0.0	0/31	A	
Current power of compressor	0	0/10000	W	
IPM/IGBT temperature	22	-100/155	°C	

Select specific data flow items

Selection of data flow item

- Control state of compressor
- Current power of compressor
- IPM/IGBT temperature
- Load current
- Load voltage
- Phase current
- Target speed of compressor

Select all Cancel select Return OK

Click OK

Data record

Name of record file: 2023_03_08_13_55_49

End record method: Manual (Record for 5 min at most)

Start recording Cancel

Start recording

Data item	Current	Scope	Unit	
Load voltage	670	0/2000	V	

Click to record

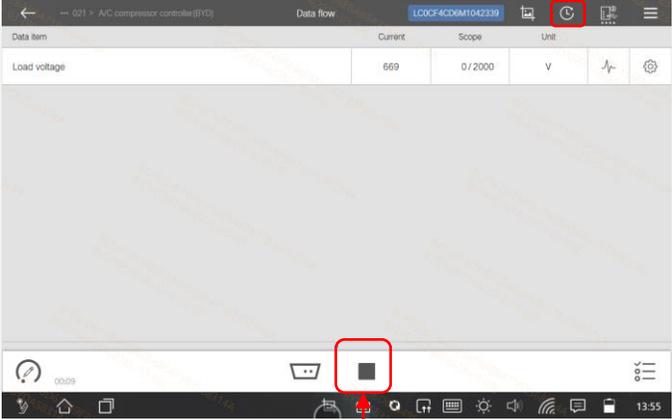
Data item	Current	Scope	Unit	
Load voltage	669	0/2000	V	

Read real-time data

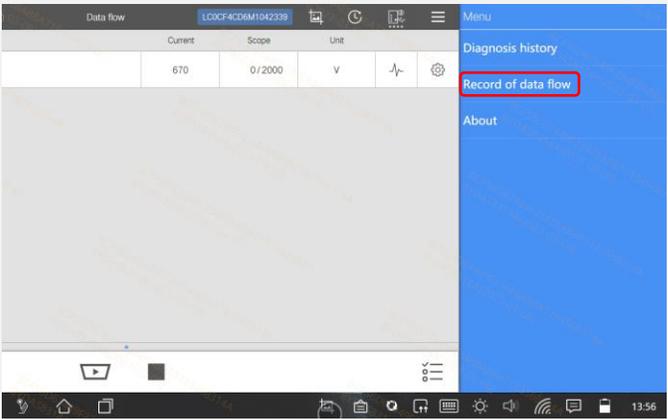
Function - Vehicle Diagnosis System



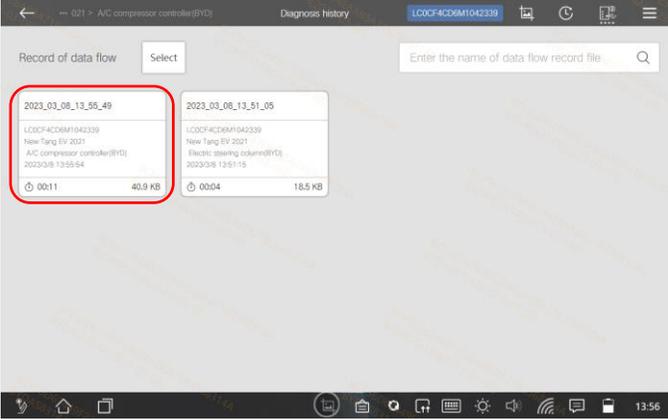
Record data flow and review



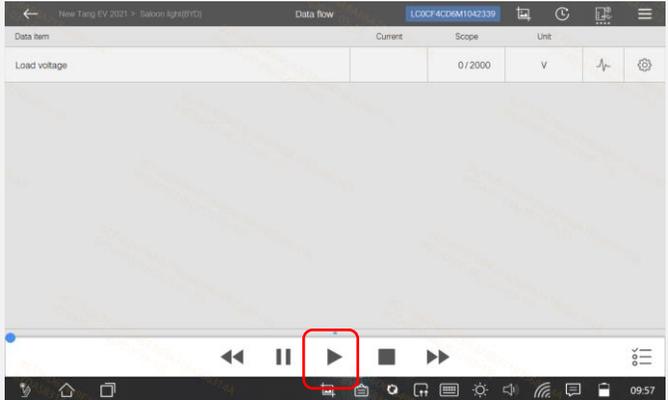
Click to stop recording



Go to recording history

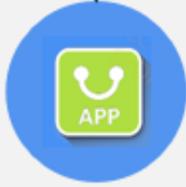


Process of exporting the recorded video is listed in the following page



Play recorded data as a video

Function - APP Warehouse



➤ Only for app update or fix.

App warehouse

Recommend Time Alphabetical

Classification: All Classifications

搜索

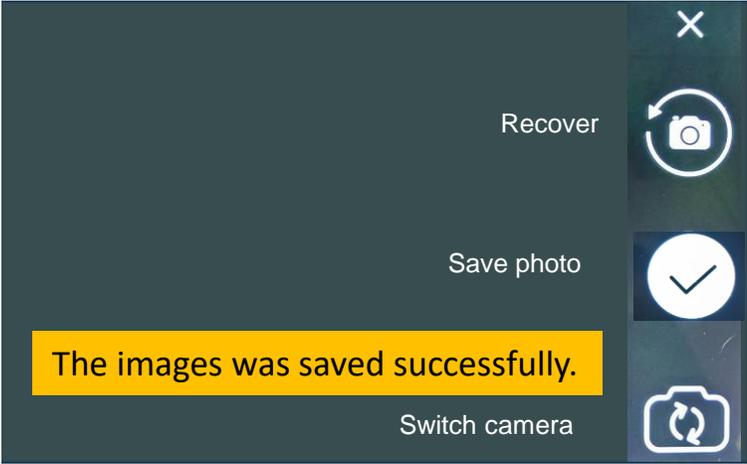
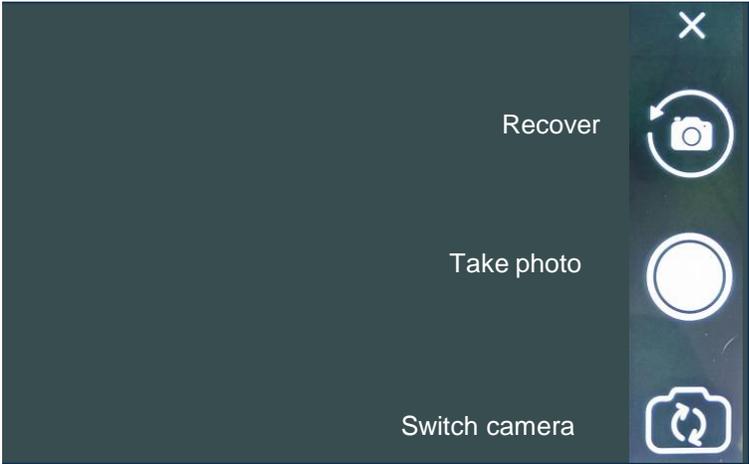
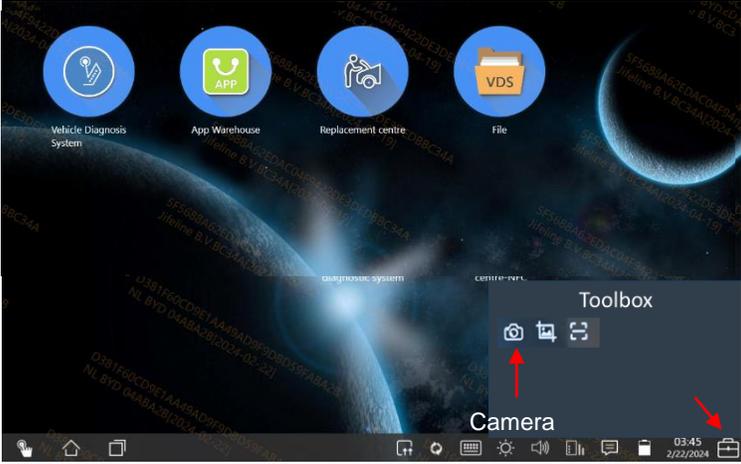
1		Replacement centre Common diagnostic applications ★★★★★ (359817)	Fix
2		Vehicle Diagnosis System Common diagnostic applications ★★★★☆ (223372)	Open
3		File System application ★★★★☆ (5645)	Open

Home User Profile System Settings

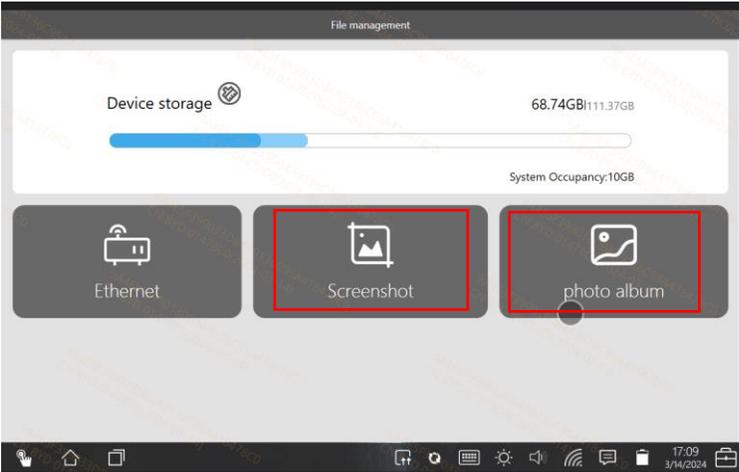
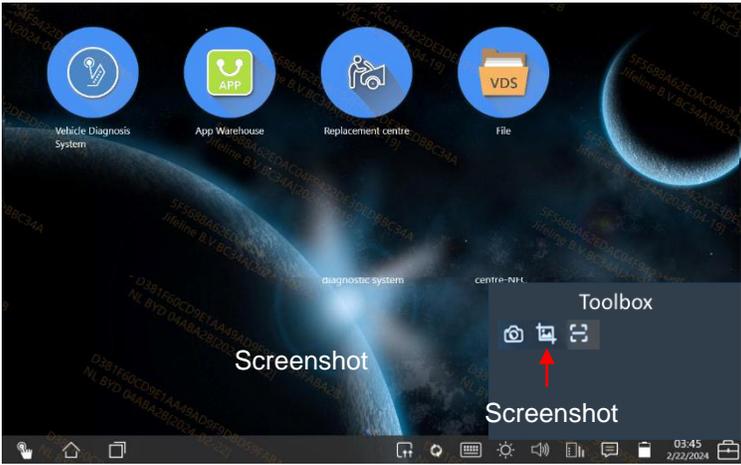
21:50
4/19/2024

Function – How to take Screenshot and picture

➤ Click the “camera” to take pictures by cameras, The photos will be saved on **photo album** on File.

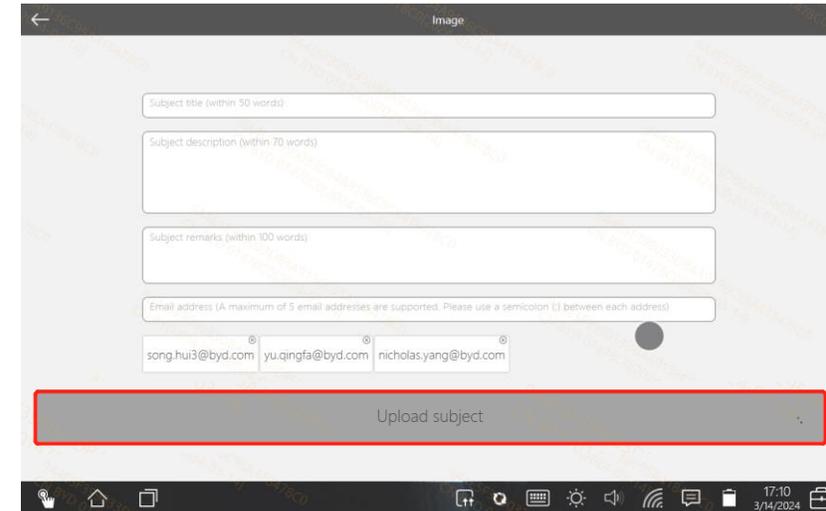
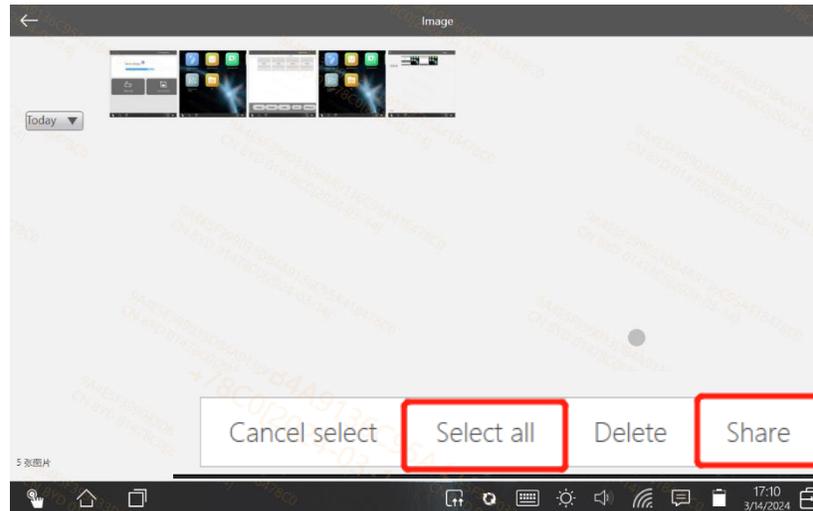
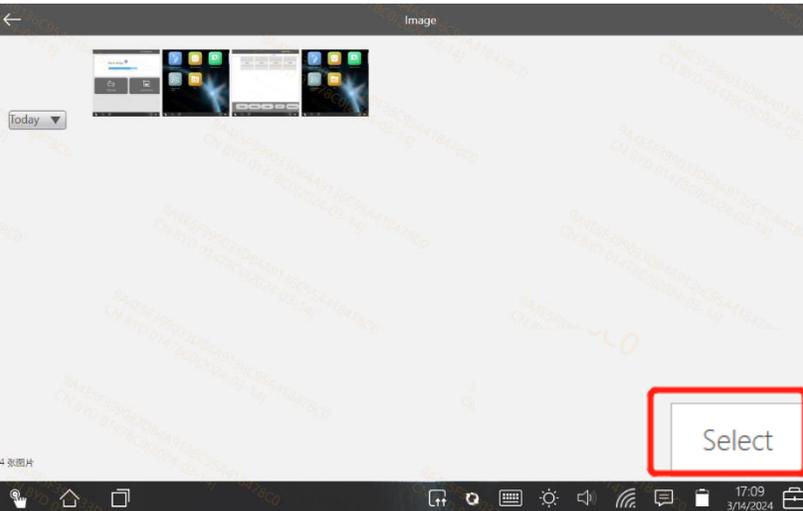


➤ click the screenshot to take screenshot. the screenshot will be saved on **screenshot**.



Function – How to take Screenshot and picture

➤ Click select > select all > share > enter your email address > Upload subject.



➤ Your email will get the linkage for download and download all pictures that you sent.

云分享资源

诊断云分享通知 <vds.service@byd.com>
To nicholas.yang@byd.com

If there are problems with how this message is displayed, click here to view it in a web browser.

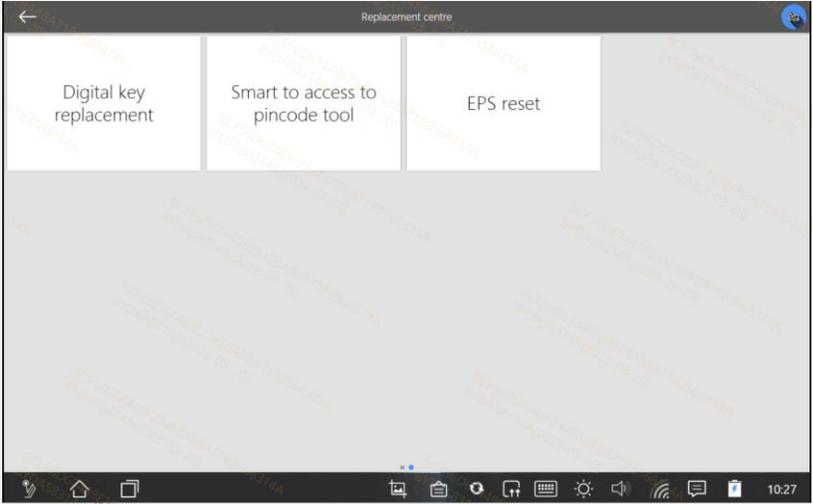
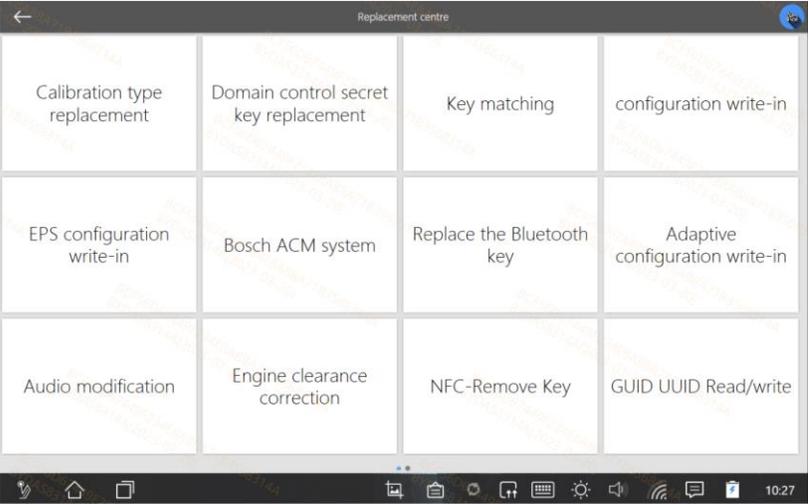
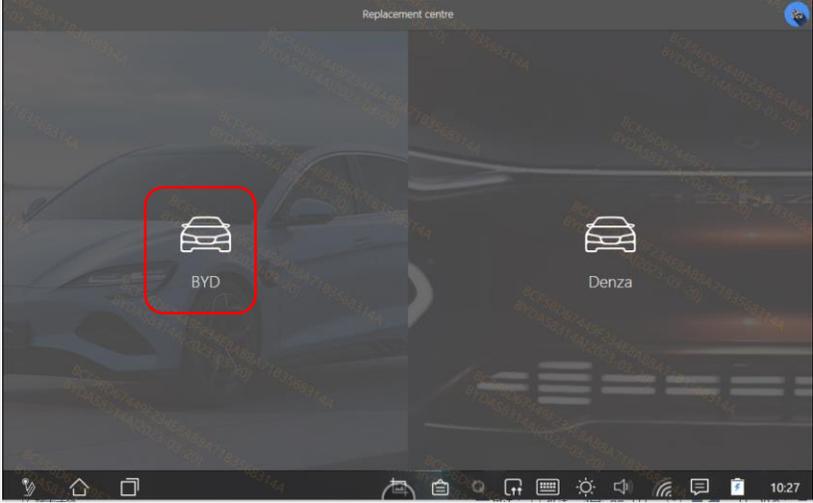
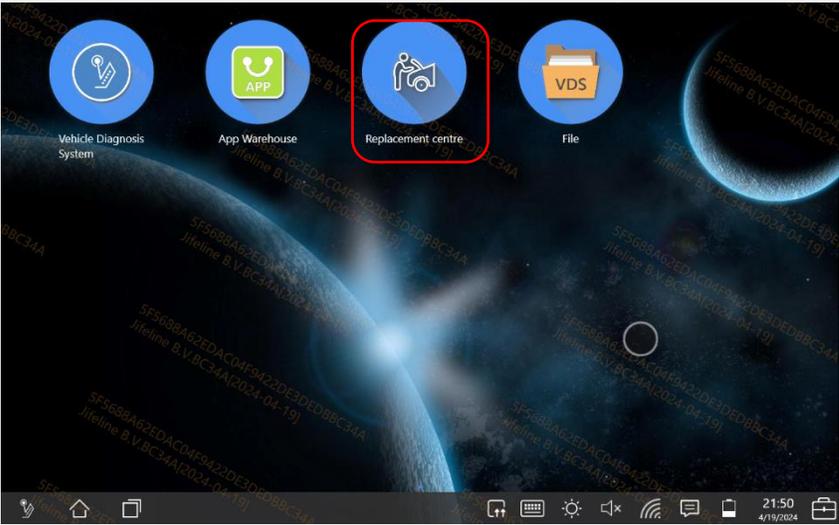
Reply Reply All Forward Thu 14/03/2024 10:24

主题描述

文件列表



Function - Replacement Centre



Sub-functions in replacement centre are only available when specific components need to be replaced or calibrated