USER MANUAL

ZENITH Z5

VER.1.00

Available in North America through:

Phone
1 (877) 263-4897

CAS

Website
www.OEMTools.com

CONNECTED AUTOMOTIVE SYSTEMS

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Chapter 1. Cautions and Warnings

1.1 End User License Agreement

⚠ Cautions and Warnings

This product is licensed to use within a designated region or country where the product was originally shipped to.
If you use this product outside of designated region or country, it may incur a disadvantage such as restrictions on the use of the product.
Please check the End User License Agreement below and proceed product registration only when you agree to all of the contents. If you disagree or do not understand any of the content in this agreement, please do not proceed product registration.

- **End User License Agreement**

  A person who wishes to purchase and use Zenith Z5 (hereinafter referred to as "end user"), agrees to the following clauses and upon completion of the product registration, end user agrees to the agreement and authorizes its validity.

Chapter A. Regional License

1. This product can only be registered and used within the country or region designated by the supplier at the time of shipment. Therefore, end user must confirm that the country or region in which product is to be used accords the country or region designated by the supplier at the time of shipment. Selling or using this product outside the designated country or region is strictly prohibited.

2. To protect the intellectual property embodied in this product and fulfill the conditions of this license agreement, end user agrees that the supplier has the right to monitor the country or region where the product is used when the product is connected to its online server facility for software update or product registration purposes.

3. The supplier has the right to restrict the use of the product if it is found registered or used outside the designated country or region.

4. Restriction of the product takes place in various levels and methods such as increased inconvenience of usage, prohibition of additional updates, restriction of specific diagnostic functions, and complete lock down of the product. Such restrictions cannot be withdrawn until following conditions are fulfilled:

   A) Restriction of the product is applied inappropriate manner due to the supplier's system error.

   B) Requested by the authorized distributor in the designated region/country with the written consent to provide full service and support for the Z5.

5. The period of warranty service and free software update subscription are not suspended even when functional restriction to the Z5 is enforced, and the expiry dates will remain the same.

6. End user shall be liable for all expenses such as transportation, labor costs, customs, and any additional fees that may arise in the process of reactivating the product or lifting the restrictions imposed to the product.

Chapter B. Liability and Indemnification

1. End user understands this product is a multi-brand diagnostic tool designed for aftermarket users and is not developed based on the original data and information provided directly by each car manufacturer but is developed and designed to provide functionality similar to each car manufacturer’s original equipment.

2. Therefore, end user acknowledges that the product is provided "as is" and "with possible faults, defects and errors" and that all use of the product is at end user's own risk and the supplier shall not be liable for any damages and losses to vehicles and bodily injuries resulting from such faults, defects and errors of the product.

3. The supplier cannot guarantee that the product will work correctly as intended with every system in every vehicle but will do the best to fix any bug in the software and bring enhancement to the product.

1.2 Copyright Notice and Disclaimer

Thank you for purchasing Zenith Z5 supplied by EZDS (E-Zenith Diagnostic System) Co., Ltd. This manual contains information needed for using Z5. We recommend you read this manual and comprehend the provided functionality before start using Z5 to get the maximum performance out of the product.

- **Copyright Notice**

- Zenith Z5 is copyrighted 2021 by EZDS Co., Ltd. All rights are reserved.
  File manipulation, de-compilation, disassembly, reverse-engineering, alteration, use as a reference tool for the purpose of developing a product with similar functionality, and re-distribution in any form without the prior written consent of EZDS Co., Ltd. is prohibited.

- EZDS Co., Ltd. owns the intellectual property including but not limited to patents, trademarks and copyright contained in this user’s manual.
  No part of this manual may be photocopied, reproduced, or translated to another language in any way without the prior written consent of EZDS Co., Ltd. Purchase of Z5 shall not be assumed as granting or transferring the rights to utilize intellectual property of EZDS Co., Ltd. contained in this manual.

- **Disclaimer**

- By use of this product, you acknowledge that the product is provided "as is" and "with possible faults, defects and errors" and that all use of the Product is at your own risk.
  Even though the product has been extensively tested and evaluated, EZDS Co., Ltd. cannot guarantee it will work correctly as intended with every system in every vehicle. EZDS Co., Ltd. will do the best to fix any bugs and to bring enhancement to the product, but specifically disclaim any liability for damage to the car and yourself.

- EZDS Co., Ltd. reserves the right to change or modify Z5 for technical and non-technical product enhancement without notice. This may include scan tool graphic displays, vehicle coverage, supported functions and operating procedures. Hardware may also be modified, altered or redesigned or may differ from the descriptions and illustrations displayed in this manual.

1.3 Safety Warnings and Cautions

This section contains warnings and cautions for safe and proper use of this product; therefore, it is recommended that every user should read this section carefully before using the product and make sure that such warnings and precautions are well observed and comprehended.

⚠ Cautions and Warnings

Dangerous consequences may arise, with the possibility of fire, death, or serious injury to the user, if the product is not handled properly as instructed below. The user shall be fully liable for any direct or consequential damage or loss caused by not following the instructions provided in this Zenith Z5 user's manual.

General issues:

- Use Z5 only for the original purposes as it was designed for.
- Keep Z5 within the specified storage temperature when not in use (See the spec sheet)
- Place the Z5 at a secured location and keep clearance with any moving part of the vehicle or hazardous environment when using Z5 with the vehicle.
- Use only the parts and accessories authorized by EZDS.
- Make secure connections of all cables and connectors. Be careful not to let the DLC cable or power cable gets disconnected while the Z5 is operating.

External Power issues:

- Supply stable power from the external source (using AC/DC adapter) when updating Z5 software (Operating System, Firmware and Application updates).
- Use the AC/DC power adapter and cables supplied by EZDS only when supplying power from the external source.
- **Charging through Type-C port of the Z5 will not work** although the battery charging icon will be displayed on the screen when attempted.

Battery issues:

- Observe the instructions of this user's manual when replacing the rechargeable battery.
- Do not use the rechargeable battery other than EZDS supplies.
- Do not disassemble the rechargeable battery in any circumstance.
- Do not put the rechargeable battery in the water and keep away from moisture.
- Keep the rechargeable battery away from the heat.
- Do not apply physical impact to the rechargeable battery or pierce with a sharp object.
- Do not put the rechargeable battery in the microwave oven or high-voltage container.
- In case of any smell, heat, distortion, or discoloration is observed with the rechargeable battery, stop using it immediately. If such a symptom is witnessed when charging or operating, remove the battery from the base unit and contact your local distributor.
- Be careful not to put the rechargeable battery in reversed polarity.
- Do not short-circuit the rechargeable battery terminals.
- Do not connect the rechargeable battery terminals directly with the external power sources.
- Do not put the rechargeable battery in fire or expose it to direct sun light.

Service authority:

- Do not disassemble or dismantle the Z5 base unit in any case.
- Beware that only the service personnel of EZDS's authorized local distributor is entitled to provide after-sales service for Z5.

Storage:

- Put Z5 base unit on a secure place and avoid unstable, inclined, or slippery place. Be careful not to drop the Z5 base unit.
- Avoid humidity and dusts when storing and using Z5 in order to prevent electric shock or fire.
- Do not put heavy objects such as hand tools on the Z5 base unit.
- Stow the parts and accessories that are not in use in the Z5 carry case.
- Avoid following hazards for storing Z5.
  - Too high or low temperature (See Spec sheet)
  - Too high or low humidity (See Spec sheet)
  - Exposure to direct sunlight

Using Z5 on the Vehicles:

- Be careful not to cause damages to the cables by heat from the engine or not to get caught by the moving parts in the engine compartment when Z5 cable connection is configured under the hood.
- Securely tighten the screw lockers when connecting the DLC main cable to Z5 base unit.
- Do not carry the Z5 by holding the cables connected to the base unit.
- Avoid physical impart and vibration when carrying Z5
- When supplying power from the vehicle battery, check the connection for correct polarity.
- Storing the rechargeable battery in a hot place may shorten its lifetime
- In case battery liquid gets in the eyes, do not rub, and wash them with fresh running water. And see the doctor immediately
- Use of sharp or pointed object may cause serious and irrecoverable damage to the touch screen and the LCD
- Keep LCD away from liquid or splash of water
- Liquid Crystal may run from the broken LCD. Do not touch the LCD when it is broken and be careful not to get liquid crystal in the eyes or mouth. If contaminated by liquid crystal on the skin, remove them immediately using soap and running water
- Use soft fabric and alcohol to clean the surface of the LCD
- Do not use volatile solvents other than alcohol when cleaning the LCD

⚠ Cautions and Warnings

Dangerous consequences may arise, with the possibility of serious injury to the user and or damage to the product, if the equipment is not handheld correctly as instructed below. The user shall be fully liable for any direct or consequential damage or loss caused by not following the instructions provided in this Z5 user’s manual.

1.4 Safety Warnings and Cautions

When the product has been used up to its lifetime and needs to be disposed, the rules and regulations that the government of each country has set forth for material recirculation, wasted electric/electronic product disposal or other related legal procedure shall be checked and followed. When disposing the wasted product, please observe the warning message below.

⚠ Cautions and Warnings

- When disposing Z5, do not dump it among the daily wastes. In many countries, it either shall be approved by local authorities or recollected by the local distributor.
- Disposal by burning or burying it underground without authorization is not generally allowed in most of the countries.

Contact your local distributor to consult the proper procedure for Z5 disposal.

Chapter 2. Getting started with Zenith Z5

2.1. Specification

Z5 Base Unit specification

General Specification

Category	Specifications
CPU	Octa Core Processor 2.0 GHz
Operating System	Android 9
System Memory	3G / Internal 32G **
External Memory	Micro SD Card
LCD	8.0 inch FHD (1920 x 1200)
Input Devices	Capacitive Touch Screen, 3 Hard Keys (Power, Volume +, Volume -)
Camera	8 megapixel auto-focus with LED flash
Sound	Loud Speaker 1 microphone; 3.5 pi standard audio jack
Rechargeable Battery	Li-ion 3.8V 3200 mAh
Operating voltage	DC 9 ~ 30V
Sensors	Ambient Light, Proximity, Gyroscope, Accelerometer
Dimension	225 x 136 x 33 mm
Weight	800g

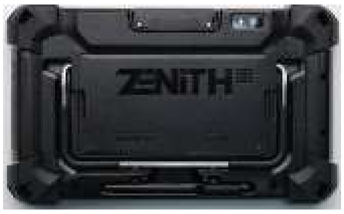
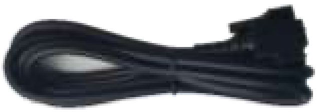
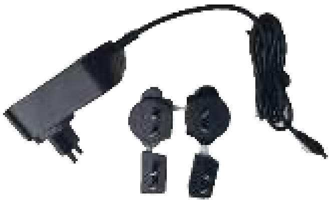
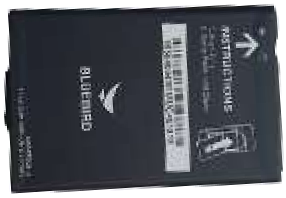
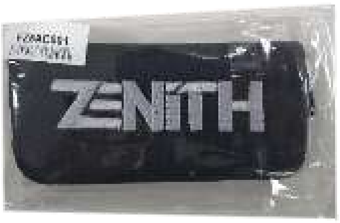
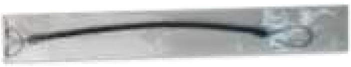
Connectivity	
External port	USB 1ea, USB C 1 ea.
Network	RJ45 Ethernet, Wi-Fi 802.11 a/b/g/n, Bluetooth 4.2

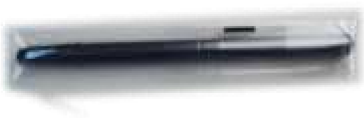
Supported Vehicle Communication Protocols
CAN (High speed, Low speed, Single), ISO-9141, ISO-9141-CARB, KWP-2000, SAE-J1708, SAE-J1587, J1850(PWM/VPW), Melco Pull-Down

** Half (16GB) of Z5's internal memory (32GB) is allocated for Z5 diagnostic software and future updates. Therefore, the actual available memory size may be less than the capacity displayed in the storage under setting.

2.2. Parts and Components

Basic Supplies

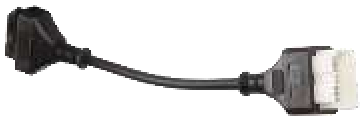
Part	Parts Number	Description	Q'ty
	EZ5MU001	ZENITH Main Body	1
	EZ5CB001	DLC Main Cable	1
	EZ5CB002	AC/DC Adapter	1
	EZ5BA001	Battery Pack	1
	EZ5AC001	Hand Strap	1
	EZ5AC002	Stylus Pen Coiled String	1

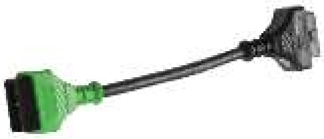
	EZ5AC003	Stylus Pen	1
	EZ5AC004	Tempered Glass Protector	1
	EZ5BX001	Packing Box	1

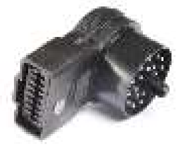
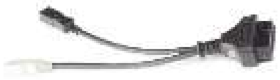
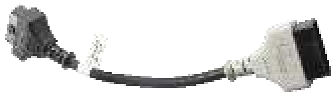
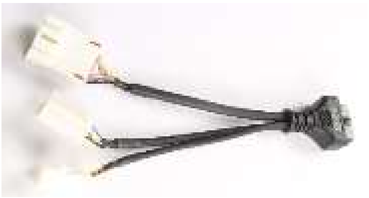
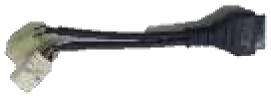
Optional Supplies

	EZ5BX005	Carrying Case	1
	EZ0CB003	Battery to DC Cable	1

Optional OBD Adapters

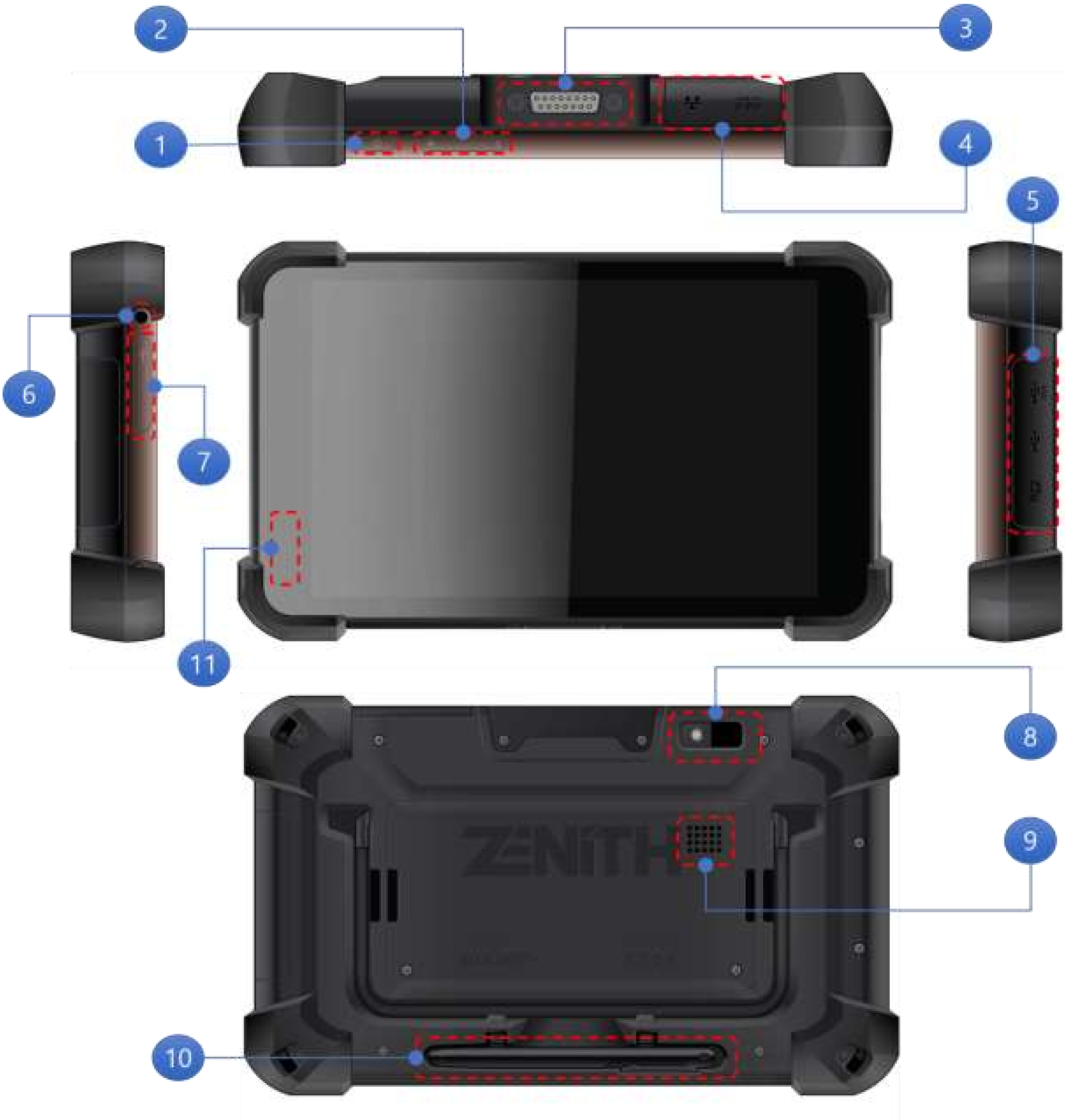
	EZ0CB004	TOYOTA 17+1P SQUARE	1
	EZ0CB005	TOYOTA 17P ROUND	1
	EZ0CB006	HONDA/ACCURA 3P	1
	EZ0CB007	MAZDA 17P	1
	EZ0CB008	SUBARU 9P	
	EZ0CB009	MITSUBISHI/HYUNDAI 12P+16P	
	EZ0CB010	KIA 20P A Type	

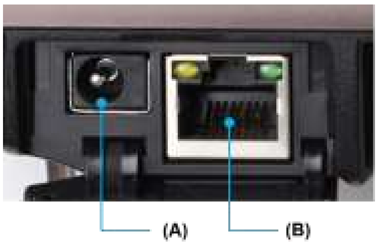
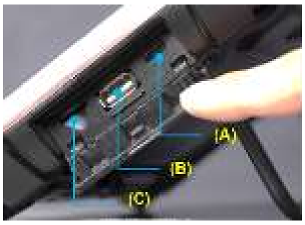
	EZ0CB011	KIA 20P B Type	1
	EZ0CB014	SSANGYONG 20P	1
	EZ0CB013	NISSAN 14P	1
	EZ0CB015	DAEWOO 12P	1
	EZ0CB016	SSANGYONG 14P	1
	EZ0CB022	J1939 9P + J1708 6P	1
	EZ0CB021	UNIVERSAL 4P	1

	EZ0CB019	BMW 20P	1
	EZ0CB020	AUDI/VW 4P	1
	EZ0CB025	HYUNDAI KIA COMMERCIAL 16P	1
	EZ0CB026	HYUNDAI CNG BUS	1
	EZ0CB023	ISUZU 20P-10P-3P	1
	EZ0CB024	HINO 12P-5P	1

2.3. Details of Base Unit

Z5 Base Unit


2
3
1
4
5
6
7
11
8
9
10

No.		Description
1	Power button	Long press on the button: Z5 Power On/Off Short press on the button: Z5 Sleep/Wake
2	Volume control button	Controls volume on media or alarm
3	DLC connection terminal	Terminal for connection of the DLC cable for communications with a vehicle
4	External device connection terminal 1 	(A) RJ45 Ethernet port for network connection
		(B) Power connection with a car battery or an AC/DC adapter
5	External device connection terminal 2 	(A) Micro-SD card slot
		(B) USB standard port
		(C) USB Type-C
6	Headphone connection jack	
7	Left side external ports	USB Type-C
8	Rear camera	
9	Speaker	
10	Stylus Pen	
11	Adaptive Brightness Sensor	Automatically adjust the brightness level

2.4. Battery Installation

A brand new Z5 will be delivered with its rechargeable battery detached. To power on and properly charge the Z5, install the provided rechargeable battery and connect the AC/DC adapter. Follow the steps described in this section to properly install the rechargeable battery to the Z5.

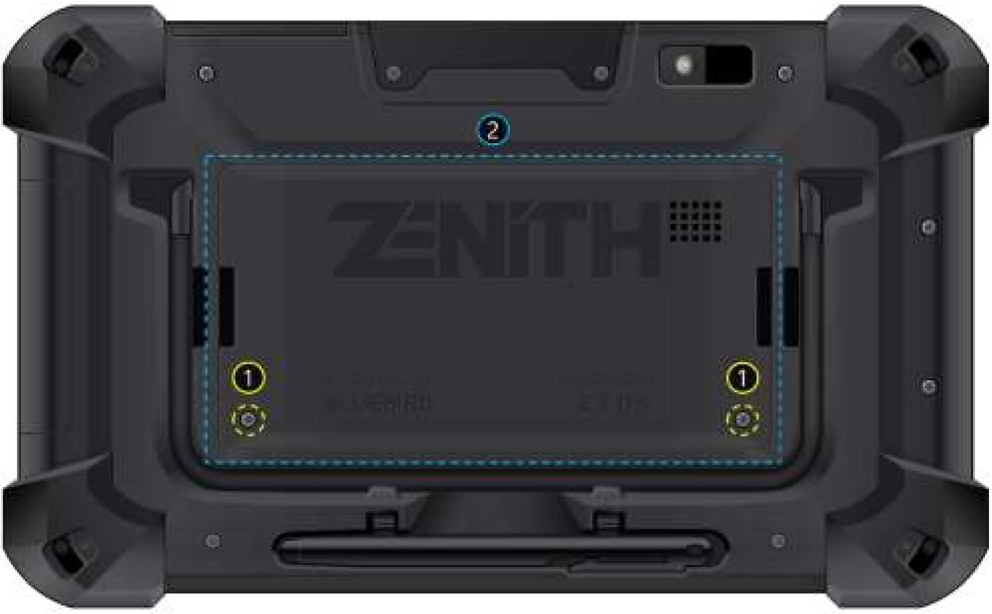
⚠ Caution

- Improper battery use may cause fire, explosion, or other hazards.
- If the battery is removed due to impact, heat, submersion, or other damage, there is a risk of explosion. Keep away from children and animals.
- Do not allow the battery's contacts to touch things like necklaces, coins, or electric conductors. Do not give any impact with sharp objects. There is a risk of explosion.
- Use only the approved battery and charger. Using an incompatible battery or charger may cause device malfunction or other damage, such as fire.
- When you are not using the device for a long period, take out the battery and keep the device and the battery in a dry, cool place. Also, charge the battery at least once a year. If you keep it without charging for a long time, it may cause device malfunction.

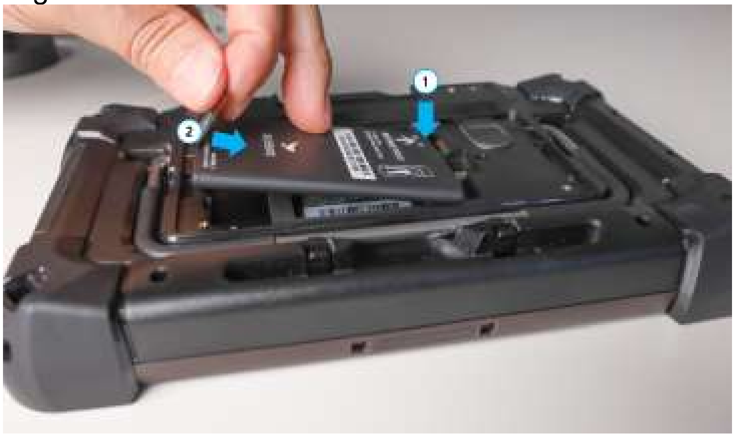
<Required Tools>

- Z5 Base unit
- Z5 Battery
- Mini (+) Screwdriver

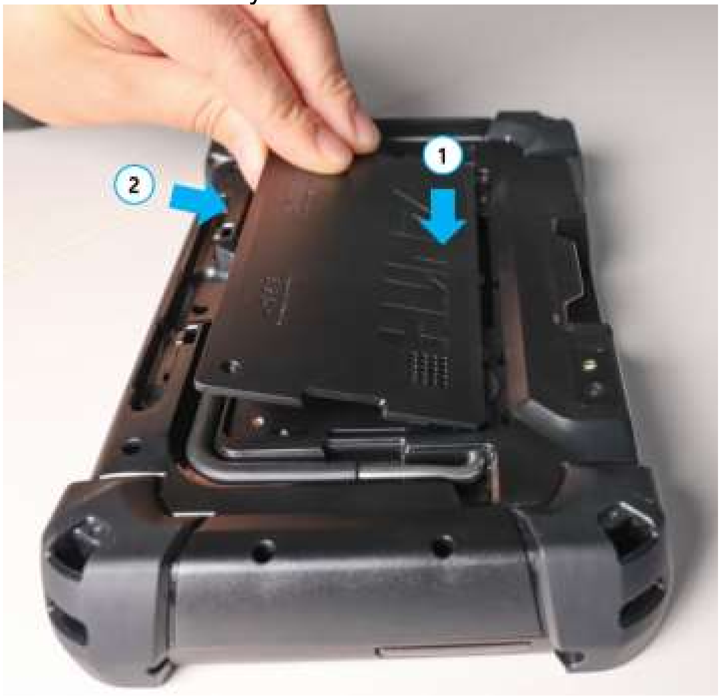
A. Remove the battery cover (2) by untightening 2 screws (1) located lower end of the cover.



B. Place the battery with its barcode facing upward and insert it with its gold contact aligned with the Z5.



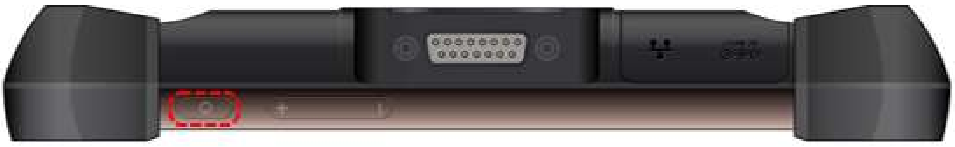
C. Reinstall the battery cover.



Basic Buttons for Android system

A. Power Button

You can turn on/off the power of Z5 by using the power button placed at the top of the main module.



Power on

To turn on the device, press and hold the Power button for a few seconds.

Power saving mode (Sleep mode)

With the device powered on, tapping the power button will turn the device to Power saving mode. By tapping the power button again, the device will come back to its normal mode.

Restart/Screenshot

Pressing the power button for longer than 2 seconds will display a popup for Power off, Restart, and Screenshot.

- Power OFF

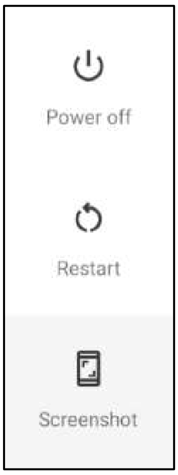
Closes all running applications and powers off the device.

- Restart

Closes all running applications and reboots the device.

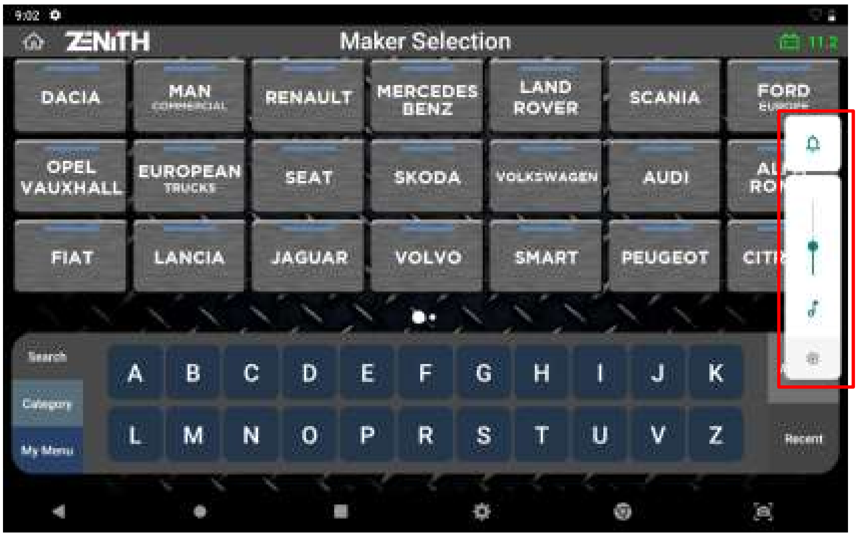
- Screenshot

Captures a screenshot of the current screen and saves it in the image folder.


Power off
Restart
Screenshot

B. Volume Control Button

You can change the volume level with the volume control buttons.
The volume level is displayed on the popup menu as follows.


9:02
ZENiTH
Maker Selection
DACIA
MAN COMMERCIAL
RENAULT
MERCEDES BENZ
LAND ROVER
SCANIA
FORD EUROPE
OPEL VAUXHALL
EUROPEAN TRUCKS
SEAT
SKODA
VOLKSWAGEN
AUDI
FIAT
LANCIA
JAGUAR
VOLVO
SMART
PEUGEOT
Search
Category
My Menu
A B C D E F G H I J K
L M N O P R S T U V Z
Recent

You can also control the volume for Media, Alarm and Notification by pressing the setting icon at the bottom of the popup menu.

2.5. Android Operating System

Zenith Z5 is NOT a multimedia tablet or a smart phone

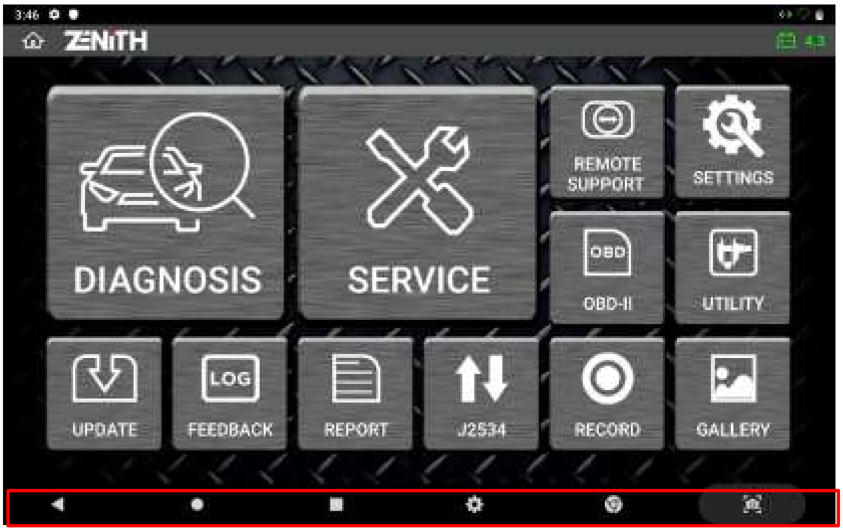
Unlike many other devices operating on Android system, Zenith hardware is designed and developed specifically for conducting diagnostic functions on the automobile, and it runs on Android operating system that is exclusively customized for itself.
Never try to use Zenith Z5 for playing 3rd party contents or attempt to alter or modify the operating system's settings and security features, which may cause serious consequences including system failure or malfunction of the device

Caution

Downloading any other applications that are not authorized by EZDS through Google Playstore is strictly prohibited due to security issue. Only printer drivers will be available to download. Any suspicious downloading attempt may void your warranty.

- **Basic Buttons for Android system**

Android feature buttons are displayed as shown below.

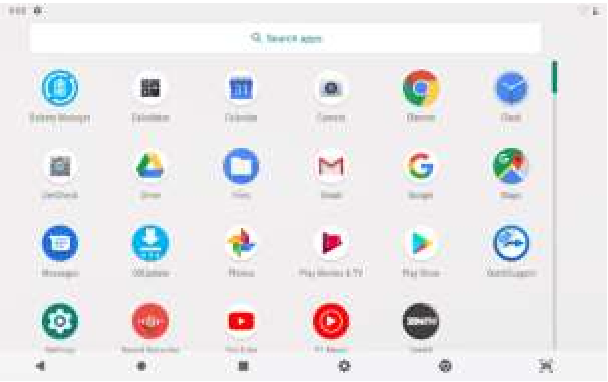

3:46
ZENITH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY

A. Back Button

◀ Closes the current screen and returns to the previous level.

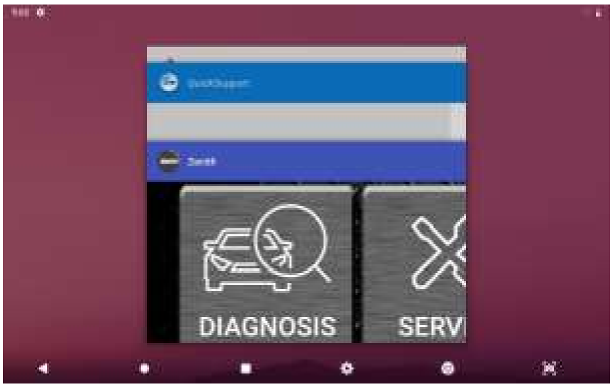
B. Home Button

Returns to Home screen. If the Z5 program is shut down, Zenith software can be selected and executed again by selecting the Zenith icon.


Search apps

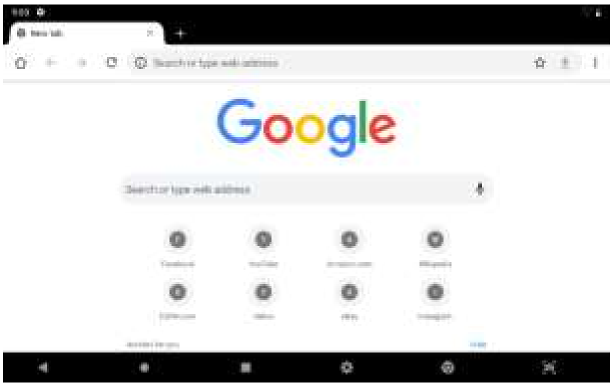
C. App Running button

Displays the applications that are running in the background or recently executed. Z5 can be selected and executed again by selecting Zenith application while scrolling up and down.


QuickSupport
Zenith
DIAGNOSIS
SERV

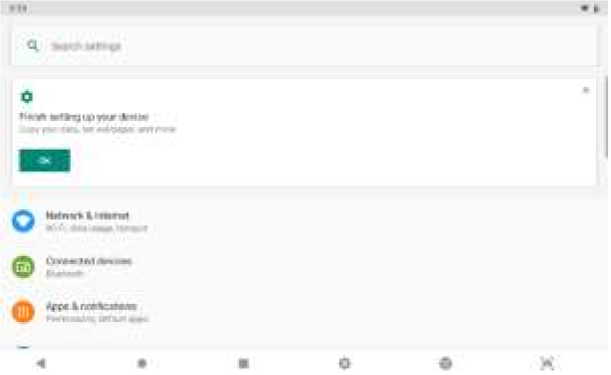
D. Web Browser Button

Runs the default Internet browser.


New tab
Search or type web address
Google
Search or type web address

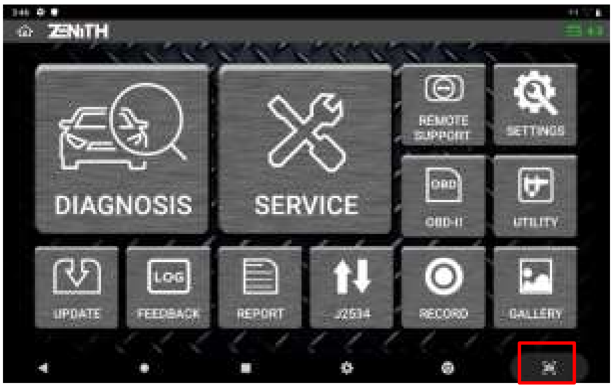
E. Setting Button

Enables hardware configuration and preference setting for operating Z5.

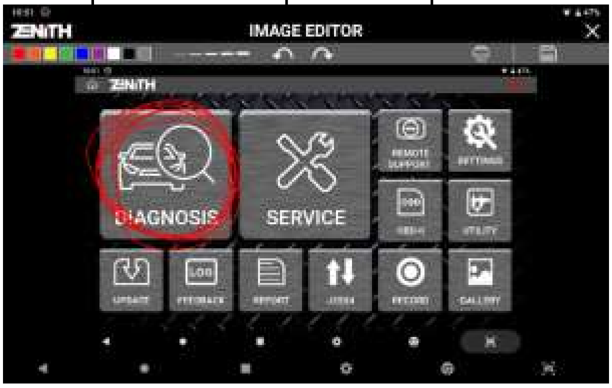

Search settings
Finish setting up your device
OK
Network & internet
Connected devices
Apps & notifications

F. Screen Capture Button

This enables an instant screen capture while operating Z5.

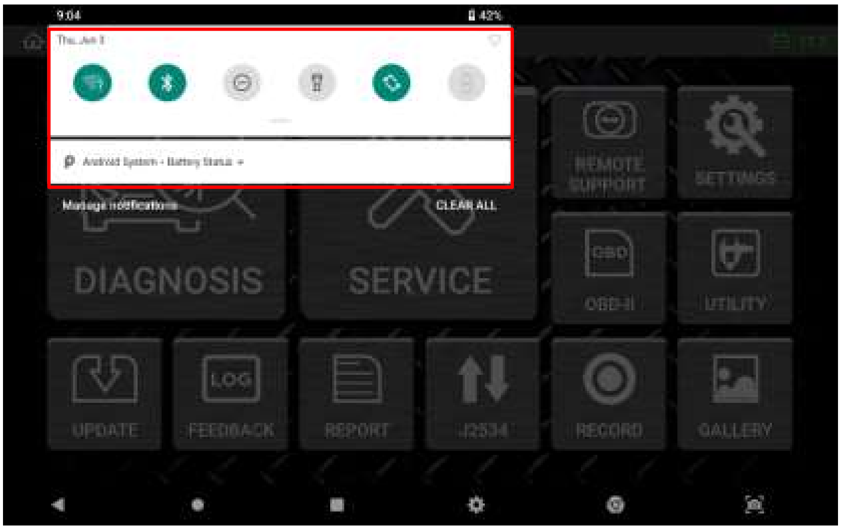

ZENiTH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY

You have option to edit or print the captured screenshot.


ZENiTH
IMAGE EDITOR
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY

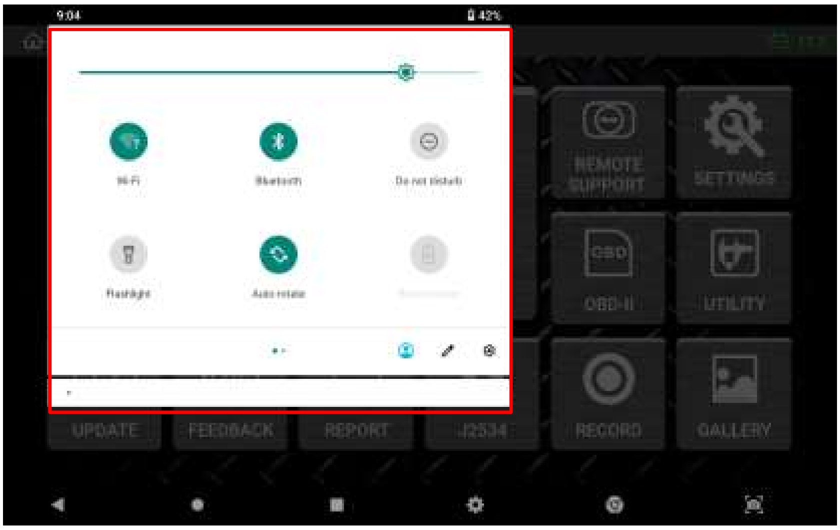
- **Quick Setting menu**

A quick setting menu appears when you touch the top of the screen.


9:04
42%
Android System • Battery Status
Manage notifications
CLEAR ALL
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY

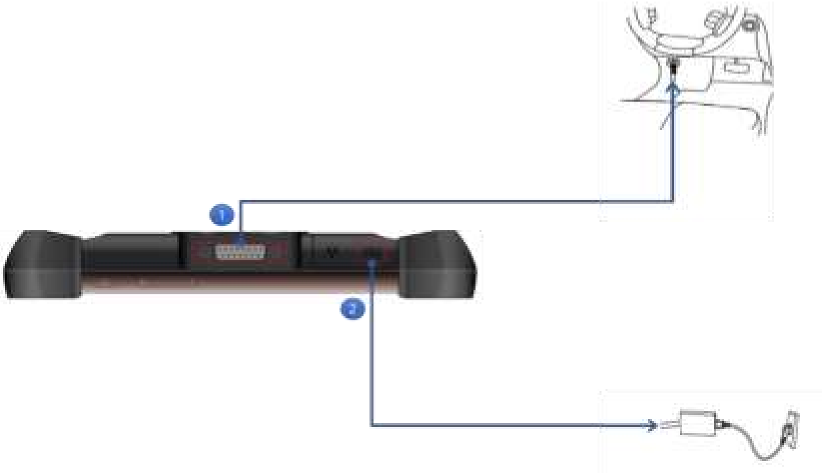
Touching the top area will extend drop-down menu and a quick setting menu appears like below.

You can quickly change the basic Android configuration setting such as WiFi, Bluetooth, Do Not Disturb, Flashlight, Auto-rotation, Battery Saver, Airplane Mode, Cast without having to select the “Setting” menu.


9:04
42%
Wi-Fi
Bluetooth
Do not disturb
Flashlight
Auto-rotate
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
RECORD
GALLERY
UPDATE
FEEDBACK
REPORT
J2534

2.6. Power Supply to Z5

Power supply to Z5 is available from 2 different sources.



① Diagnostic connector

1. Extend the Z5 main cable to the vehicle side diagnostic socket. Attach the paring OBD non-standard connector if necessary.
2. Turn the ignition key to ACC or ON position, and power is supplied to Z5.
   The power is supplied through the diagnostic socket even when the IG key is turned OFF. However, please note that the IG key must be turned ON for diagnostic communication.
3. By the industrial standard, all OBD-2 / EOBD compliant vehicles are designed to supply power through the diagnostic adapter.
4. According to SAE and ISO standards, the vehicle side DLC socket is recommended to be placed within 1 meter from the driver's seat.
   It is generally found under the dashboard. However, be reminded that there are exceptions.

② AC outlet (through AC/DC adapter

1. Connect the DC jack of the AC/DC adapter to Z5's DC input jack.
2. Extend the AC plug of the AC/DC adapter to the AC outlet.

⚠ **Cautions**

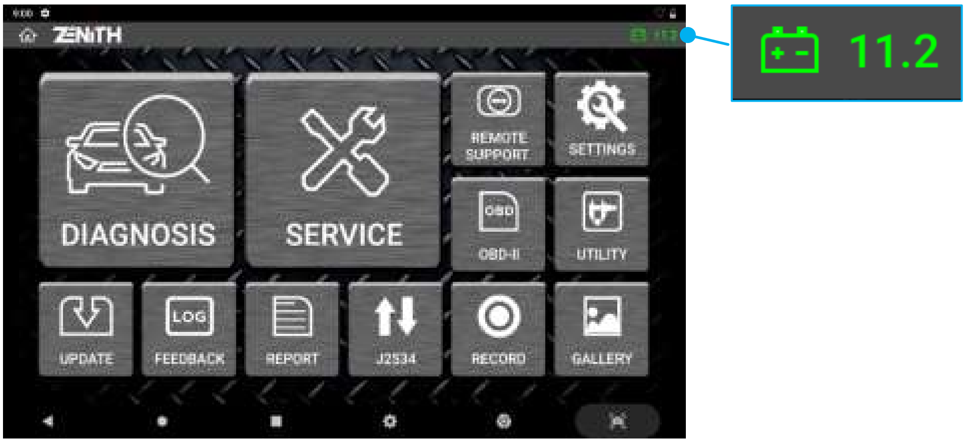
Make sure to use the AC/DC adapter that is supplied with Z5. Damage caused from use of unapproved AC/DC adapter is not subject to warranty.

2.7. Rechargeable Battery

Z5 is fitted with the Li-ion rechargeable battery pack as the basic supply, and it enables the device to run normally when the external power supply is lost.

● Vehicle Battery Voltage Indication

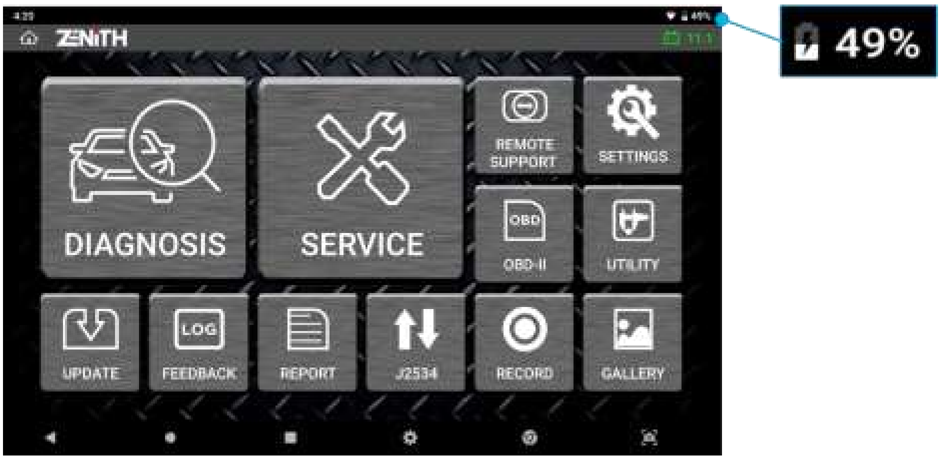
However, the device is not designed to be run on battery without external power supply for an extended time and drawing power from the car through the diagnostic adapter is always recommended for diagnostic communication stability.


ZENiTH
11.2
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD
OBD-II
UTILITY
UPDATE
LOG
FEEDBACK
REPORT
J2534
RECORD
GALLERY

● Rechargeable Battery Level Indication

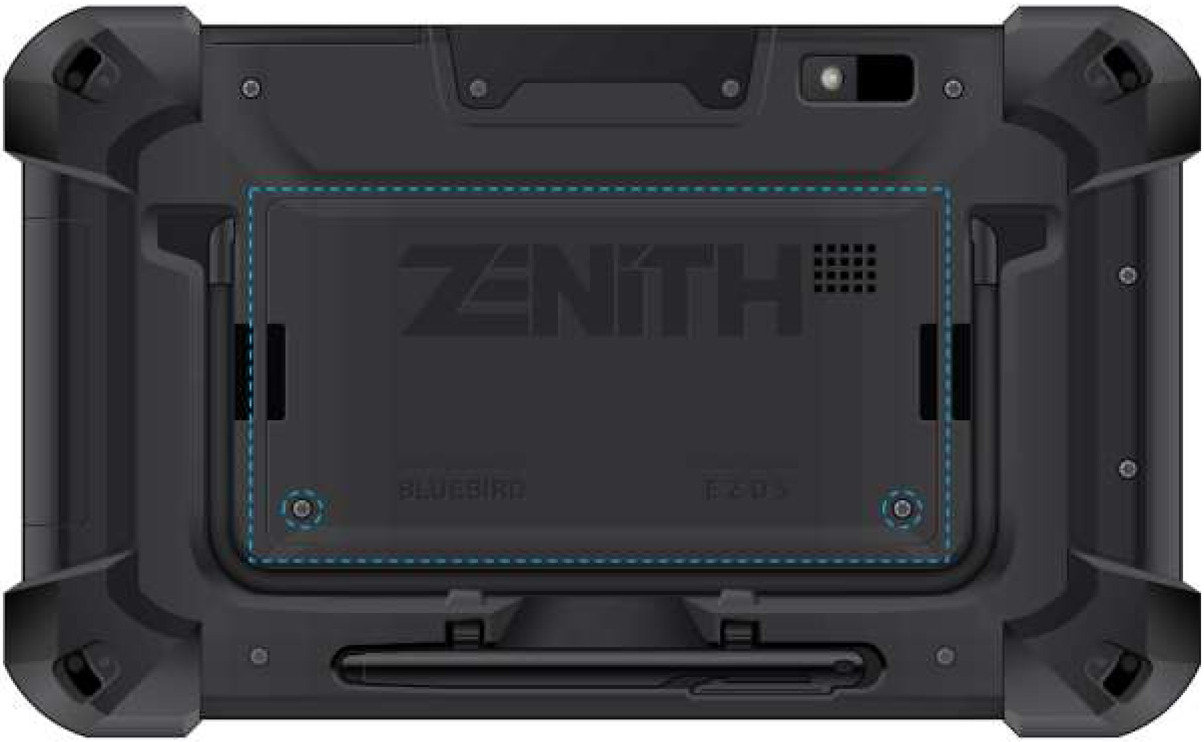
Please make sure that the rechargeable battery is charged enough, and the battery level does not drop below 20% level when operating the device without external power supply. The battery level is indicated in the top right corner of the screen.

- ➢ When the battery is low, Z5 will sound a warning and display a low power message.
- ➢ When the battery is charging, the charging LED will illuminate in red.
- ➢ When the battery is not charging properly, the charging LED will flash.
- ➢ When the battery is fully charged, the charging LED will turn to green


ZENiTH
49%
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD
OBD-II
UTILITY
UPDATE
LOG
FEEDBACK
REPORT
J2534
RECORD
GALLERY

- **Rechargeable Battery Replacement**

A rechargeable battery is an expendable supply of which performance deteriorates over the repeated recharging cycles, and the replacement of the battery is recommended when the lowered charging performance is experienced or any distortion such as swelling is witnessed. Unfasten the 2 screws to open the rear battery cover and lift the battery to remove. Insert the new battery in place, close the cover and fasten the screws.



2.8. Connecting to Vehicle

- ### Connecting the main DLC cable to the base unit

Connect the DLC main cable to the Z5 D-sub connector and secure the connection by fastening the 2 main screws. Do not apply excessive force when fastening the screws.

- ### Connecting to the Vehicle

Extend the DLC main cable connected to the Z5 to the vehicle side DLC socket. Different types of non-standard diagnostic adapter may be used for the pre-OBD2 models or the commercial vehicles. If the vehicle is not OBD2 / EOBD compliant, identify and attach the matching adapter, then connect it to the vehicle side socket.

The diagnostic adapters are designed to fit in the vehicle side diagnostic ports, therefore the diagnostic adapters supplied with the different scan tools may look alike or similar. However, internal wiring and circuits can be different, therefore not compatible each other. Please do not use the diagnostic adapters that are not supplied by EZDS specifically for use with Z5 and never attempt to connect the adapters supplied by a third party.

⚠ Use of wrong adapters may result in communication failure, damage to the device as well as the vehicle control system, and EZDS are not liable for any damage and loss caused. Also, it constitutes warranty void conditions for Z5 base unit itself.

Chapter 3. How to activate Zenith Z5

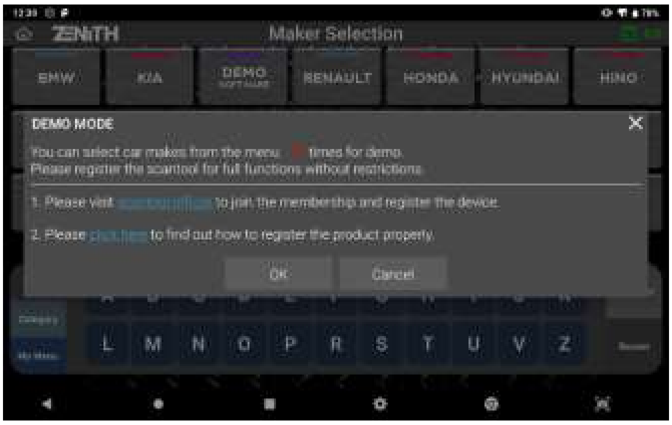
3-1. Inactivated when delivered

● Product Registration

A brand new Zenith Z5 will have the software installed when delievered. However, to activate the software properly, user needs to create an account at EZDS website and complete product registration.

A. Demo Mode

In the main screen of the Z5 software, pressing [Diagnosi] menu will display supported carlines. If your Z5 is not registered under your account at EZDS website, Z5 will operate in Demo mode and it will allow you to choose the carline for 30 attempts only. Remaining attempts will be displayed in the popup message as shown below.


ZENiTH
Maker Selection
BMW
KIA
DEMO
RENAULT
HONDA
HYUNDAI
HINO
OK
Cancel
L
M
N
O
P
R
S
T
U
V
Z

DEMO MODE

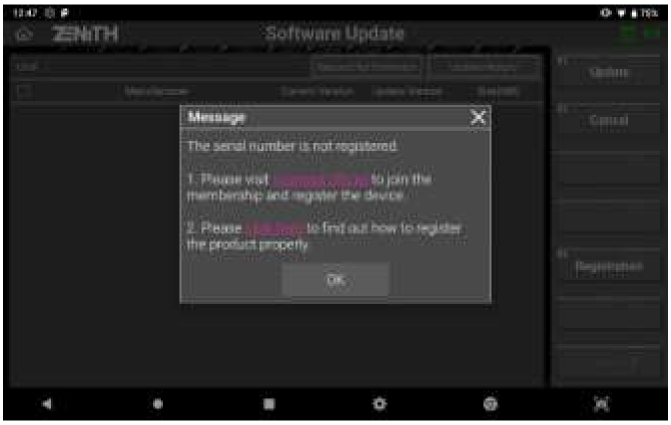
You can select car makes from the menu [illegible] times for demo.
Please register the scantool for full functions without restrictions.

1. Please visit [illegible] to join the membership and register the device.

2. Please [illegible] to find out how to register the product properly.

B. Software Update

If your Z5 is not registered under your account at EZDS website, software update is prohibited. You will be guided to visit EZDS website.


ZENiTH
Software Update
Update
Cancel
Registration
OK

Message

The serial number is not registered.

1. Please visit [illegible] to join the membership and register the device.

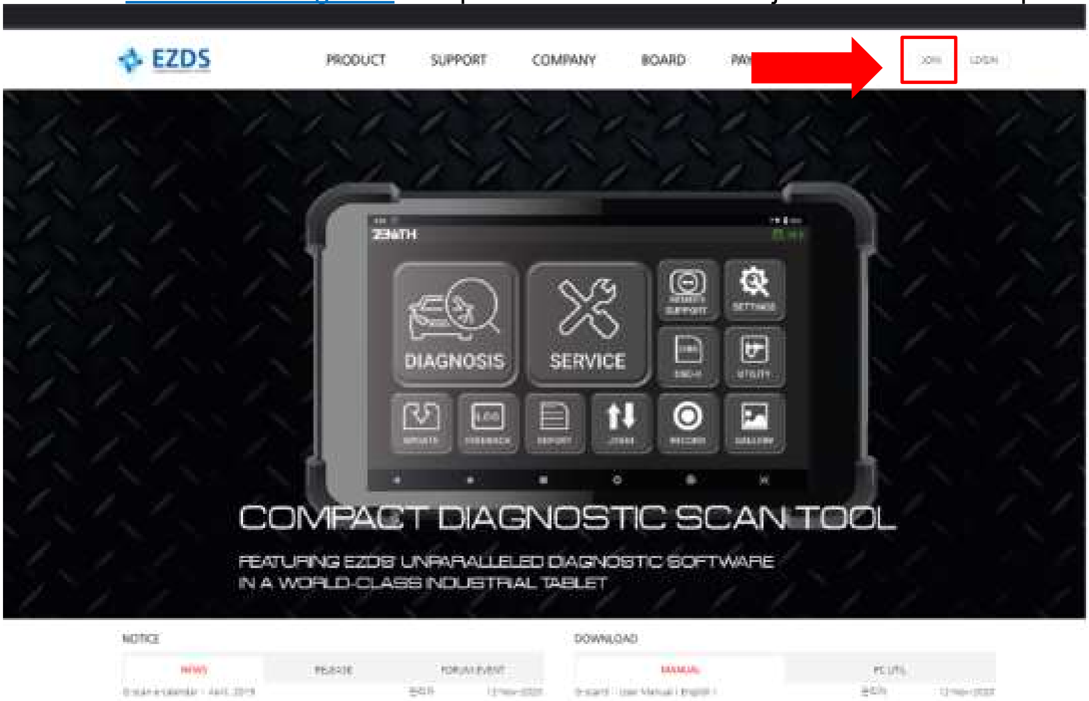
2. Please [illegible] to find out how to register the product properly.

3-2. Device Registration

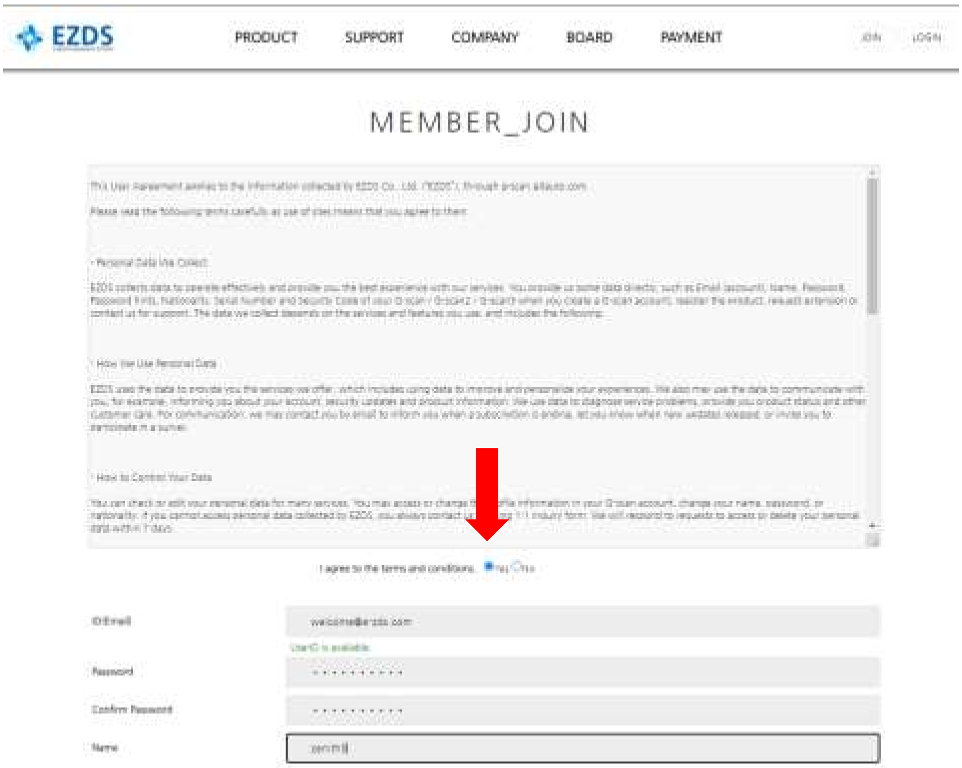
Step 1. Membership Enrollment at EZDS.com

Visit EZDS website and create user account.

A. Go to www.zenithdiag.com and press the Join button to join the membership.


EZDS
PRODUCT
SUPPORT
COMPANY
BOARD
JOIN
LOGIN
DIAGNOSIS
SERVICE
COMPACT DIAGNOSTIC SCAN TOOL
FEATURING EZDS' UNPARALLELED DIAGNOSTIC SOFTWARE
IN A WORLD-CLASS INDUSTRIAL TABLET
NOTICE
DOWNLOAD

B. Read the Terms of service carefully and if you agree, click the check box and fill in the blanks.


EZDS
PRODUCT
SUPPORT
COMPANY
BOARD
PAYMENT
JOIN
LOGIN

MEMBER_JOIN

I agree to the terms and conditions. ● Yes ○ No

ID(Email) welcome@ezds.com

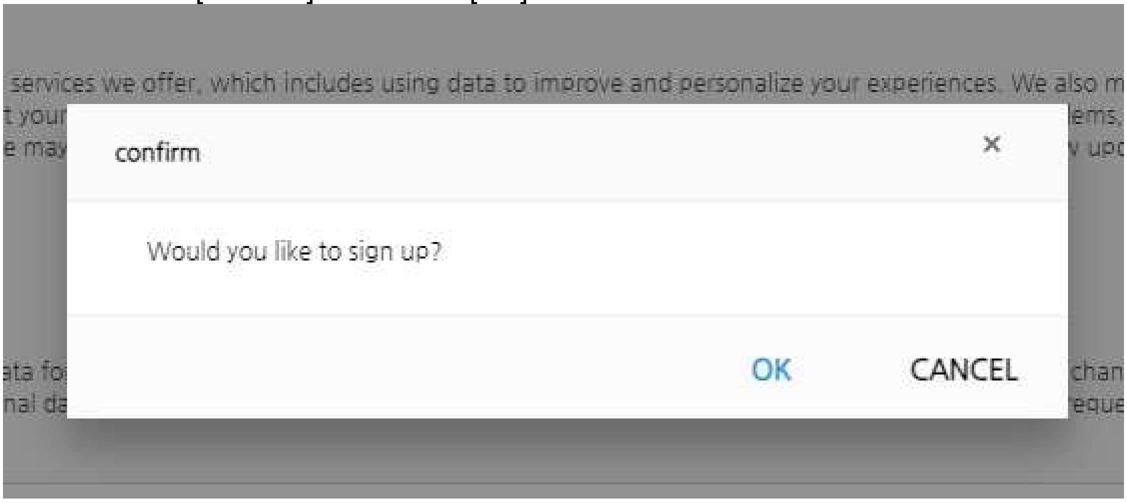
UserID is available.

Password ··········

Confirm Password ··········

Name zenith

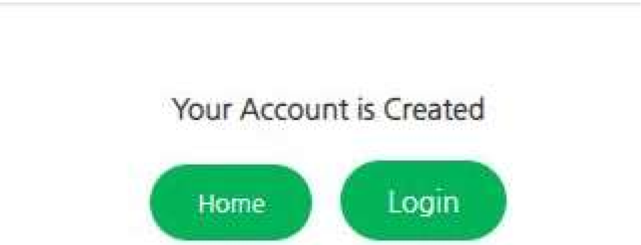
C. Press the [Confirm] button and [OK] button.



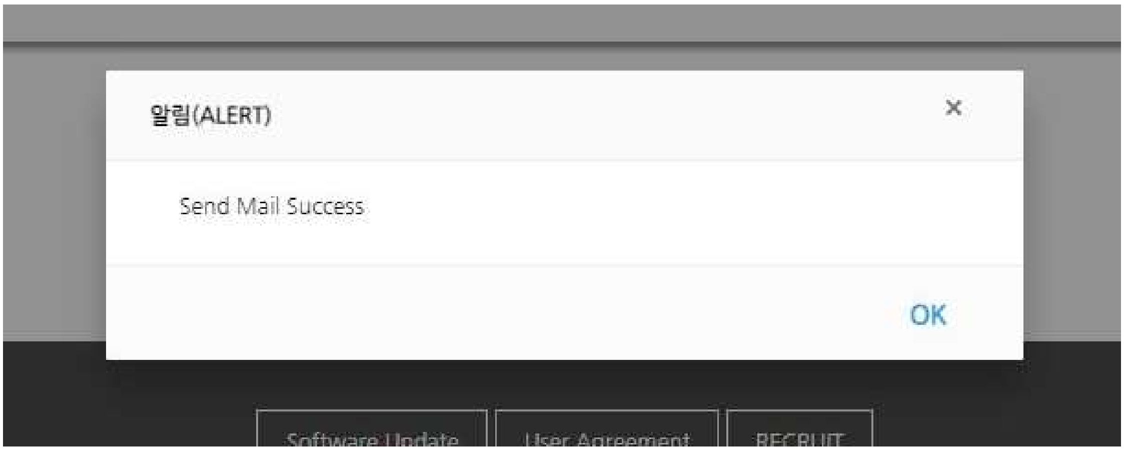
confirm

Would you like to sign up?

D. Your account is created. Verification email will be sent to your email address. Please follow the next verification procedure.



Your Account is Created



알림(ALERT)

Send Mail Success

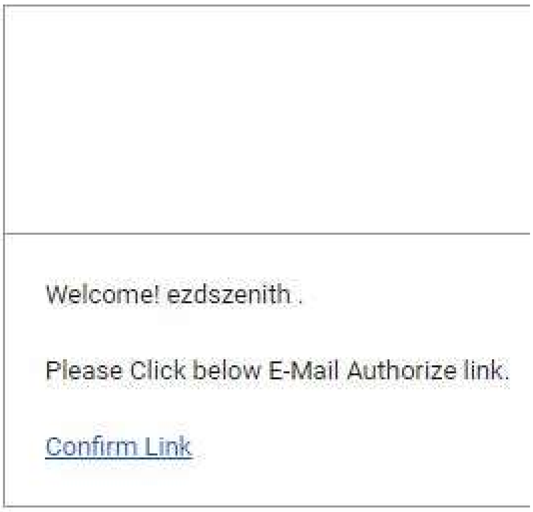
Step 2. E-Mail Verification

A. The email address that you enter when joining the membership is **very important** because it is the **only channel** for bi-directional communication between the customer and the supplier, therefore it needs to be verified to make sure that it is valid and working email.

A verification email will be automatically sent to the address that you entered when you create the account succesfully.

- Please note that the delivery can be delayed due to technical reasons, server overload or traffic.
- In case you do not receive the verification email in your inbox, please check the spam or junk mail box as well because there is a possibility that your email server or email program may put the verification email there according to the security settings.
- Please use an alternative email address preferrably on a public domain if the verification email is not found even in the spam or junk mail box. An email can be filtered or blocked by the server and not delivered to the recipient at all in case of using corporate email account due to email security policy that are stricter than public or personal email services.

B. Go to your registered email and check email with the title ‘Welcome to join E-ZDS!’. Open the email and click the Confirm Link.

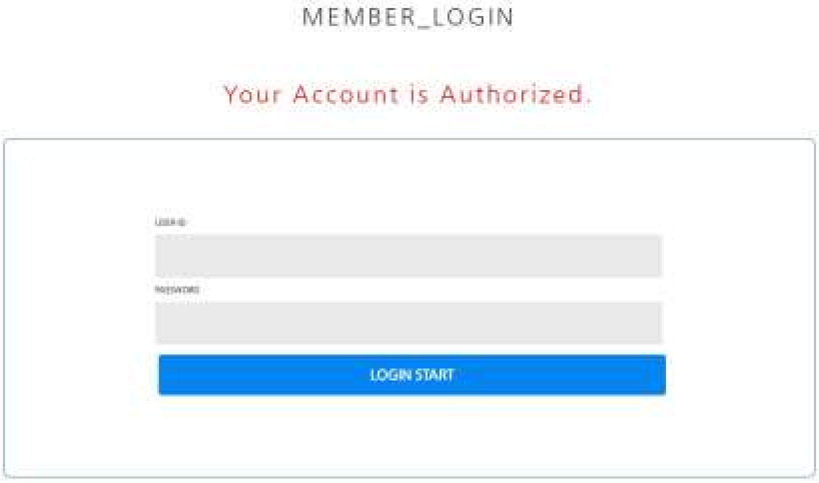


Welcome! ezdszenith .

Please Click below E-Mail Authorize link.

Confirm Link

C. Verification process is completed!



MEMBER_LOGIN

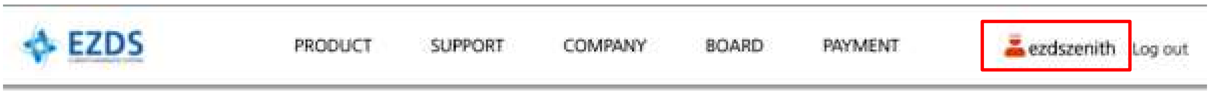
Your Account is Authorized.

USER ID
PASSWORD
LOGIN START

Step 3. Z5 Device Registration

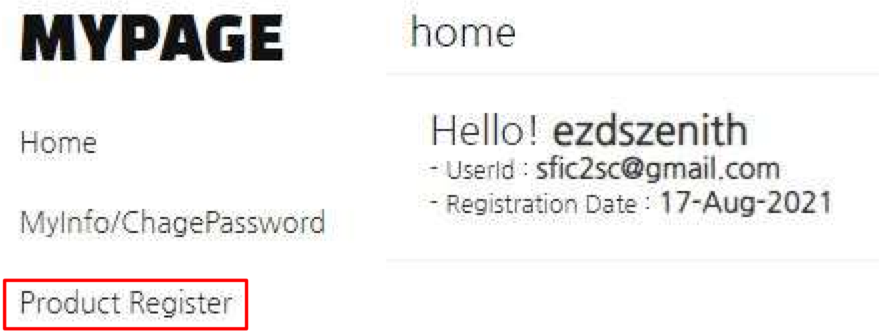
Device Registration is a process of matching a Z5 serial number with individual website member. When registration is completed, the Z5 will be combined with a specific website member ID on EZDS's database and the device will be finally activated for using full functionality of the device.

A. Login to your account and click your ID at the top menu.



EZDS
PRODUCT
SUPPORT
COMPANY
BOARD
PAYMENT
ezdszenith
Log out

B. Select [Product Register] as shown below. You will be required to enter Serial number and Security code of your Z5.



MYPAGE

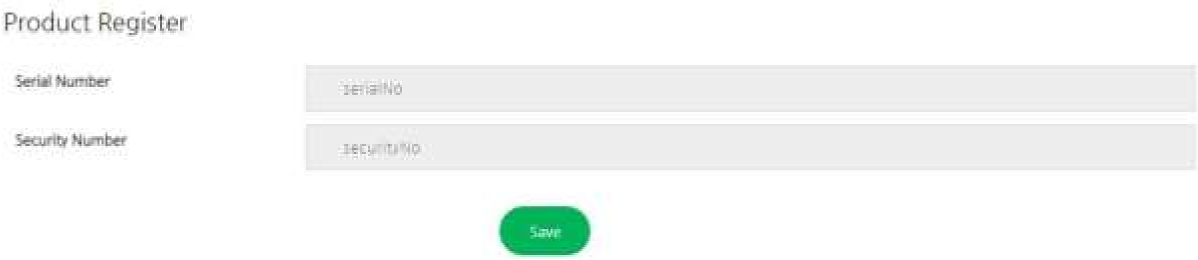
home

Home

MyInfo/ChagePassword

Product Register

Hello! ezdszenith
- UserId : sfic2sc@gmail.com
- Registration Date : 17-Aug-2021

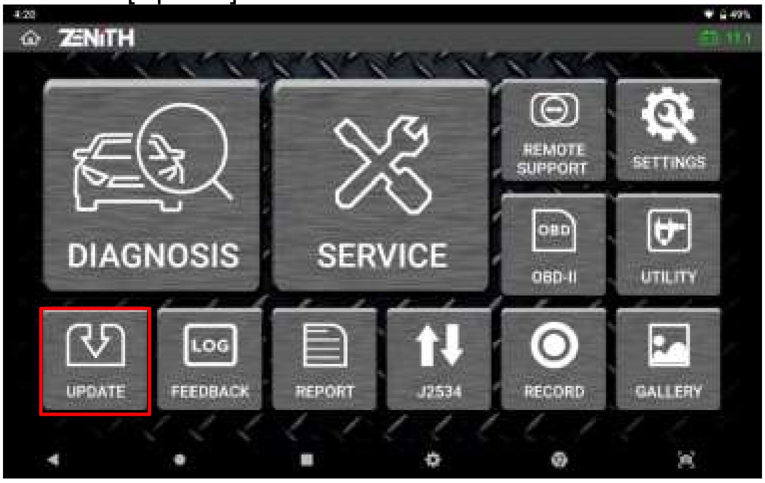


Product Register

Serial Number: serialNo

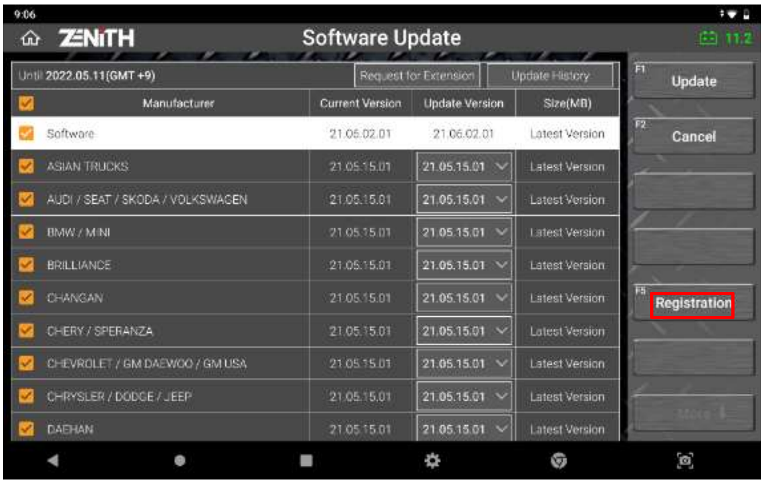
Security Number: securityNo

C. Go to your Z5 and hit [Update] menu from the main screen.



ZENiTH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY

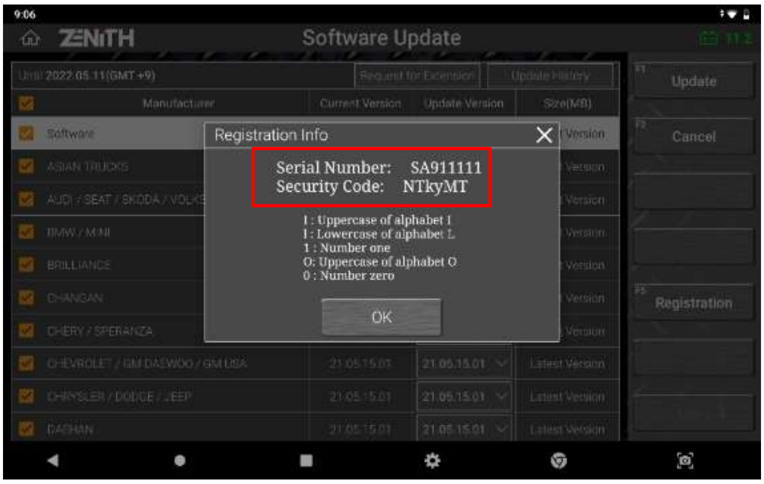
- Press [Registration] button.


9:06
ZENiTH
Software Update
11.2
Request for Extension
Update History
F1 Update
F2 Cancel
F5 Registration
More

Until 2022.05.11(GMT +9)

☑	Manufacturer	Current Version	Update Version	Size(MB)
☑	Software	21.06.02.01	21.06.02.01	Latest Version
☑	ASIAN TRUCKS	21.05.15.01	21.05.15.01	Latest Version
☑	AUDI / SEAT / SKODA / VOLKSWAGEN	21.05.15.01	21.05.15.01	Latest Version
☑	BMW / MINI	21.05.15.01	21.05.15.01	Latest Version
☑	BRILLIANCE	21.05.15.01	21.05.15.01	Latest Version
☑	CHANGAN	21.05.15.01	21.05.15.01	Latest Version
☑	CHERY / SPERANZA	21.05.15.01	21.05.15.01	Latest Version
☑	CHEVROLET / GM DAEWOO / GM USA	21.05.15.01	21.05.15.01	Latest Version
☑	CHRYSLER / DODGE / JEEP	21.05.15.01	21.05.15.01	Latest Version
☑	DAEHAN	21.05.15.01	21.05.15.01	Latest Version

- Copy the Serial number and the Security code written on the popup screen.


9:06
ZENiTH
Software Update
Registration Info
OK
F1 Update
F2 Cancel
F5 Registration

Serial Number: SA911111
Security Code: NTkyMT

I : Uppercase of alphabet I
l : Lowercase of alphabet L
1 : Number one
O: Uppercase of alphabet O
0 : Number zero

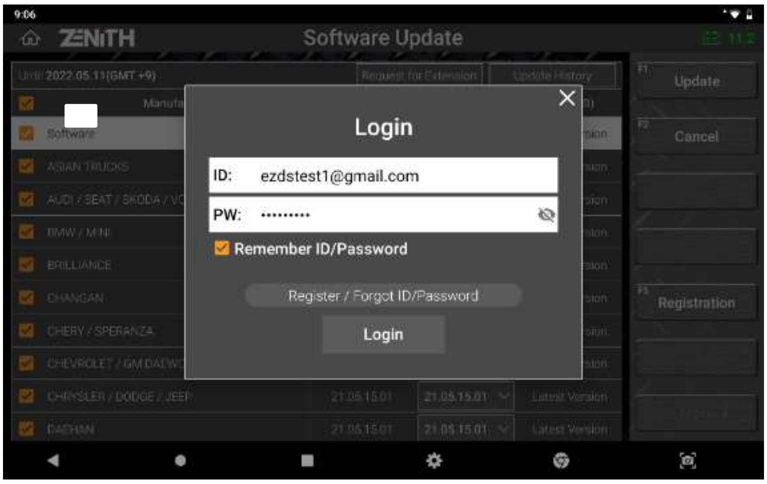
D. Go back to the registration page and enter the Serial number and the Security code. Make sure to enter correctly as the security code is case sensitive. When you are ready, hit the [Save] button.

E. Membership Database Refreshment

When registration at the website is completed, the membership database needs to be refreshed. It generally takes 10 ~ 20 minutes, then you can download the latest version software from the server.

F. Log-in for Software Update

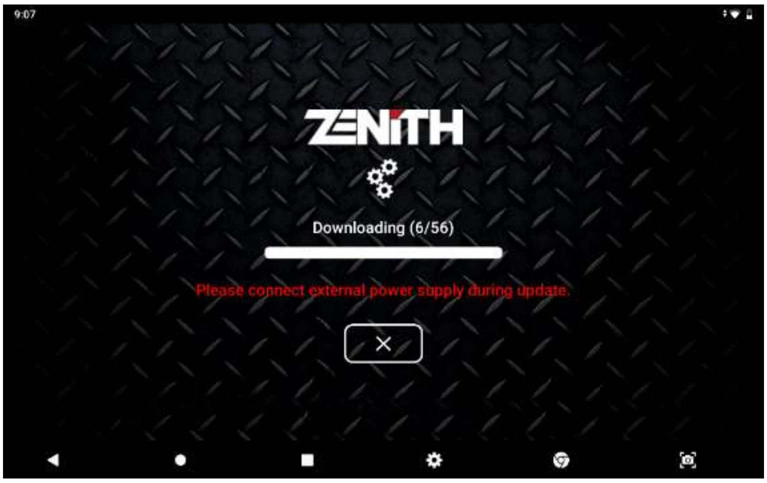
From now on, you need to login to your account when updating software. You may save the ID&PW for future update.


9:06
Software Update
Until 2022.05.11(GMT +9)
Request for Extension
Update History
Update
Cancel
Registration
Login
Register / Forgot ID/Password
Login

ID: ezdstest1@gmail.com

PW: •••••••••

☑ Remember ID/Password



Downloading (6/56)

Please connect external power supply during update.

Chapter 4. Z5 Basic Operation

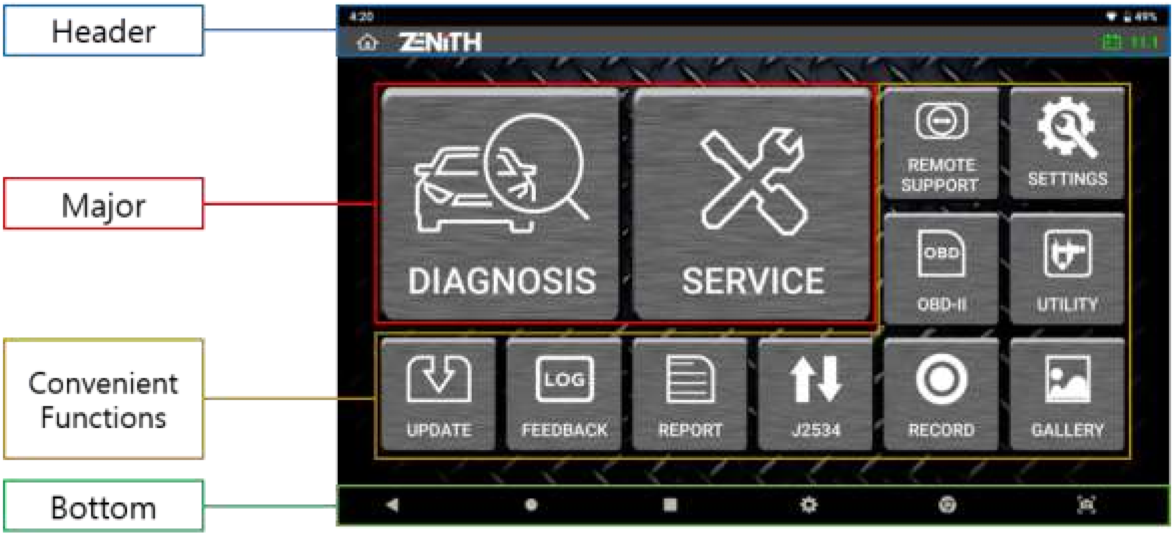
4.1. Main Menu and System Tools

Please be advised that the user interface including graphical output and menu structure can be changed and updated without notice for the improvement of product performance and usability.

The main menu as shown below appears when Z5 is turned on or when Zenith Application is selected among the applications list.

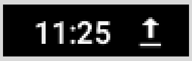
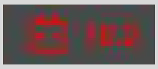
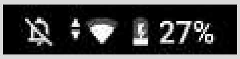
- **Main menu**

The main menu of Zenith Z5 is consisted of 4 sections (header, major functions ,convenient functions, bottom menu).

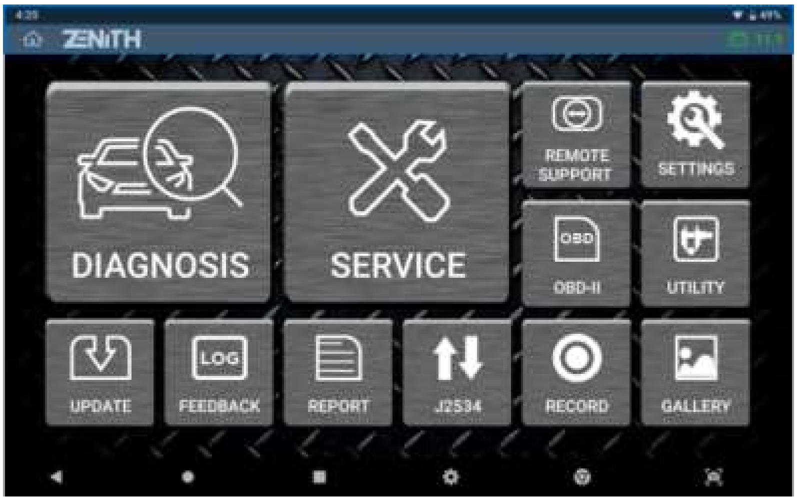

Header
Major
Convenient Functions
Bottom
ZENITH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY

- **Header**

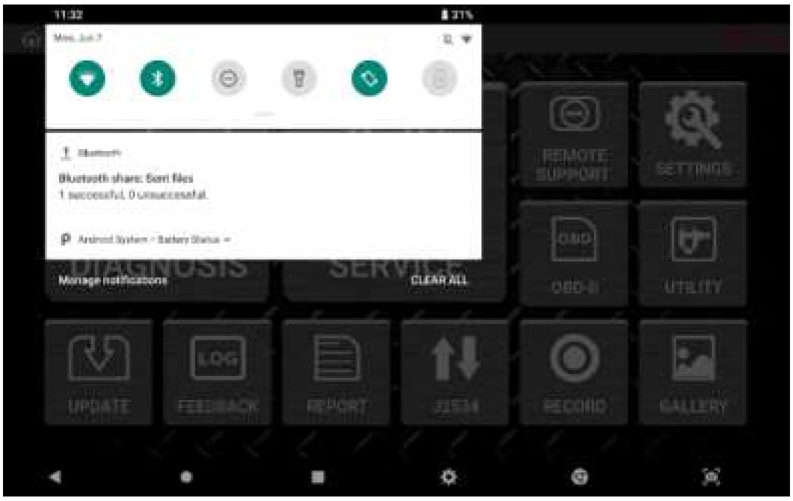
The header shows different Z5 system status indicators.

	System Notifications	In the left corner of the header, indicator symbols appear when Z5 system detects any changes or new development in the system status that need to be notified to the user.
	Vehicle Battery Status	In the right of the header, vehicle battery voltage is indicated when the power is supplied from the vehicle.
	System Status	In the right corner of the header, Z5 system status including Wi-Fi or Bluetooth connection, battery charging status.

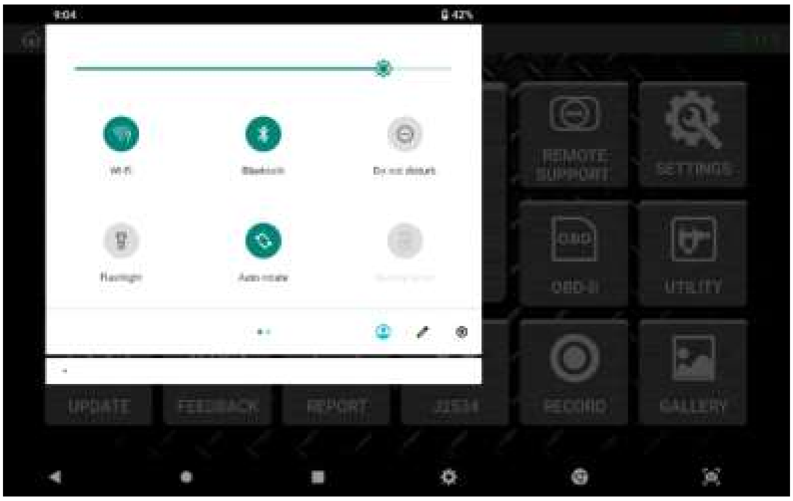
Double tab on the [Header] area in the top of the screen with a finger or tab on the area and swipe down, then the details of the system notifications are displayed.


ZENiTH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD
OBD-II
UTILITY
UPDATE
LOG
FEEDBACK
REPORT
J2534
RECORD
GALLERY

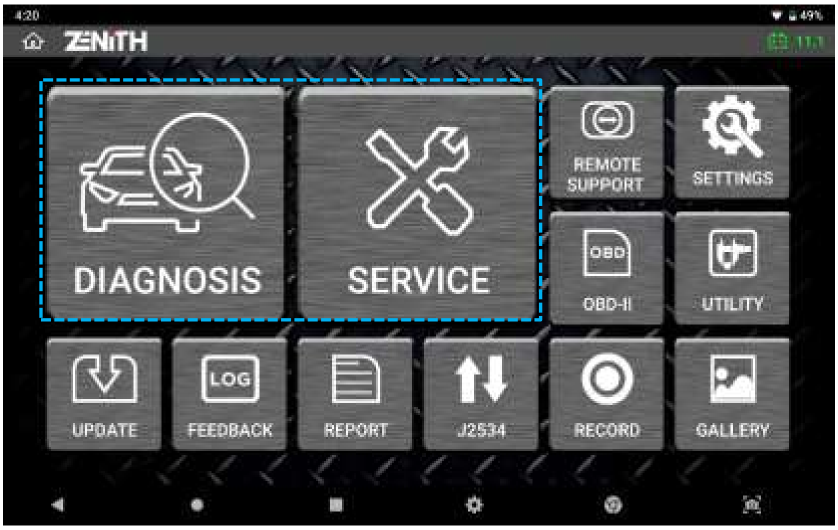
Tab on the top of the pop-up notifications with a finger, then a system configuration menu appears where you can check and make quick and simple changes to the basic system settings.


Bluetooth share: Sent files
1 successful, 0 unsuccessful.

11:32
Bluetooth
Android System · Battery Status
Manage notifications
CLEAR ALL


9:04
Wi-Fi
Bluetooth
Do not disturb
Flashlight
Auto-rotate

- **Major**

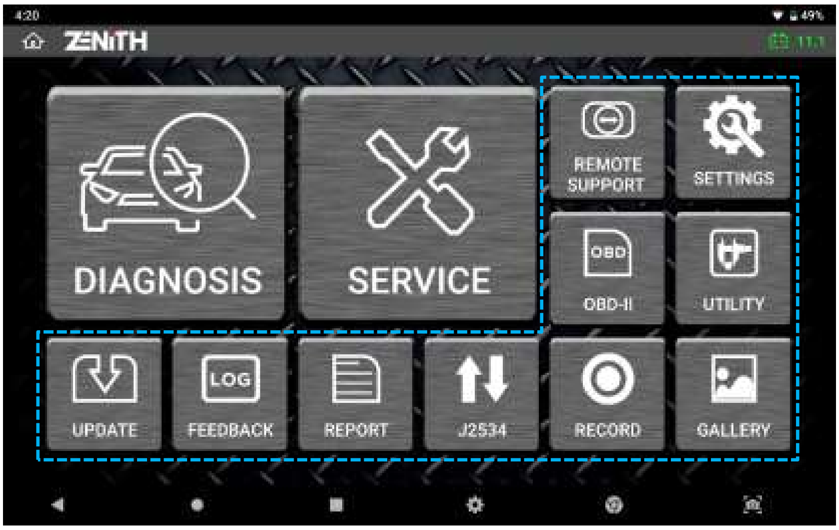

4:20
49%
ZENITH
11.1
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD
OBD-II
UTILITY
UPDATE
LOG
FEEDBACK
REPORT
J2534
RECORD
GALLERY

At the time of publishing this user manual, Z5 main function menu includes following 2 selections: Diagnosis, Service function.

Each of these main functions are explained more in detail in the separate chapters in this manual hereinafter.

Title	Description
DIAGNOSIS	Runs manufacturer specific diagnostic functions including DTC Analysis, Data Analysis, Actuation Test, ECU Info and various Special Functions for each car manufacturer.
SERVICE	Shortcut to the most frequently used functions in the shop such as ADAS, Brake Pad Replacement, Engine Oil Reset, Brake Air Bleeding, Battery Reset, Steering Angle Sensor Calibration.

- **Convenient Function**


4:20
49%
ZENITH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY

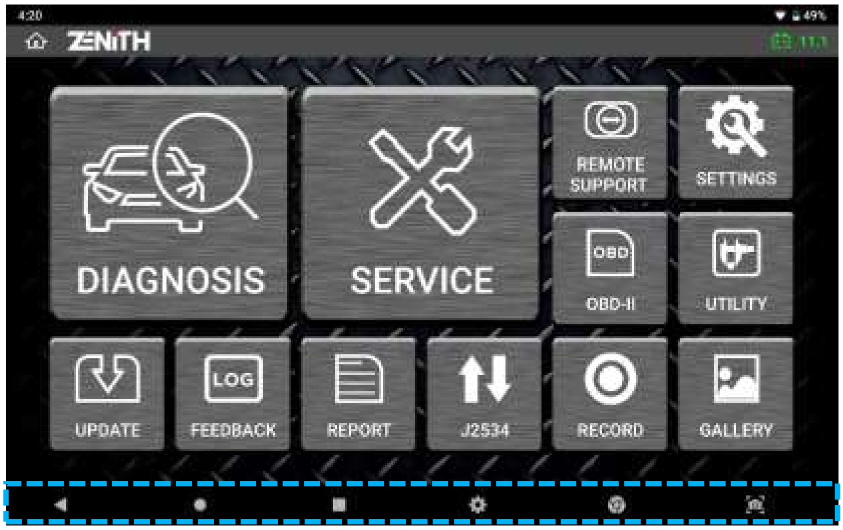
Convenient functions are listed in left side and bottom of the screen that can be directly selected from the main menu: Update, Feedback, Report, J2534, Record, Remote Support, Settings, Utility, Gallery. The details of these convenience functions are explained in the following chapters.

Title	Description
UTILITY	Calls the Z5's various utility programs such as "Vehicle Communication Line Check", "Unit Converter", "Calculator", "Special Function Calculator", etc.
SETTINGS	Opens the Settings menu where software version information check, language selection, Self-test and various user settings can be reviewed and changed
GALLERY	Opens saved screenshots, photos, and videos
REMOTE SUPPORT	Links to TeamViewer application allowing remote support for Z5
OBD-II	Performs Generic OBD2/EOBD diagnostic functions for the ISO9141-2, ISO14230 (KWP2000) and ISO15765-4 (CAN-Bus) compliant vehicles
RECORD	Retrieves data files recorded in the Z5 internal memory, including flight record data.

J2534	Turns Z5 into a J2534 Pass-thru device
REPORT	Retrieves the previously saved Pre and Post Repair Diagnostic Report that can be added to Z5 memory while performing Diagnosis function.
LOG FEEDBACK	Allows user to send or delete saved log data
UPDATE	Connects to the Z5 download server to check the availability of new diagnostic software and downloads the latest version software to Z5

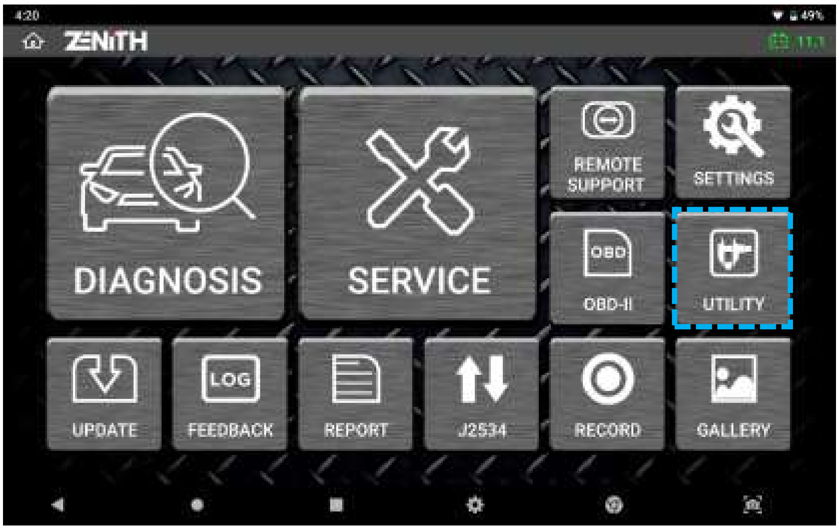
- **Bottom Menu**

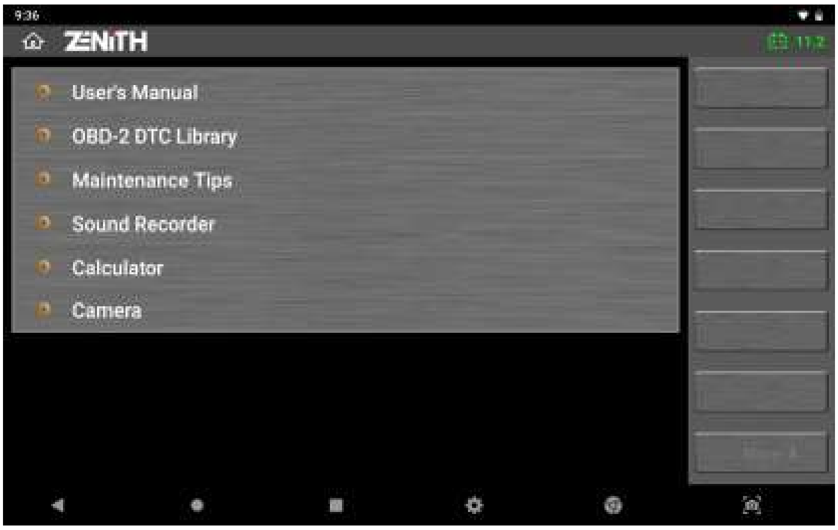
The menu on the left of the screen is a set of standard Android system functions, and the details are explained in the [Chapter 2.4. Android Operating System]. Please refer to the [Chapter 2. Getting Started with Z5] section.


4:20
49%
ZENITH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD
OBD-II
UTILITY
UPDATE
LOG
FEEDBACK
REPORT
J2534
RECORD
GALLERY

4.2 Utility

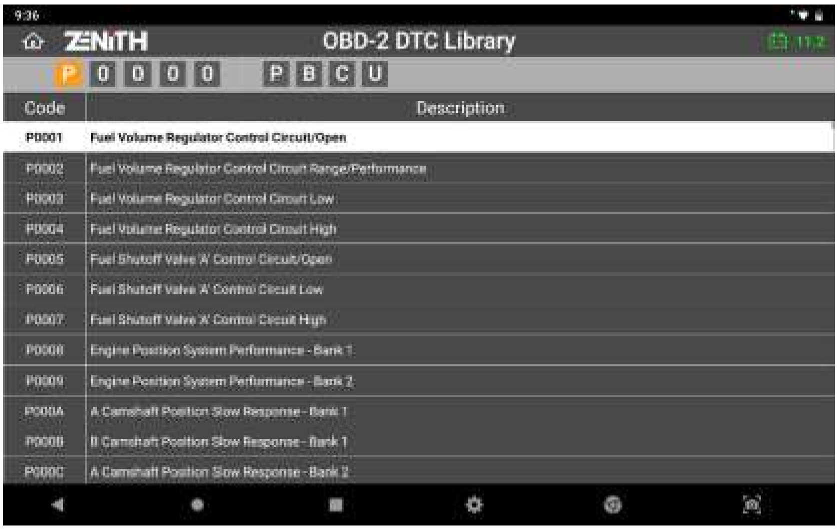
User’s manual, OBD-2 DTC Library, Maintenance tip, Sound Recorder, Calculator, Camera features are available in the Utility menu.


4:20
49%
ZENITH
11.1
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD
OBD-II
UTILITY
UPDATE
LOG
FEEDBACK
REPORT
J2534
RECORD
GALLERY


9:36
ZENITH
11.2
User's Manual
OBD-2 DTC Library
Maintenance Tips
Sound Recorder
Calculator
Camera

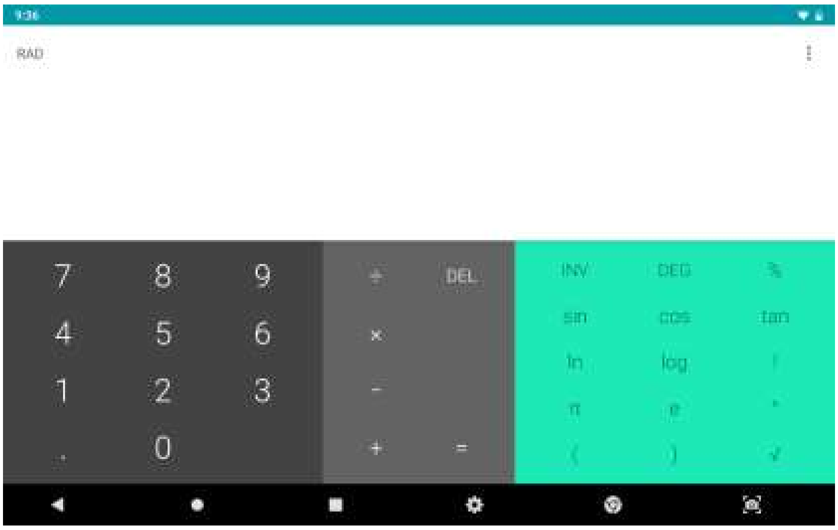
- **User’s Manual**
  Z5’s complete user’s manual and quick manual is available in PDF format.

- **OBD-II DTC library**
  Enables search of OBD-II generic fault codes for code definition.



Code	Description
P0001	Fuel Volume Regulator Control Circuit/Open
P0002	Fuel Volume Regulator Control Circuit Range/Performance
P0003	Fuel Volume Regulator Control Circuit Low
P0004	Fuel Volume Regulator Control Circuit High
P0005	Fuel Shutoff Valve 'A' Control Circuit/Open
P0006	Fuel Shutoff Valve 'A' Control Circuit Low
P0007	Fuel Shutoff Valve 'A' Control Circuit High
P0008	Engine Position System Performance - Bank 1
P0009	Engine Position System Performance - Bank 2
P000A	A Camshaft Position Slow Response - Bank 1
P000B	B Camshaft Position Slow Response - Bank 1
P000C	A Camshaft Position Slow Response - Bank 2

- **Calculator**
  A utility function that works like a technical calculator.



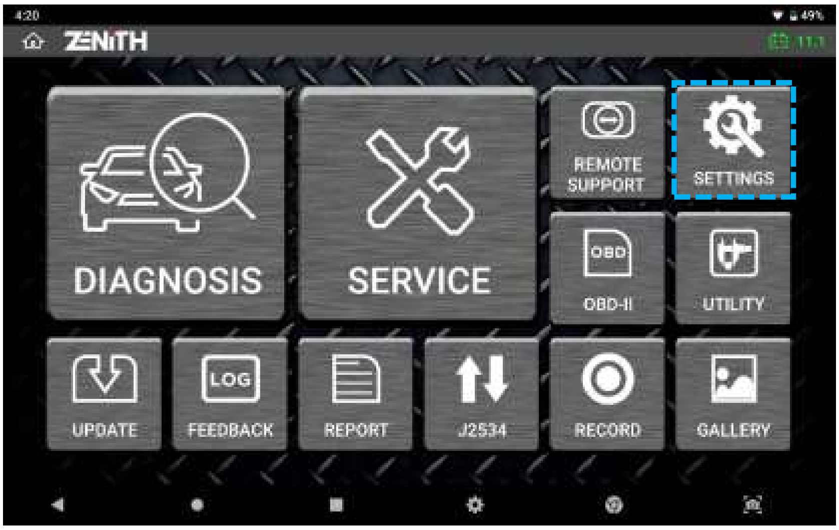
- **Sound Recorder**
  Enables voice recording through the Z5 embedded microphone.

Button shape	Description
●	Starts sound recording from standby mode.
■	Exits and saves sound being recorded.
☰	Displays the list of recorded files.

- **Camera**
  This enables taking the photographs using the embedded camera of Z5

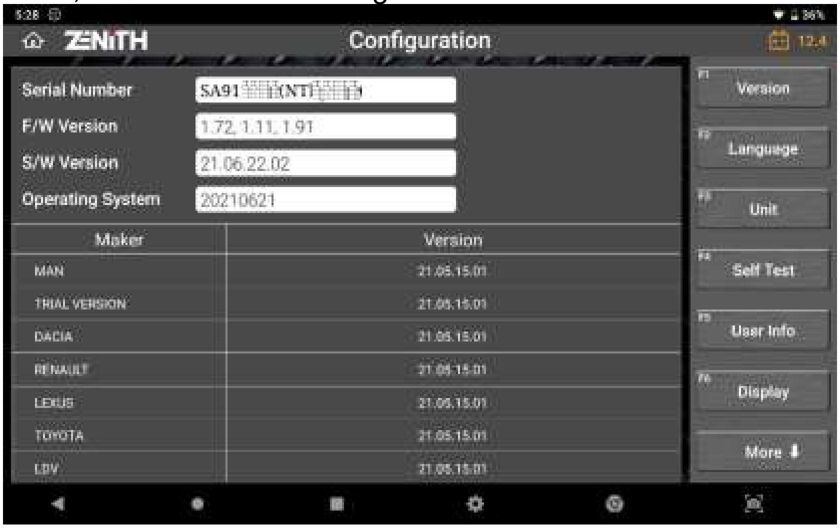
4.3 Settings

In the [SETTINGS] menu, you can check the Software Version and Open Source License, choose the Language of the Z5 software, and change the settings in measurement unit, and display mode.


4:20
49%
ZENITH
11.1
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY

- **Software version**

  Check the serial number (security code), firmware & software version, operating system version, and each carline's diagnostic software version installed in Z5.

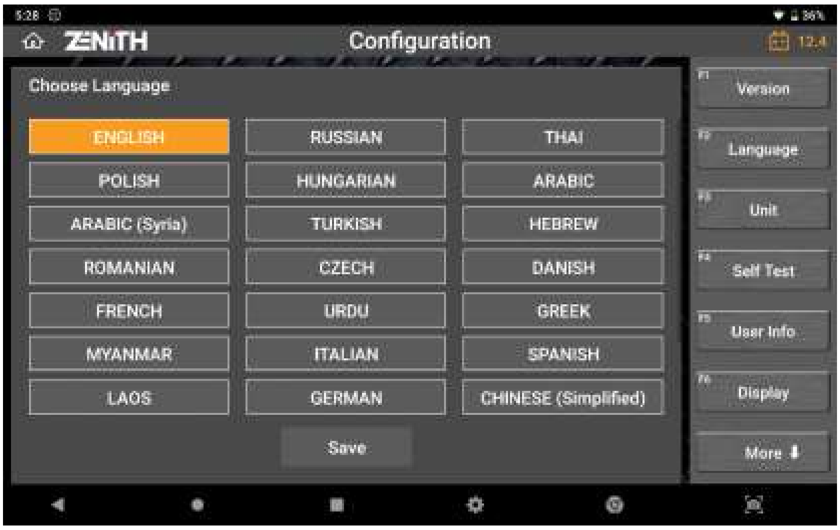

5:28
36%
ZENITH
Configuration
12.4
F1 Version
F2 Language
F3 Unit
F4 Self Test
F5 User Info
F6 Display
More

Serial Number: SA91[illegible](NT[illegible]
F/W Version: 1.72, 1.11, 1.91
S/W Version: 21.06.22.02
Operating System: 20210621

Maker	Version
MAN	21.05.15.01
TRIAL VERSION	21.05.15.01
DACIA	21.05.15.01
RENAULT	21.05.15.01
LEXUS	21.05.15.01
TOYOTA	21.05.15.01
LDV	21.05.15.01

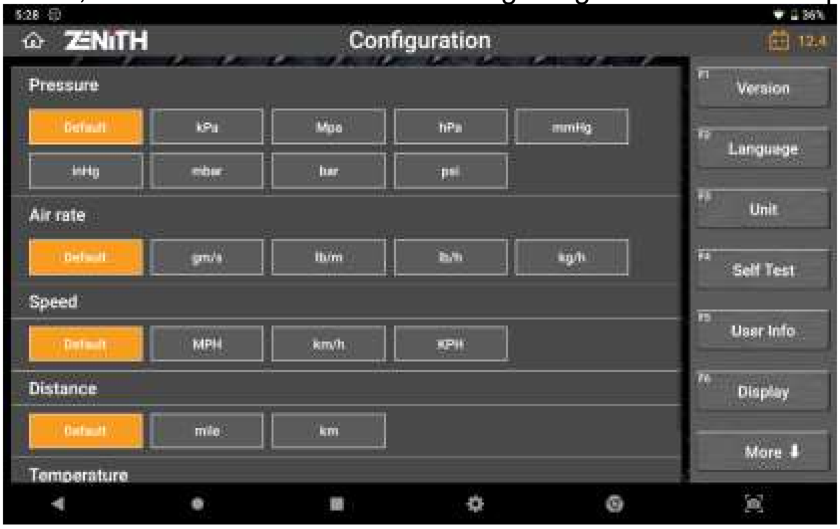
- **Language**

  Select the preferred language among the supported languages (if available). The languages are supported in different set by the regions. Generally English is the primary language with the different local languages supported as the secondary.


5:28
ZENITH
Configuration
12.4
Choose Language
ENGLISH
RUSSIAN
THAI
POLISH
HUNGARIAN
ARABIC
ARABIC (Syria)
TURKISH
HEBREW
ROMANIAN
CZECH
DANISH
FRENCH
URDU
GREEK
MYANMAR
ITALIAN
SPANISH
LAOS
GERMAN
CHINESE (Simplified)
Save
Version
Language
Unit
Self Test
User Info
Display
More

- **Unit**

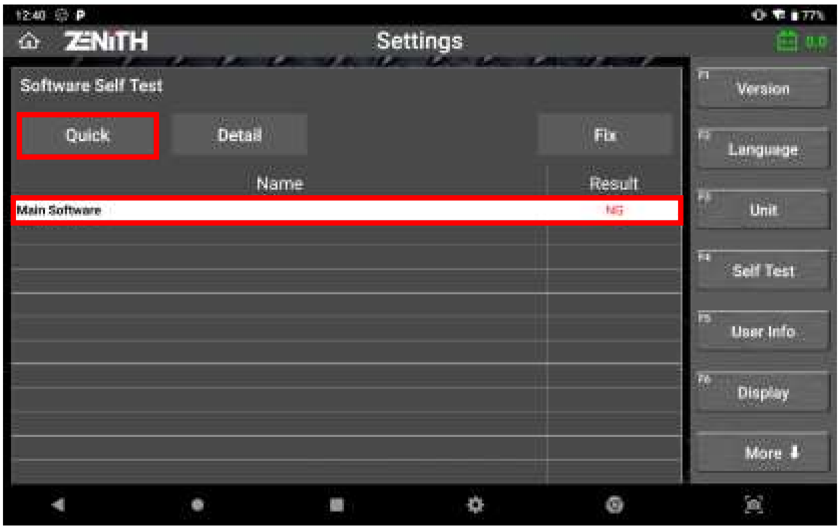
  Z5 shows the parameter values and the measuring units just as the vehicle's Electronic Control Unit is programmed. However, if the different measuring units are preferred, the units can be selected among the given variations as preferred.


5:28
ZENITH
Configuration
12.4
Pressure
Default
kPa
Mpa
hPa
mmHg
inHg
mbar
bar
psi
Air rate
Default
gm/s
lb/m
lb/h
kg/h
Speed
Default
MPH
km/h
KPH
Distance
Default
mile
km
Temperature
Version
Language
Unit
Self Test
User Info
Display
More

- **Self test (Software Self test)**

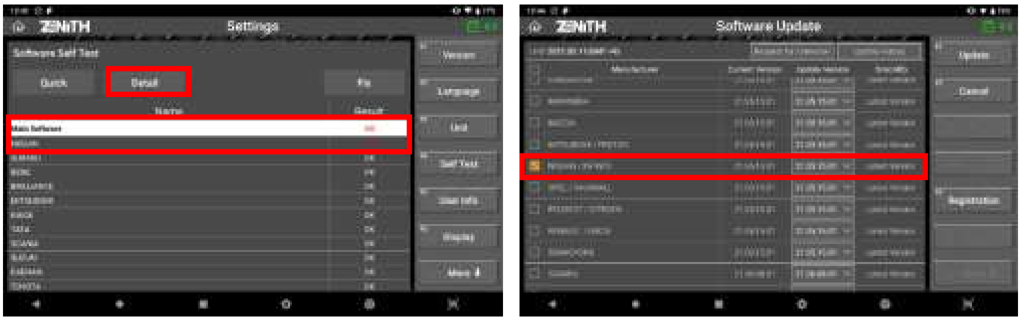
  In case the Z5 fails in performing the diagnostic functions properly, Software self-test verifies software integrity to make sure that there are no corrupted data in Z5 diagnostic applications.

  - **Quick:** Checks the Z5 main program


12:40
ZENiTH
Settings
Software Self Test
Quick
Detail
Fix
F1 Version
F2 Language
F3 Unit
F4 Self Test
F5 User Info
F6 Display
More

Name	Result
Main Software	NG

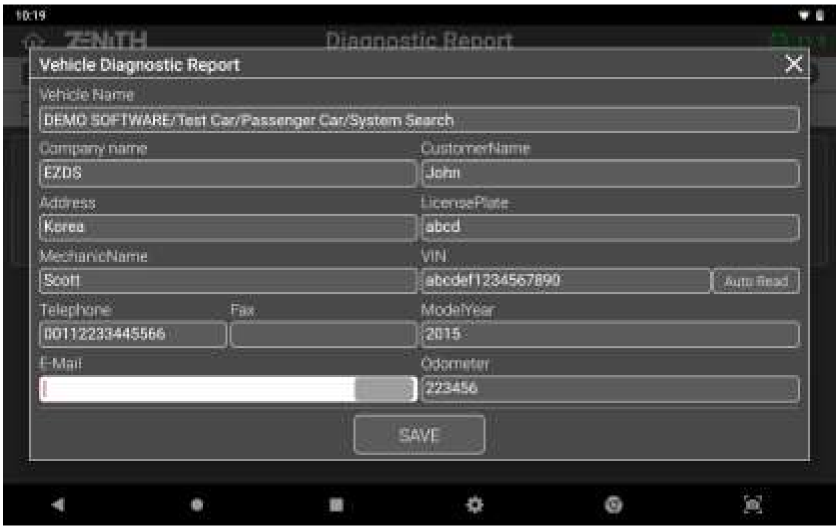
- **Detailed:** Checks software and database of Z5 for the individual automakers.


ZENiTH
Settings
Software Self Test
Quick
Detail
Fix
Name
Result
Main Software
Version
Language
Unit
Self Test
User Info
Display
More
ZENiTH
Software Update
Update
Cancel
Registration

If the test result shows NG (No Good), [Fix] button will be activated. Pressing the [Fix] button will direct to the software update screen for fresh download of the latest software.

- ## User Info

Type in your personal and workshop information and it will be used when printing the Pre-Post diagnostic report and other forms. Be advised that User Info is stored and used within the Z5 device only, and no personal information is transferred to the server.

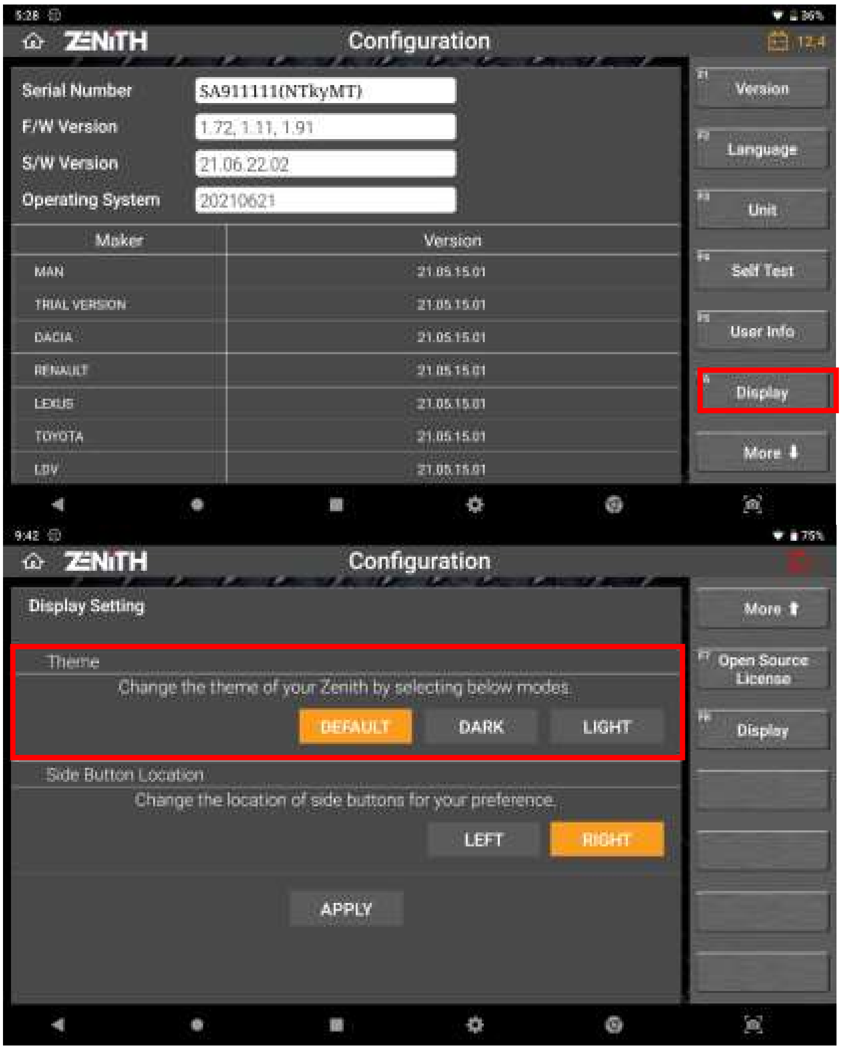

10:19
ZENiTH
Diagnostic Report
Auto Read
SAVE

Vehicle Diagnostic Report

Vehicle Name: DEMO SOFTWARE/Test Car/Passenger Car/System Search
Company name: EZDS
CustomerName: John
Address: Korea
LicensePlate: abcd
MechanicName: Scott
VIN: abcdef1234567890
Telephone: 00112233445566
Fax:
ModelYear: 2015
E-Mail:
Odometer: 223456

- ## Display

User can change the theme of the Z5 software and change the location of the side buttons.



Configuration
Version
Language
Unit
Self Test
User Info
Display
More
Open Source License

Serial Number: SA911111(NTkyMT)
F/W Version: 1.72, 1.11, 1.91
S/W Version: 21.06.22.02
Operating System: 20210621

Maker	Version
MAN	21.05.15.01
TRIAL VERSION	21.05.15.01
DACIA	21.05.15.01
RENAULT	21.05.15.01
LEXUS	21.05.15.01
TOYOTA	21.05.15.01
LDV	21.05.15.01

Display Setting

Theme
Change the theme of your Zenith by selecting below modes.
DEFAULT DARK LIGHT

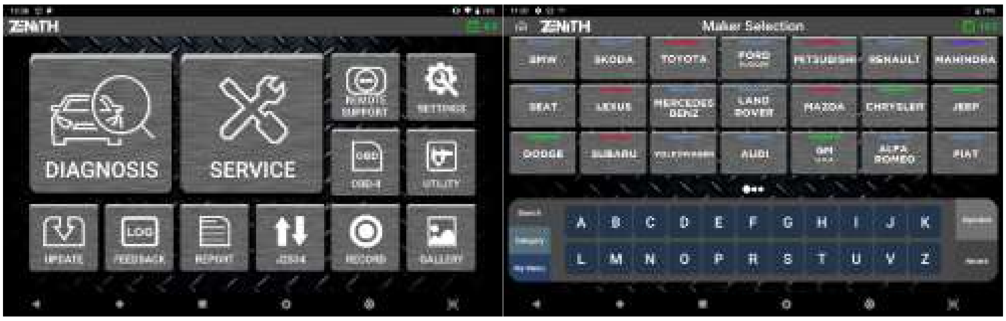
Side Button Location
Change the location of side buttons for your preference.
LEFT RIGHT

APPLY

A. Display Mode

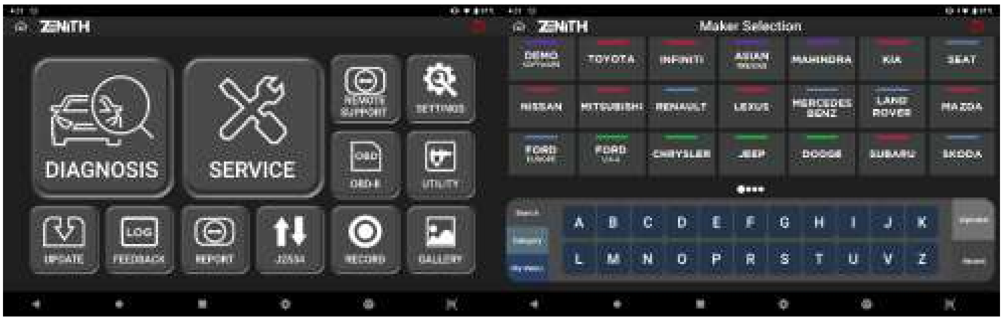
Z5 offers 3 different display modes: Default, Dark, and Light.

- Default Mode

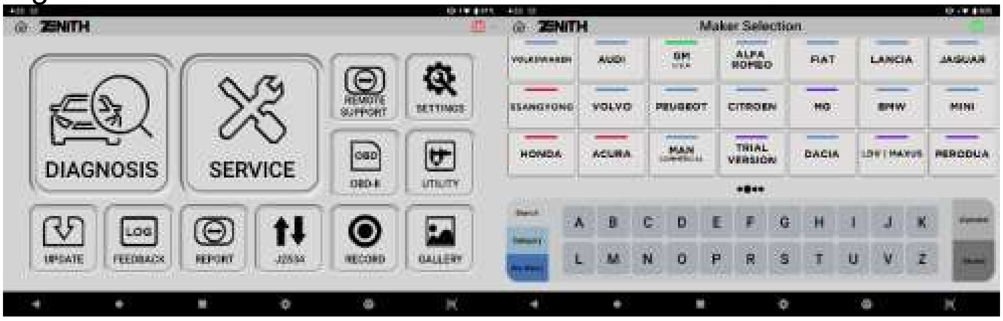


DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY
Maker Selection
BMW
SKODA
TOYOTA
FORD
MITSUBISHI
RENAULT
MAHINDRA
SEAT
LEXUS
MERCEDES BENZ
LAND ROVER
MAZDA
CHRYSLER
JEEP
DODGE
SUBARU
VOLKSWAGEN
AUDI
ALFA ROMEO
FIAT
A B C D E F G H I J K
L M N O P R S T U V Z

- Dark Mode

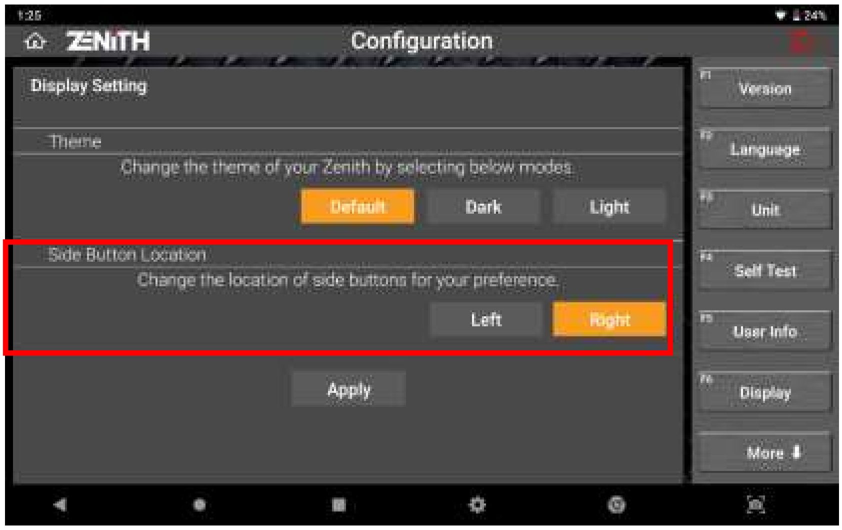

ZENiTH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY
Maker Selection
DEMO
TOYOTA
INFINITI
ASIAN
MAHINDRA
KIA
SEAT
NISSAN
MITSUBISHI
RENAULT
LEXUS
MERCEDES BENZ
LAND ROVER
MAZDA
FORD
FORD
CHRYSLER
JEEP
DODGE
SUBARU
SKODA
A B C D E F G H I J K
L M N O P R S T U V Z

- Light Mode


ZENiTH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY
Maker Selection
VOLKSWAGEN
AUDI
GM
ALFA ROMEO
FIAT
LANCIA
JAGUAR
SSANGYONG
VOLVO
PEUGEOT
CITROEN
MG
BMW
MINI
HONDA
ACURA
MAN
TRIAL VERSION
DACIA
LDV | MAXUS
PERODUA
A B C D E F G H I J K
L M N O P R S T U V Z

B. Side Button Location

Location of the side buttons can be changed per user preference.


1:25
24%
ZENiTH
Configuration
F1 Version
F2 Language
F3 Unit
F4 Self Test
F5 User Info
F6 Display
More

Display Setting

Theme

Change the theme of your Zenith by selecting below modes.

Default | Dark | Light

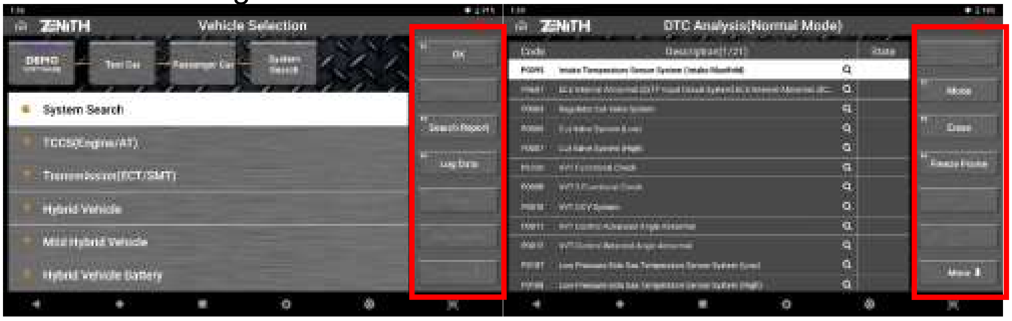
Side Button Location

Change the location of side buttons for your preference.

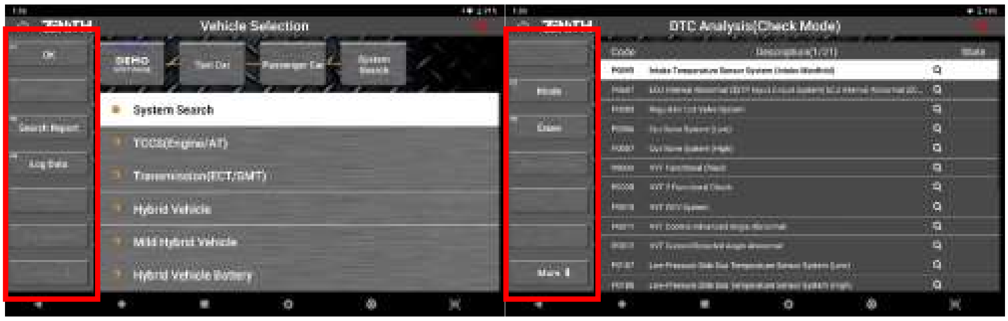
Left | Right

Apply

- Side Button - Right


ZENiTH
Vehicle Selection
DEMO
Test Car
Passenger Car
System Search
System Search
TCCS(Engine/AT)
Transmission(ECT/SMT)
Hybrid Vehicle
Mild Hybrid Vehicle
Hybrid Vehicle Battery
OK
Search Report
Log Data
ZENiTH
DTC Analysis(Normal Mode)
Code
Description(1/21)
State
Mode
Erase
Freeze Frame
More

- Side Button - Left

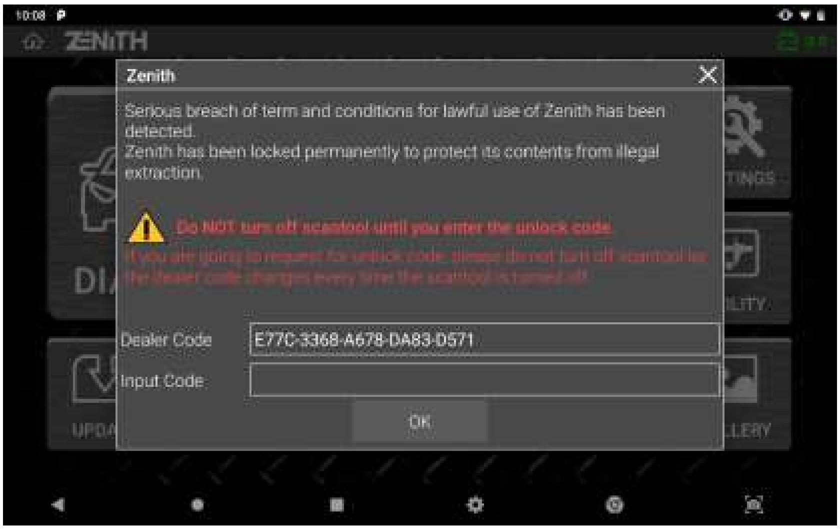

Vehicle Selection
OK
Search Report
Log Data
DEMO
Test Car
Passenger Car
System Search
System Search
TCCS(Engine/AT)
Transmission(ECT/SMT)
Hybrid Vehicle
Mild Hybrid Vehicle
Hybrid Vehicle Battery
DTC Analysis(Check Mode)
Code
Description(1/21)
State
Mode
Erase
More

4.4 System Lock

- ### "Security Breach" Lock

For the protection of proprietary right and intellectual property of EZDS that are embodied in Z5, the product contains the "Security Breach Lock" function.
In the event of executing any diagnostic functions of Z5 in a way that is not logically possible in the real world, and when such abuse is detected evidently, it is considered as a serious security breach and Z5 is programmed to lock down its system immediately for self-protection.

In case the Z5 is locked down for this reason, no unlock code input is possible and the only way to unlock the device is returning the device to the EZDS in Korea for inspection. It will be unlocked only when the device turns out to have been locked for no proper reasons. If the internal memory is altered or manipulated by the user from the state when the Z5 was locked, any request for unlocking the device will be refused.



Zenith

Serious breach of term and conditions for lawful use of Zenith has been detected.
Zenith has been locked permanently to protect its contents from illegal extraction.

Do NOT turn off scantool until you enter the unlock code

If you are going to request for unlock code, please do not turn off scantool for the dealer code changes every time the scantool is turned off.

Dealer Code: E77C-3368-A678-DA83-D571

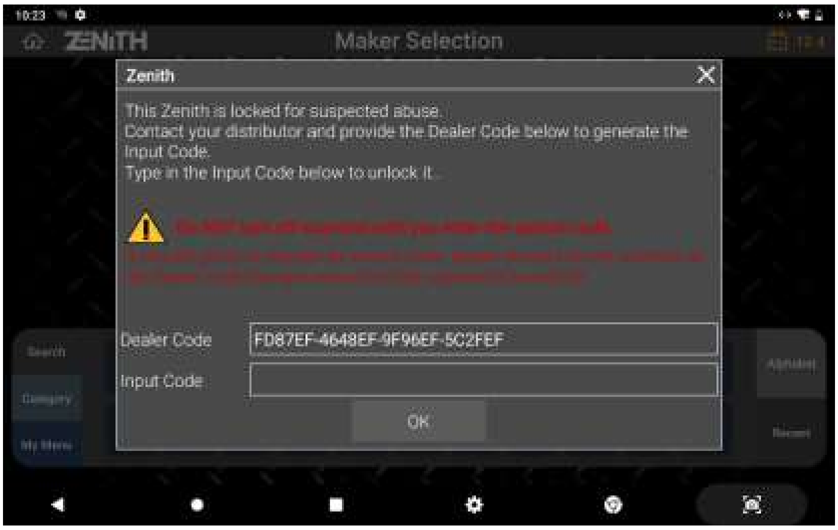
Input Code:

- ### Violation of end user license agreement for regional restriction

As written in the first page of this manual, and as it appears on the screen in the process of registering Z5, the product is licensed for use in the designated country only. Z5 found being used outside the designated country can be locked down as it constitutes a direct violation of end user license agreement.

Once Z5 is locked for this reason, it is not recoverable unless the Z5 base unit is returned to the authorized local distributor in the region where the Z5 is actually being used.

The Z5 can be unlocked only by inputting the unlock code which is provided with the consent of the authorized local distributor in the regional of actual use. And this unlocking process itself is not subject to warranty and cost may be charged because it will involve the transfer of responsibility of service and support to the new local distributor and change of software license.



Zenith

This Zenith is locked for suspected abuse.
Contact your distributor and provide the Dealer Code below to generate the Input Code.
Type in the Input Code below to unlock it.

Dealer Code: FD87EF-4648EF-9F96EF-5C2FEF

Input Code:

OK

Also, for this purpose, Z5 needs to be validated by logging onto the server and checking the proper usage in compliance with the end user license agreement, and the device is required to connect to internet via Wi-Fi or Ethernet LAN cable periodically.
If Z5 fails to log on to the EZDS server for a certain period, a warning message pops up to remind that the device needs to connect the device to internet for validation.

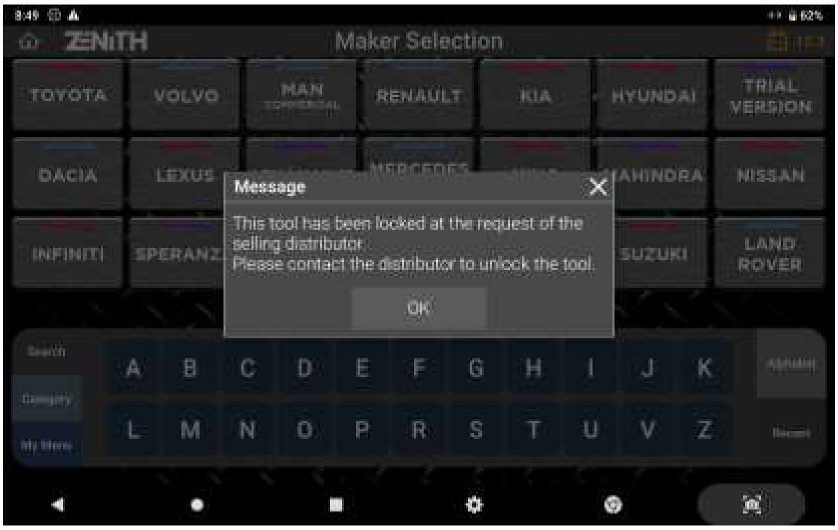
If Z5 still does not connect to internet despite of repeated warning message, Z5 does not respond to user input and pauses to operate for one or a few minutes after closing the warning message, and the irresponsive time will increase if the message is ignored, and no internet connection is made for validation.

If the device is not validated despite of such inconvenience increased over time, Z5 finally becomes non-operational as it constitutes breach of end user license agreement. Z5 software will not run and just the reminder asking you to connect the device to the internet will appear on the screen without any button to close the message.
The only way to remove the message and restore Z5's normal operation is connecting the device to internet and getting it access to the server for validation.

If the device is validated, you can use Z5 normally until the next request for validation. However, if the device is found being used outside the designated country, which constitutes a direct violation of end user license agreement, Z5 will be locked down as explained above in the section.

- System Lock by distributor

  On the premise of prior consent of the customer, the authorized local distributor may reserve the right to restrict the use of Z5 of which ownership has not been completely transferred to the customer such as selling on installment or credit. Below screen will be displayed on the screen when the use of Z5 is restricted by the distributor, which can be resolved by settling down on the issues with the local distributor.


Maker Selection
TOYOTA
VOLVO
MAN
RENAULT
KIA
HYUNDAI
TRIAL VERSION
DACIA
LEXUS
MERCEDES
MAHINDRA
NISSAN
INFINITI
SPERANZA
SUZUKI
LAND ROVER
Search
Category
My Menu
Alphabet
Recent
A B C D E F G H I J K
L M N O P R S T U V Z
OK

Message

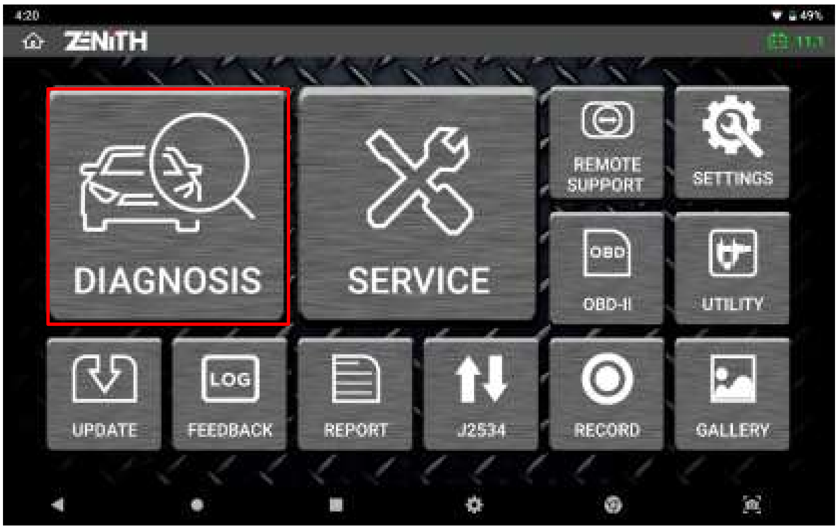
This tool has been locked at the request of the selling distributor.
Please contact the distributor to unlock the tool.

Chapter 5. Z5 Diagnosis

5.1 Vehicle Selection

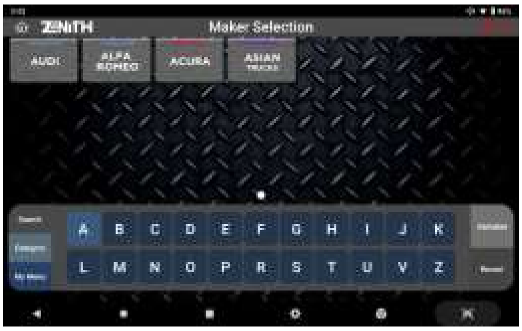
- **Diagnosis**

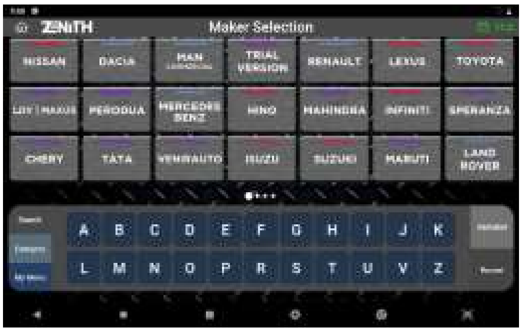
  To start diagnosis, select “Diagnosis” icon from the Z5 main menu.


4:20
49%
ZENiTH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD
OBD-II
UTILITY
UPDATE
LOG
FEEDBACK
REPORT
J2534
RECORD
GALLERY

- **Carline Selection**

  In the [Diagnosis] menu, each carline software will be displayed as shown below.

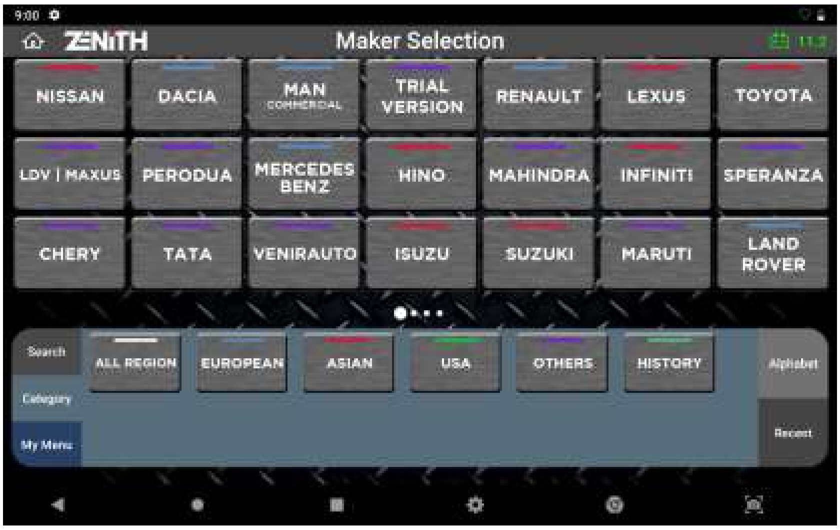

ZENiTH
Maker Selection
AUDI
ALFA ROMEO
ACURA
ASIAN TRUCKS
A B C D E F G H I J K
L M N O P R S T U V Z


ZENiTH
Maker Selection
NISSAN
DACIA
MAN
TRIAL VERSION
RENAULT
LEXUS
TOYOTA
LDV | MAXUS
PERODUA
MERCEDES BENZ
HINO
MAHINDRA
INFINITI
SPERANZA
CHERY
TATA
VENRAUTO
ISUZU
SUZUKI
MARUTI
LAND ROVER
A B C D E F G H I J K
L M N O P R S T U V Z

For easy and quick navigation of the software, Z5 offers 5 sorting features at both end of the bottom menu.

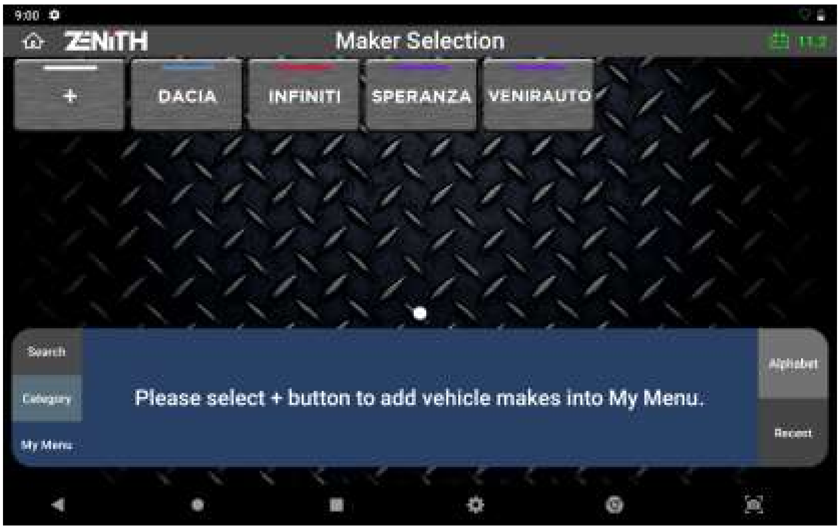
- **Search**

  [Search] feature allows sorting the carline software according to the first letter. After selecting the first letter, the software can be sorted further using features in the [Region] tab.


9:00
ZENITH
Maker Selection
NISSAN
DACIA
MAN COMMERCIAL
TRIAL VERSION
RENAULT
LEXUS
TOYOTA
LDV | MAXUS
PERODUA
MERCEDES BENZ
HINO
MAHINDRA
INFINITI
SPERANZA
CHERY
TATA
VENIRAUTO
ISUZU
SUZUKI
MARUTI
LAND ROVER
Search
Category
My Menu
ALL REGION
EUROPEAN
ASIAN
USA
OTHERS
HISTORY
Alphabet
Recent

- **Region**

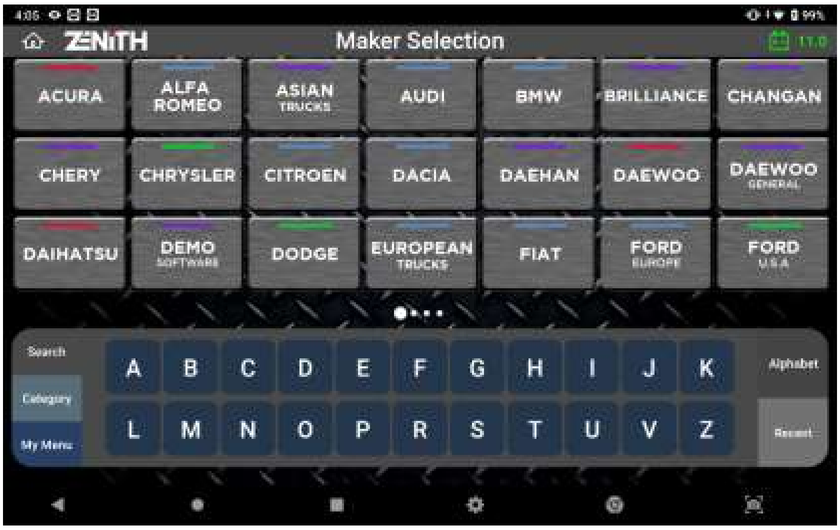
  [Region] feature sorts the carline software according to its region such as ‘All Region’, ‘Asian’, ‘Australia’, ‘European’, ‘USA’, and ‘Other’. In addition, ‘History’ feature displays recently diagnosed vehicle/ accessed system/ function path, offering a shortcut to access the system without navigating menu from scratch.


9:00
ZENITH
Maker Selection
+
DACIA
INFINITI
SPERANZA
VENIRAUTO
Search
Category
My Menu
Alphabet
Recent

Please select + button to add vehicle makes into My Menu.

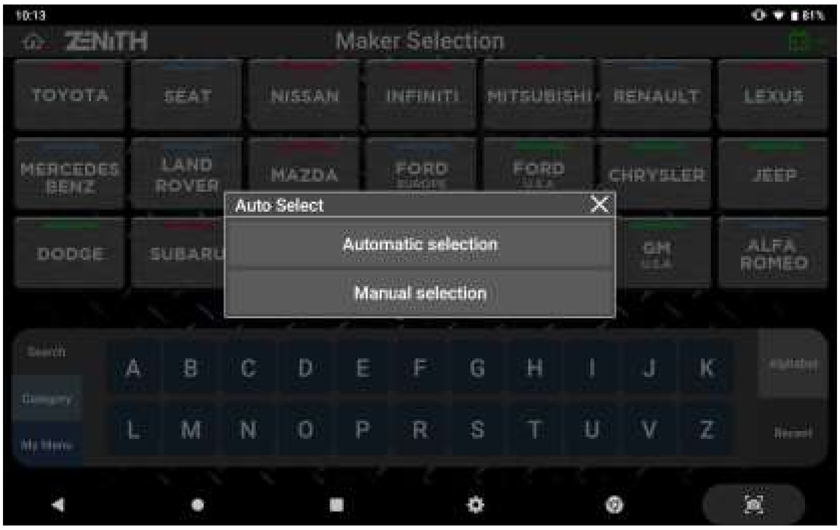
- **My Menu**

  [My Menu] allows user to add or delete carline software to separate menu. This is ideal for user to add most frequently used software in My Menu for quick navigation. To add the software, press '+' button, select desired software and hit 'Apply' button. To delete the software, deselect the software and hit 'Apply' button.


4:06
ZENITH
Maker Selection
11.0
ACURA
ALFA ROMEO
ASIAN TRUCKS
AUDI
BMW
BRILLIANCE
CHANGAN
CHERY
CHRYSLER
CITROEN
DACIA
DAEHAN
DAEWOO
DAEWOO GENERAL
DAIHATSU
DEMO SOFTWARE
DODGE
EUROPEAN TRUCKS
FIAT
FORD EUROPE
FORD U.S.A
Search
Category
My Menu
A B C D E F G H I J K
L M N O P R S T U V Z
Alphabet
Recent

- **A to Z & Recent**

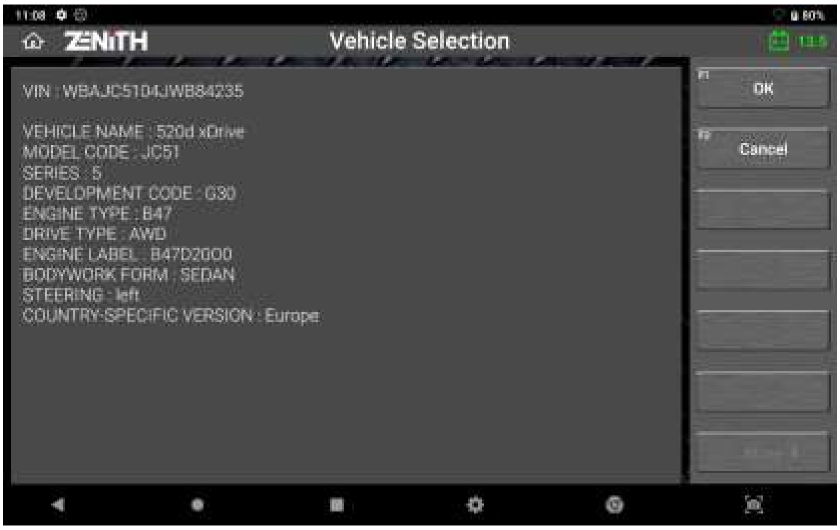
  [A to Z] feature organizes the carline software in alphabetical order from A to Z. [Recent] feature displays the carline software in recently used order.


10:13
ZENITH
Maker Selection
TOYOTA
SEAT
NISSAN
INFINITI
MITSUBISHI
RENAULT
LEXUS
MERCEDES BENZ
LAND ROVER
MAZDA
FORD EUROPE
FORD U.S.A
CHRYSLER
JEEP
DODGE
SUBARU
GM U.S.A
ALFA ROMEO
Auto Select
Automatic selection
Manual selection
Search
Category
My Menu
A B C D E F G H I J K
L M N O P R S T U V Z
Alphabet
Recent

Automatic selection & Manual selection

Zenith Z5 offers options to select the vehicle model either automatically or manually. [Automatic selection] detects the vehicle information including the VIN number, model year, model name, engine type, and other necessary information whereas [Manual selection] lets the user to select the vehicle information manually.

A. Automatic Selection


ZENITH
Vehicle Selection
OK
Cancel

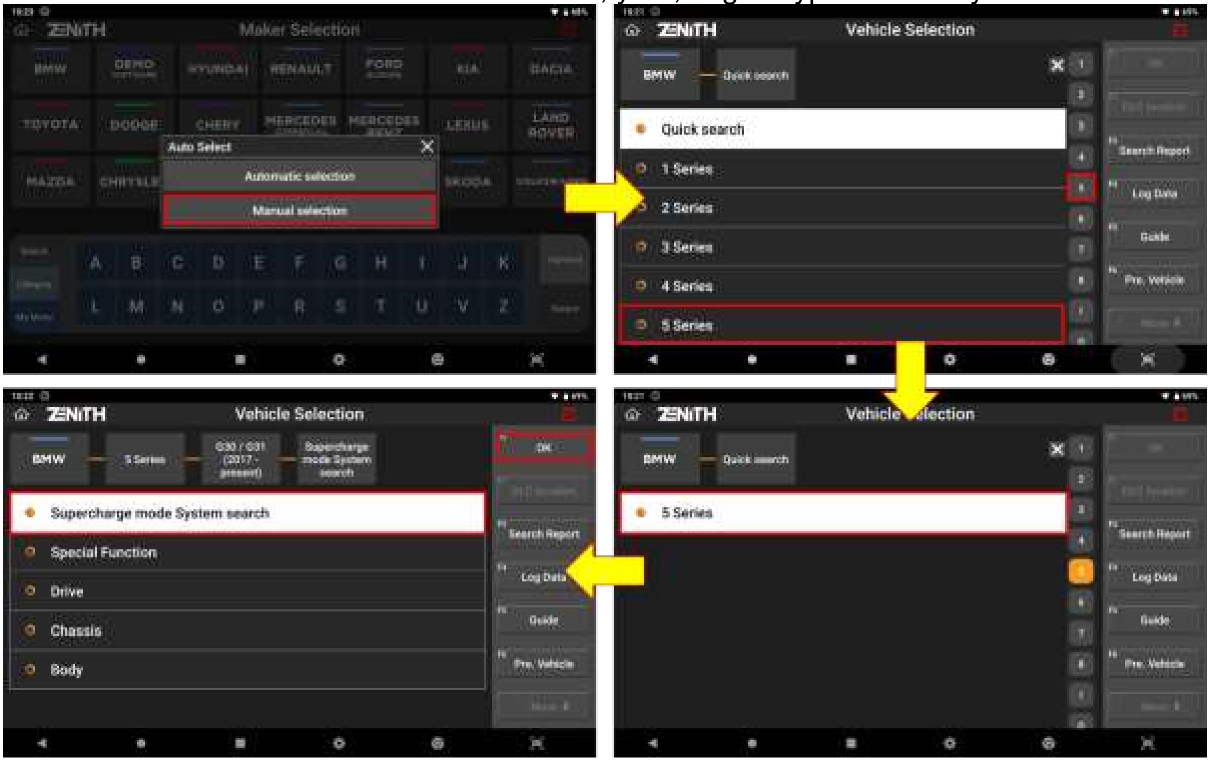
VIN : WBAJC5104JWB84235

VEHICLE NAME : 520d xDrive
MODEL CODE : JC51
SERIES : 5
DEVELOPMENT CODE : G30
ENGINE TYPE : B47
DRIVE TYPE : AWD
ENGINE LABEL : B47D2000
BODYWORK FORM : SEDAN
STEERING : left
COUNTRY-SPECIFIC VERSION : Europe

*Automatic selection may not work if connected vehicle does not communicate through CAN protocol. In such case, please select the model manually.

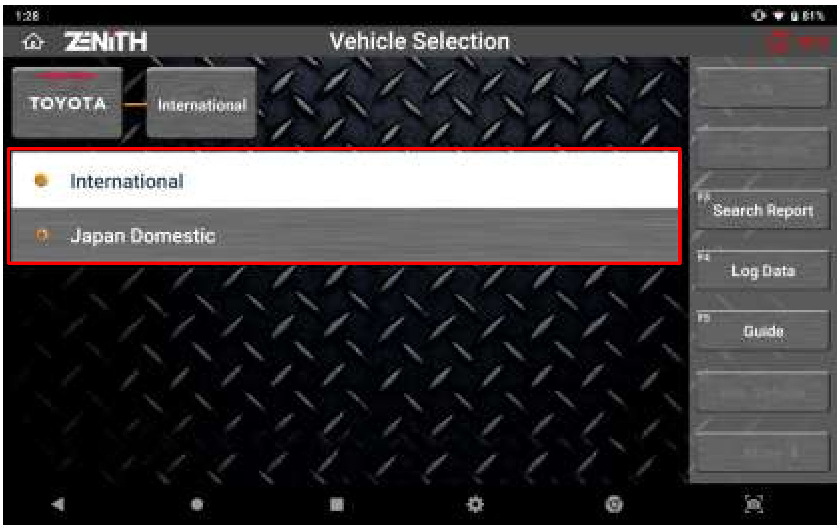
B. Manual Selection

User needs to select vehicle's model, year, engine type and the system.


Maker Selection
Auto Select
Automatic selection
Manual selection
Vehicle Selection
BMW
Quick search
1 Series
2 Series
3 Series
4 Series
5 Series
Search Report
Log Data
Guide
Pre. Vehicle
OK
G30 / G31 (2017 - present)
Supercharge mode System search
Special Function
Drive
Chassis
Body

- ## Japan Domestic vs. International

Select any Japanese brand “Toyota”, “Nissan”, “Honda”, “Mitsubishi”, “Mazda”, “Daihatsu” and “Suzuki” from the car maker selection menu, then it is followed by the Z5’s unique Japanese car menu structure as shown below.



Japan Domestic

Z5 is offering the model names and the detailed model selection procedure for the cars sold in Japanese domestic market or secondhand vehicles imported from Japan with unique model names and variants.

The model names and further details provided under Japan Domestic menu include only the Japanese domestic specs, therefore the export models or foreign local assembly models may not be supported if the identical models are not sold in Japan.

Therefore, Japan Domestic is not recommended to the international users in general.
Select Japan Domestic only when testing the Japanese cars originally sold in Japan and imported as secondhand cars from Japan.

International

In the overseas, the Japanese cars are named differently, and there is a huge variety of variant models that are not found in Japan.
International menu was added to include ALL regional versions of each Japanese automaker.

Therefore, selecting [International] is always recommended to the international users.

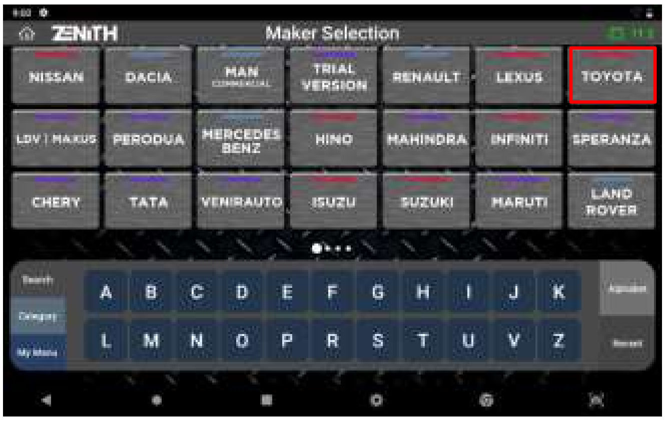
When [International] is selected, a simple Diagnostic Connector Type selection follows and then you can select the control system or conduct System Search without having to follow multiple steps of model name, model code, type or model year selections.
It is so simple but it does not mean that the diagnostic results are also simplified. It provides complete function and diagnostic result of the same level as selecting all the details of the test car in Japan Domestic.

\

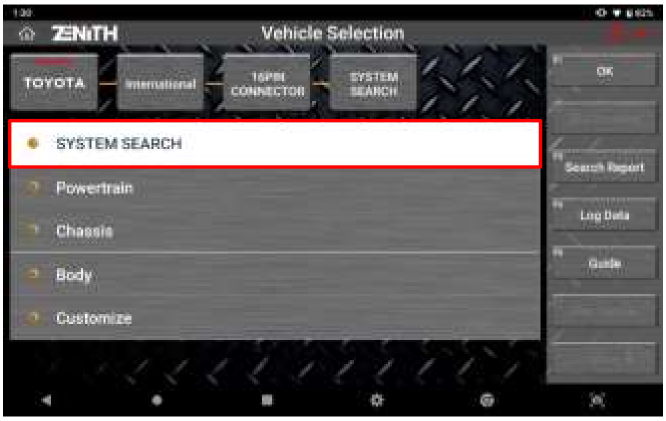
5.2 System Search

System Search Function

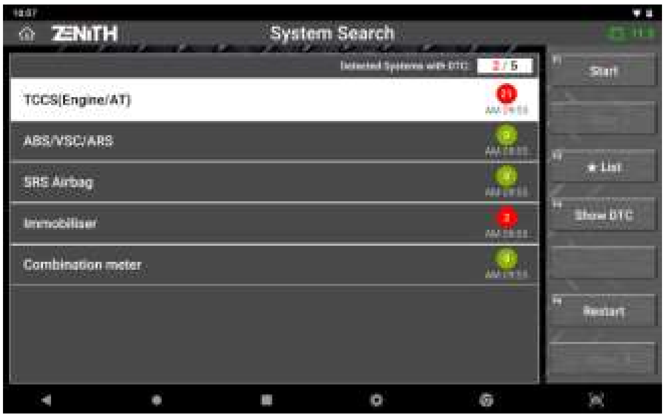
For many automakers with some exceptions, selecting “System Search” from the system selection menu activates the automatic “All Systems Check” procedure, where Z5 tries to establish communication with all possible systems fitted in the car one after one, and then provides the summarized report of the diagnostic result on the screen.


ZENiTH
Maker Selection
NISSAN
DACIA
MAN COMMERCIAL
TRIAL VERSION
RENAULT
LEXUS
TOYOTA
LDV | MAXUS
PERODUA
MERCEDES BENZ
HINO
MAHINDRA
INFINITI
SPERANZA
CHERY
TATA
VENIRAUTO
ISUZU
SUZUKI
MARUTI
LAND ROVER
Search
Category
My Menu
A B C D E F G H I J K
L M N O P R S T U V Z
Alphabet
Recent

Selected [Mitsubishi] from automaker selection menu as an example

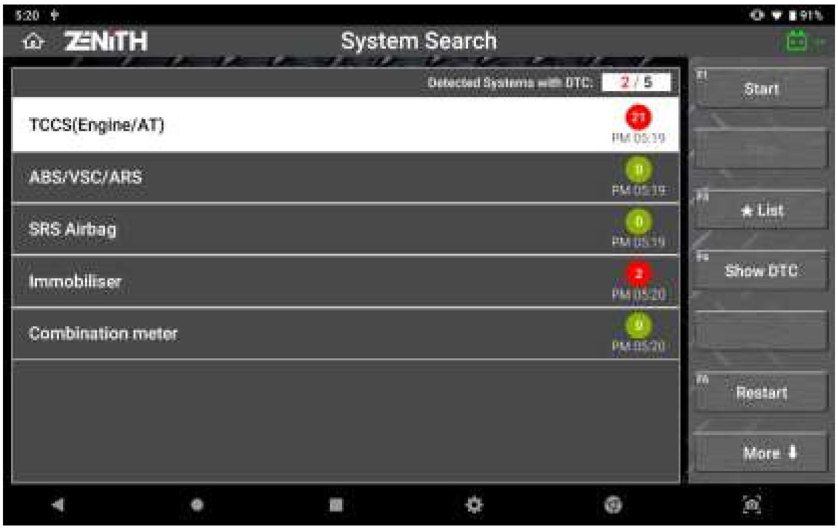

ZENiTH
Vehicle Selection
TOYOTA
International
16PIN CONNECTOR
SYSTEM SEARCH
SYSTEM SEARCH
Powertrain
Chassis
Body
Customize
OK
Search Report
Log Data
Guide

Select [System Search] option placed in the top of the control system list.
>> Select OK on the left to continue.


ZENiTH
System Search
Detected Systems with DTC
2 / 5
TCCS(Engine/AT)
21
ABS/VSC/ARS
0
SRS Airbag
0
Immobiliser
2
Combination meter
0
Start
★ List
Show DTC
Restart

Z5 checks the availability of individual control system one after one and counts the number of DTCs logged to each system.

- **System Search Result**



Detected Systems with DTC: 2 / 5

TCCS(Engine/AT)	21	PM 05:19
ABS/VSC/ARS	0	PM 05:19
SRS Airbag	0	PM 05:19
Immobiliser	2	PM 05:20
Combination meter	0	PM 05:20

- **Systems found in the vehicle**

The control systems with which Z5 could communicate and check the DTCs are listed on the screen.

- **Number of DTCs**

Z5 reads the DTCs from the vehicle's control systems while conducting the system search function and indicates the number of trouble codes found in each system. However, some of the control systems such as SRS, IMM or BCM may not support DTC Read and Erase functions. Some control modules may require Z5 to communicate with the system individually to read the DTC.

In both cases, Z5 is unable to show the number of DTCs in the System Search report, not because of its fault but because the system is designed in that way. To avoid misunderstanding, Z5 indicates such exceptional cases with the marks below:

Symbol	Description
⊖	The system does not support DTC reading function.
●	The system needs to communicate individually. Please select the system from the menu and check the DTC individually.

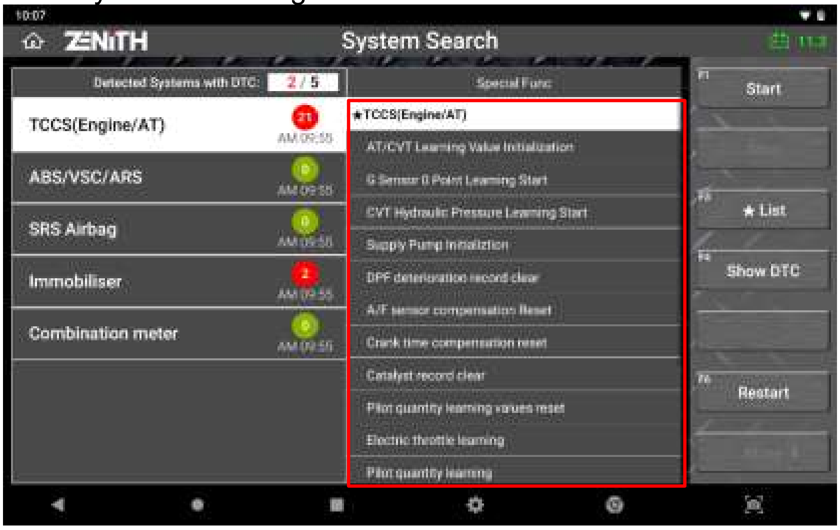
In case of Mercedes Benz, System Search result shows [!] mark to indicate that DTCs are found in the control system instead of showing the number of DTCs.

Additional Commands

START
Select a system to conduct more diagnostic functions from the systems list in the left half of the screen, and touch [START] to enter the system.

STOP
Select [STOP] to abort System Search function. This option is activated only when System Search is running.

★LIST
Select [★LIST], and the Z5 shows the details of the special functions available with the detected systems in the right half of the screen.

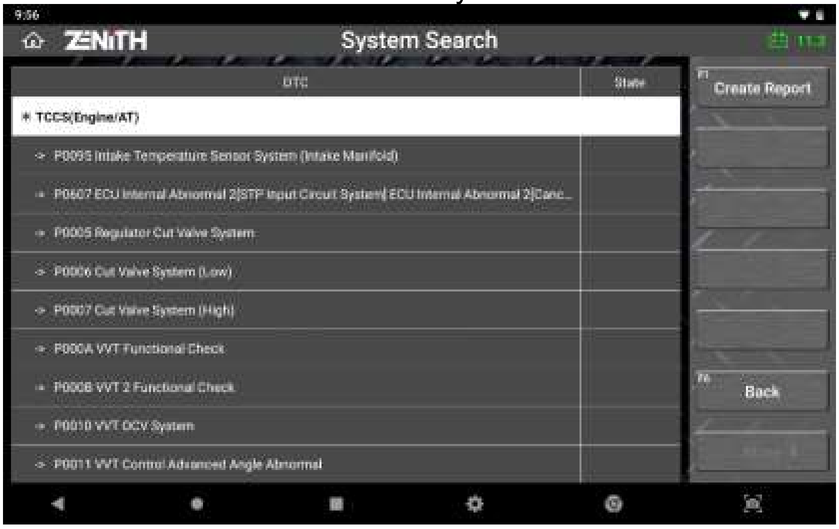

10:07
ZENITH
System Search
Detected Systems with DTC: 2 / 5
Special Func
21
AM 09:55
0
AM 09:55
0
AM 09:55
2
AM 09:55
0
AM 09:55
F1
Start
F3
★ List
F4
Show DTC
F6
Restart

TCCS(Engine/AT)
ABS/VSC/ARS
SRS Airbag
Immobiliser
Combination meter

★TCCS(Engine/AT)
AT/CVT Learning Value Initialization
G Sensor 0 Point Learning Start
CVT Hydraulic Pressure Learning Start
Supply Pump Initializtion
DPF deterioration record clear
A/F sensor compensation Reset
Crank time compensation reset
Catalyst record clear
Pilot quantity learning values reset
Electric throttle learning
Pilot quantity learning

SHOW DTC

Displays the DTCs found in each control system with the code and description.


9:56
ZENITH
System Search
DTC
State
F1
Create Report
F6
Back

* TCCS(Engine/AT)
-> P0095 Intake Temperature Sensor System (Intake Manifold)
-> P0607 ECU Internal Abnormal 2|STP Input Circuit System| ECU Internal Abnormal 2|Canc...
-> P0005 Regulator Cut Valve System
-> P0006 Cut Valve System (Low)
-> P0007 Cut Valve System (High)
-> P000A VVT Functional Check
-> P000B VVT 2 Functional Check
-> P0010 VVT OCV System
-> P0011 VVT Control Advanced Angle Abnormal

- **REPORT**

[REPORT] option appears when [SHOW DTC] is selected. Select this option in order to use the System Search result for the creating Pre & Post Repair Report. Please refer [Chapter 10. Diagnostic Report] for more details about the Pre & Post Repair Report function.

- **RESTART**

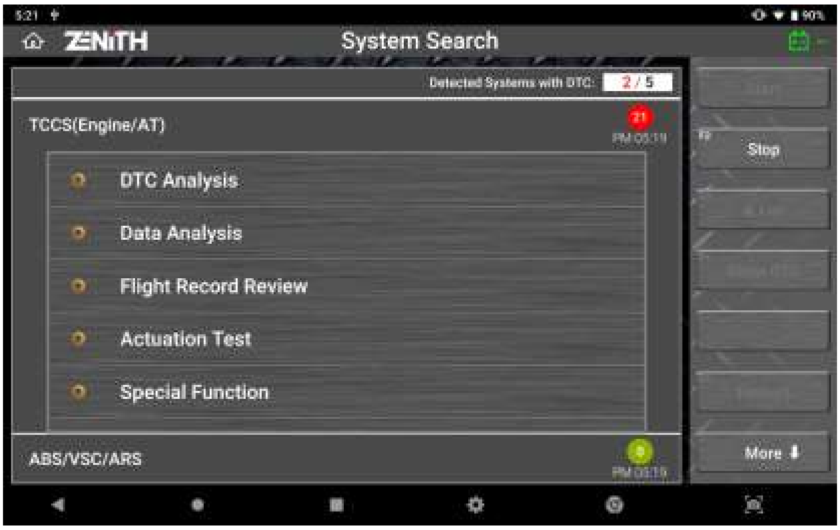
Select [RESTART] to begin System Search again.

5.3 DTC Analysis

Reads the Diagnostic Trouble Codes set in the control module and erases them after repairing the vehicle

Diagnostic Function Menu

When the automaker and the control system is selected, either by selecting the control system directly from the menu or by selecting [START] after picking up a control system from the System Search result, following diagnostic functions are provided for the majority of the brands that Z5 supports.


5:21
ZENITH
System Search
Detected Systems with DTC: 2 / 5
TCCS(Engine/AT)
21
PM 05:19
DTC Analysis
Data Analysis
Flight Record Review
Actuation Test
Special Function
ABS/VSC/ARS
0
PM 05:19
Stop
More

- DTC Analysis
- Data Analysis
- Flight Record Review
- Actuation Test
- Special Function
- ECU Information Display

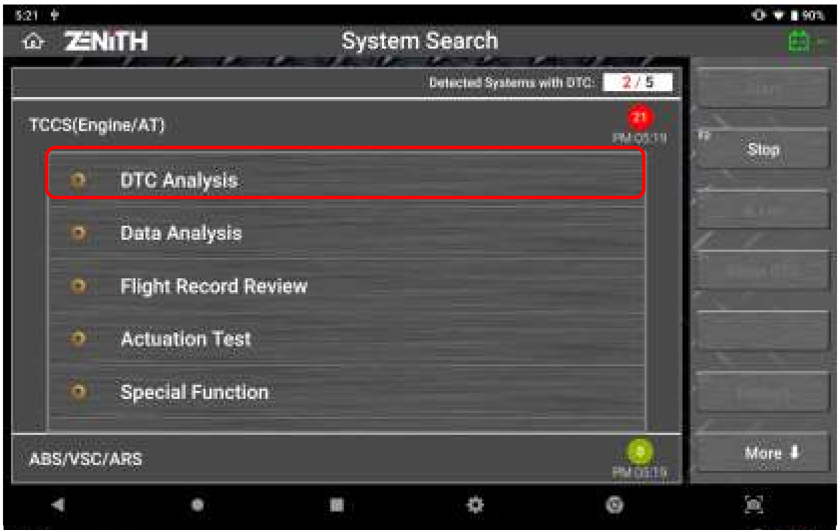
The details of the diagnostic functions are explained in the following chapters individually.

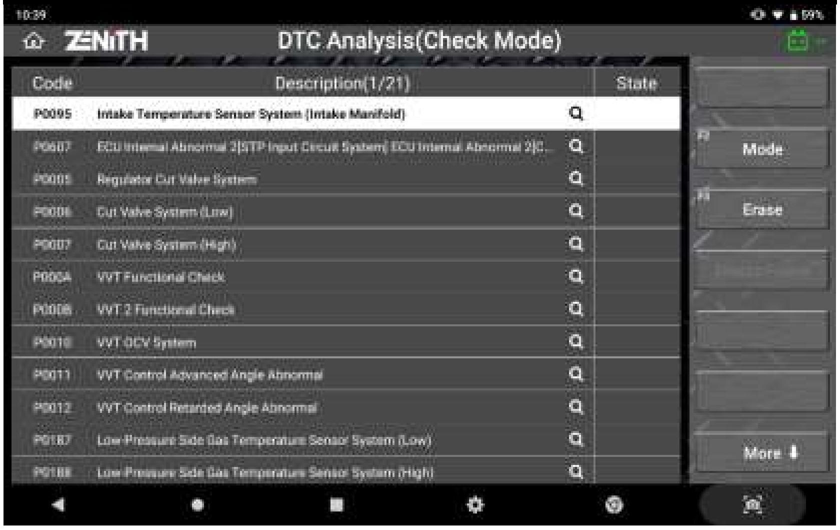
DTC Reading & Erasing

Standard Some Automakers may provide different DTC Analysis functions in their own ways, therefore make sure to be acquainted with the different procedures and conditions before executing the manufacturer specific DTC Analysis functions.

DTC Reading

Select [DTC Analysis] then Z5 checks the DTCs set in the selected control system and shows the list of the DTCs.


5:21
ZENITH
System Search
Detected Systems with DTC: 2 / 5
TCCS(Engine/AT)
21
PM 05:19
DTC Analysis
Data Analysis
Flight Record Review
Actuation Test
Special Function
ABS/VSC/ARS
0
PM 05:19
Stop
More


10:39
ZENITH
DTC Analysis(Check Mode)
Mode
Erase
More

Code	Description(1/21)	State
P0095	Intake Temperature Sensor System (Intake Manifold)	
P0607	ECU Internal Abnormal 2|STP Input Circuit System| ECU Internal Abnormal 2|C...	
P0005	Regulator Cut Valve System	
P0006	Cut Valve System (Low)	
P0007	Cut Valve System (High)	
P000A	VVT Functional Check	
P000B	VVT 2 Functional Check	
P0010	VVT OCV System	
P0011	VVT Control Advanced Angle Abnormal	
P0012	VVT Control Retarded Angle Abnormal	
P0187	Low-Pressure Side Gas Temperature Sensor System (Low)	
P0188	Low-Pressure Side Gas Temperature Sensor System (High)	

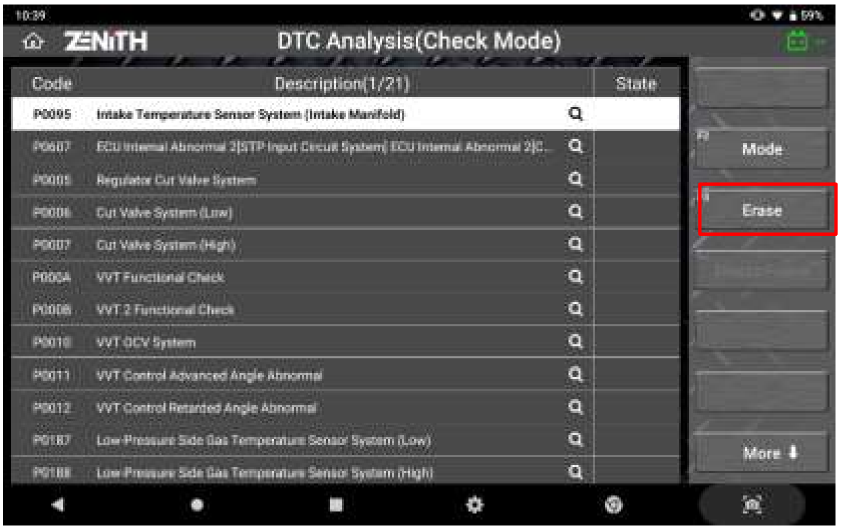
- ## Present / History / Pending DTC

In general, Diagnostic Trouble Codes are categorized into 3 types according to the status of the code.

Present DTC An actual DTC currently affecting the control system’s error or failure and needs further diagnosis for repair and erasure.
History DTC A DTC that was active in the past as the related parameter readings went out of range but dismissed after several drive cycles without reoccurring.
Pending DTC A temporary DTC that has not fulfilled the code setting conditions at the moment, and is going to be set if the related data reading goes out of range again.

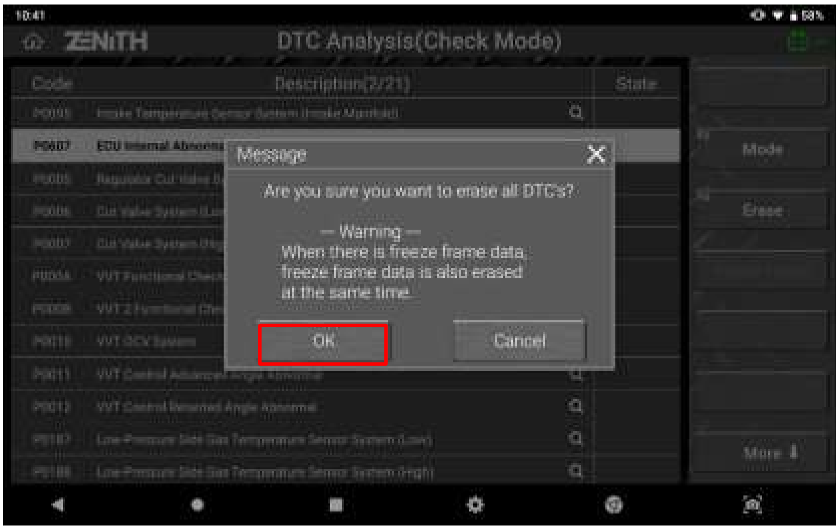
- ## DTC Erasing

Select the [ERASE] button to remove the DTC from the control system, then select [OK].



DTC Analysis(Check Mode)

Code	Description(1/21)	State
P0095	Intake Temperature Sensor System (Intake Manifold)	
P0607	ECU Internal Abnormal 2(STP Input Circuit System) ECU Internal Abnormal 2(C...	
P0005	Regulator Cut Valve System	
P0006	Cut Valve System (Low)	
P0007	Cut Valve System (High)	
P000A	VVT Functional Check	
P000B	VVT 2 Functional Check	
P0010	VVT OCV System	
P0011	VVT Control Advanced Angle Abnormal	
P0012	VVT Control Retarded Angle Abnormal	
P0187	Low-Pressure Side Gas Temperature Sensor System (Low)	
P0188	Low-Pressure Side Gas Temperature Sensor System (High)	



DTC Analysis(Check Mode)

Message

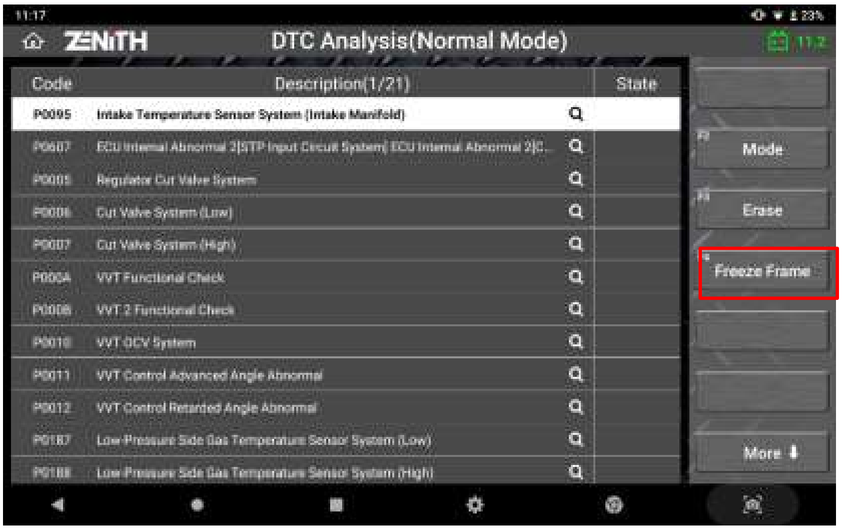
Are you sure you want to erase all DTC's?

— Warning —
When there is freeze frame data,
freeze frame data is also erased
at the same time.

- ## Freeze Frame Data

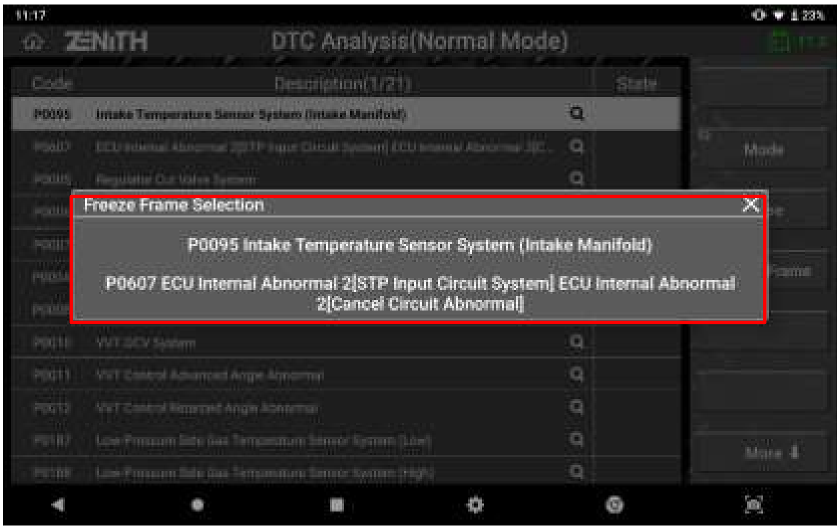
  To aid the mechanic's better understanding on what had happened to the vehicle's control system before and after the DTC was set, live Data parameters are recorded when the critical diagnostic trouble code was detected and logged to the control unit's memory.

  [FREEZE FRAME] button is activated on the left of the screen when the Freeze Frame Data is available. Select the button to list the freeze frame data recorded in the control unit's memory.



Code	Description(1/21)	State
P0095	Intake Temperature Sensor System (Intake Manifold)	
P0607	ECU Internal Abnormal 2[STP Input Circuit System] ECU Internal Abnormal 2[C...	
P0005	Regulator Cut Valve System	
P0006	Cut Valve System (Low)	
P0007	Cut Valve System (High)	
P000A	VVT Functional Check	
P000B	VVT 2 Functional Check	
P0010	VVT OCV System	
P0011	VVT Control Advanced Angle Abnormal	
P0012	VVT Control Retarded Angle Abnormal	
P0187	Low-Pressure Side Gas Temperature Sensor System (Low)	
P0188	Low-Pressure Side Gas Temperature Sensor System (High)	

Select the freeze frame data among the list, then the selected freeze frame data is retrieved from the control unit's memory.



Freeze Frame Selection

P0095 Intake Temperature Sensor System (Intake Manifold)

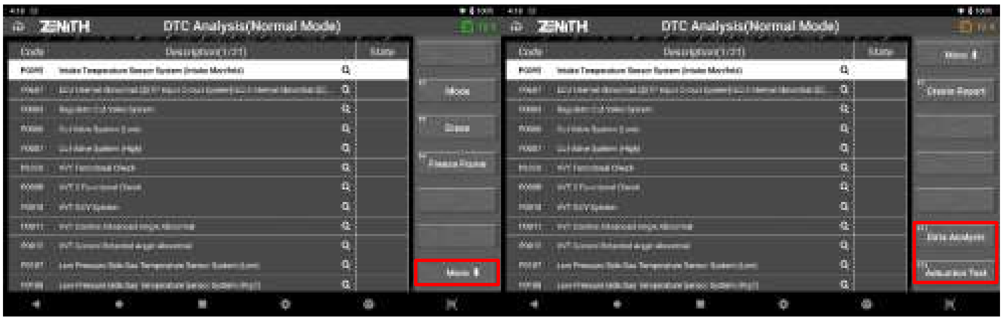
P0607 ECU Internal Abnormal 2[STP Input Circuit System] ECU Internal Abnormal 2[Cancel Circuit Abnormal]

- ## Manual DTC Reading

Reading and erasing the codes from the old vehicles of 1980's and early 1990's using Z5 or any other diagnostic tools may not be possible as the old control systems do not support bi-directional communication. Only manual reading and erasing are possible for those vehicles, so please follow the instructions that are provided on the Z5 screen.

- ## Move to other function menu

Press [More↓] button located at the bottom of side menu bar to find [F11 Data Analysis] and [F12 Actuation Test] function. User can jump directly to observe live data and test components.

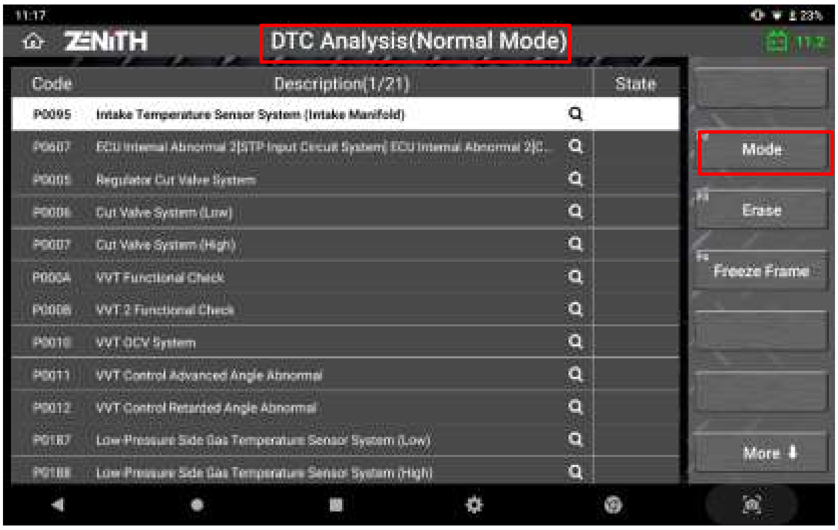

DTC Analysis(Normal Mode)
Code
Description(1/21)
State
Mode
Erase
Freeze Frame
More
DTC Analysis(Normal Mode)
Menu
Create Report
Data Analysis
Actuation Test

- **Mode** (just for Toyota and Daihatsu)

[MODE] button is activated only when reading the DTCs from Toyota or Daihatsu models.
Unlike the other automakers, Toyota and Daihatsu have an additional option for DTC reading function, and it is switching the diagnostic mode to Check Mode or Normal Mode.

Reading DTC in [Normal Mode] is the standard DTC reading function that is not much different from the other automakers.
When switched to [Check Mode], the control unit applies narrower allowance for fault code setting, making the DTC setting conditions more sensitive than normal, in order to check the potential trouble codes with the defects of marginal level of which values are not out of the normal range yet.

> Toyota and Daihatsu ABS systems support [Test Mode] that shows the list of all DTC's set in the ABS control system and conducts the related calibration functions at the same time.


11:17
23%
ZENITH
DTC Analysis(Normal Mode)
11.2
Mode
Erase
Freeze Frame
More

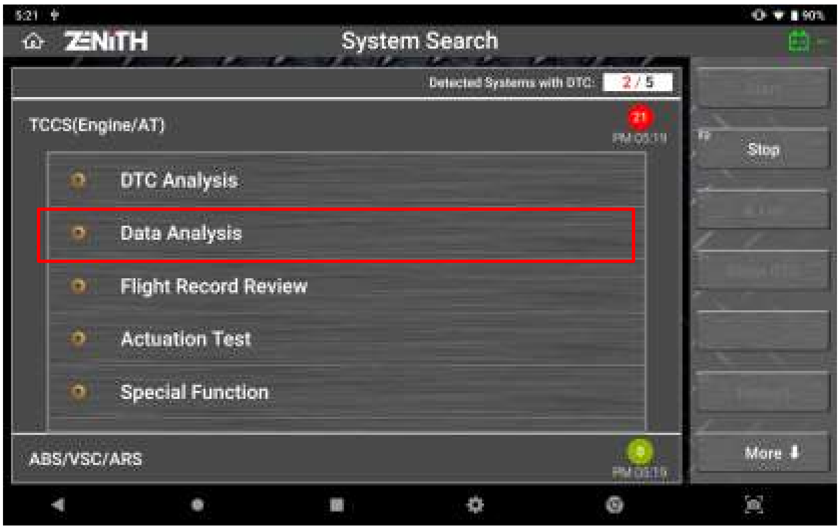
Code	Description(1/21)	State
P0095	Intake Temperature Sensor System (Intake Manifold)	
P0607	ECU Internal Abnormal 2(STP Input Circuit System) ECU Internal Abnormal 2(C...	
P0005	Regulator Cut Valve System	
P0006	Cut Valve System (Low)	
P0007	Cut Valve System (High)	
P000A	VVT Functional Check	
P000B	VVT 2 Functional Check	
P0010	VVT OCV System	
P0011	VVT Control Advanced Angle Abnormal	
P0012	VVT Control Retarded Angle Abnormal	
P0187	Low-Pressure Side Gas Temperature Sensor System (Low)	
P0188	Low-Pressure Side Gas Temperature Sensor System (High)	

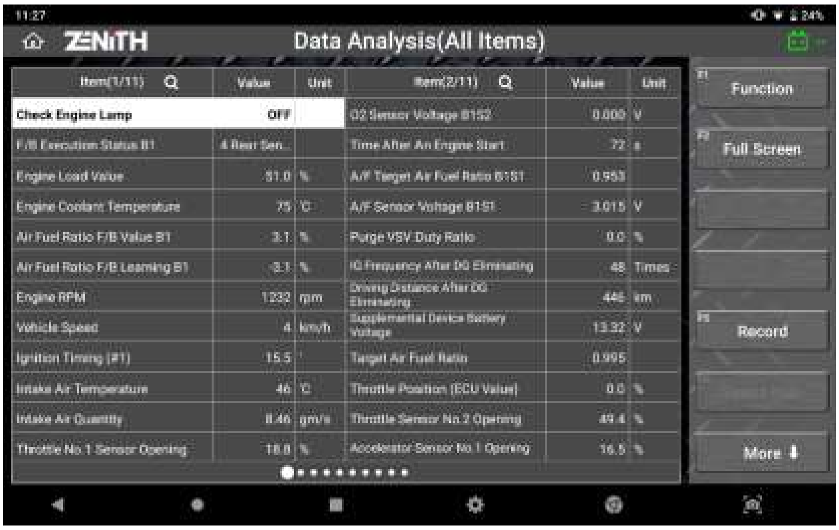
5.5 Data Analysis

Also called Live Data, Data List, Data Stream or Current Data by the automakers, it is one of the basic diagnostic functions that shows the sensor input value readings and the actuator status of a control system to monitor the control system’s operation of both input and output sides.

- ### Data Reading

  Select [Data Analysis] from the menu then the data parameters are listed as shown below.

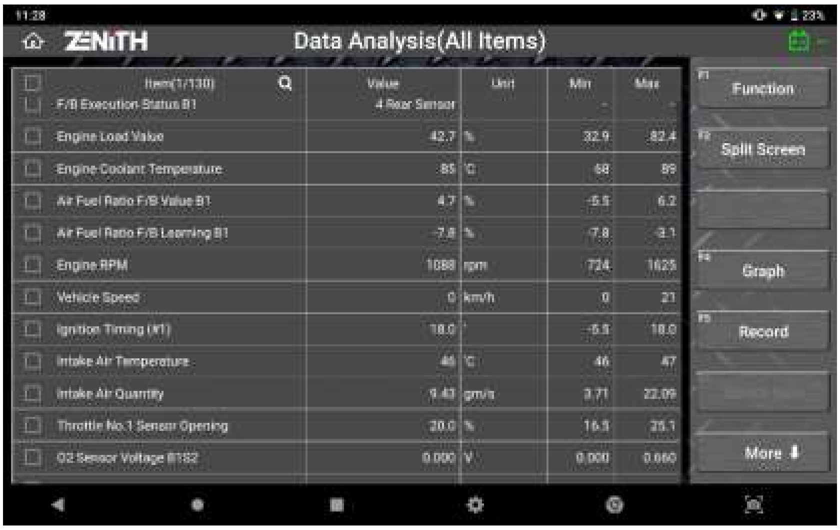

System Search
Detected Systems with DTC: 2 / 5
TCCS(Engine/AT)
21
PM 05:19
DTC Analysis
Data Analysis
Flight Record Review
Actuation Test
Special Function
ABS/VSC/ARS
0
PM 05:19
Stop
More


Data Analysis(All Items)
Function
Full Screen
Record
More

Item(1/11)	Value	Unit	Item(2/11)	Value	Unit
Check Engine Lamp	OFF		O2 Sensor Voltage B1S2	0.000	V
F/B Execution Status B1	4 Rear Sen...		Time After An Engine Start	72	s
Engine Load Value	51.0	%	A/F Target Air Fuel Ratio B1S1	0.953	
Engine Coolant Temperature	75	℃	A/F Sensor Voltage B1S1	3.015	V
Air Fuel Ratio F/B Value B1	3.1	%	Purge VSV Duty Ratio	0.0	%
Air Fuel Ratio F/B Learning B1	-3.1	%	IG Frequency After DG Eliminating	48	Times
Engine RPM	1232	rpm	Driving Distance After DG Eliminating	446	km
Vehicle Speed	4	km/h	Supplemental Device Battery Voltage	13.32	V
Ignition Timing (#1)	15.5	°	Target Air Fuel Ratio	0.995	
Intake Air Temperature	46	℃	Throttle Position (ECU Value)	0.0	%
Intake Air Quantity	8.46	gm/s	Throttle Sensor No.2 Opening	49.4	%
Throttle No.1 Sensor Opening	18.8	%	Accelerator Sensor No.1 Opening	16.5	%

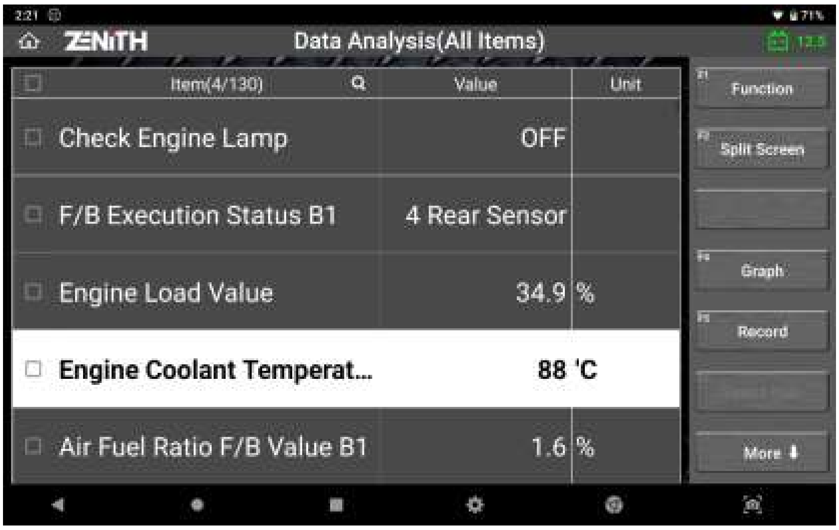
- **Full Screen**

Select [Full Screen] button on the left to switch the data display to a full page "Detail" mode, where up to 11 parameters are listed with more space to accommodate the longer parameter names.
Select [Split Screen] button to return to the mode that shows up to 24 parameters in the split screen.


11:28
ZENITH
Data Analysis(All Items)
Function
Split Screen
Graph
Record
More

☐ Item(1/130)	Value	Unit	Min	Max
☐ F/B Execution Status B1	4 Rear Sensor		-	-
☐ Engine Load Value	42.7	%	32.9	82.4
☐ Engine Coolant Temperature	85	'C	68	89
☐ Air Fuel Ratio F/B Value B1	4.7	%	-5.5	6.2
☐ Air Fuel Ratio F/B Learning B1	-7.8	%	-7.8	-3.1
☐ Engine RPM	1088	rpm	724	1625
☐ Vehicle Speed	0	km/h	0	21
☐ Ignition Timing (#1)	18.0	'	-5.5	18.0
☐ Intake Air Temperature	46	'C	46	47
☐ Intake Air Quantity	9.43	gm/s	3.71	22.09
☐ Throttle No.1 Sensor Opening	20.0	%	16.5	25.1
☐ O2 Sensor Voltage B1S2	0.000	V	0.000	0.060

With using two fingers, the list can be zoomed in so that the parameters can be viewed in much bigger font (limited to 5 parameters at max.)

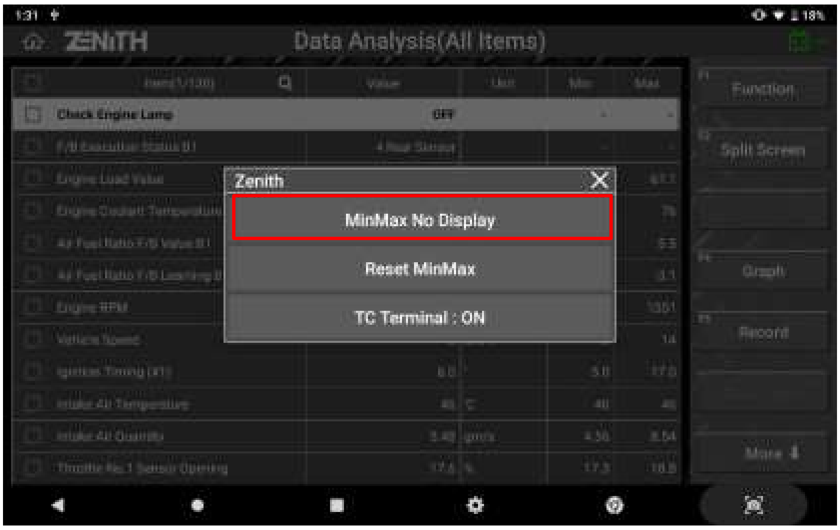

2:21
ZENITH
Data Analysis(All Items)
Function
Split Screen
Graph
Record
More

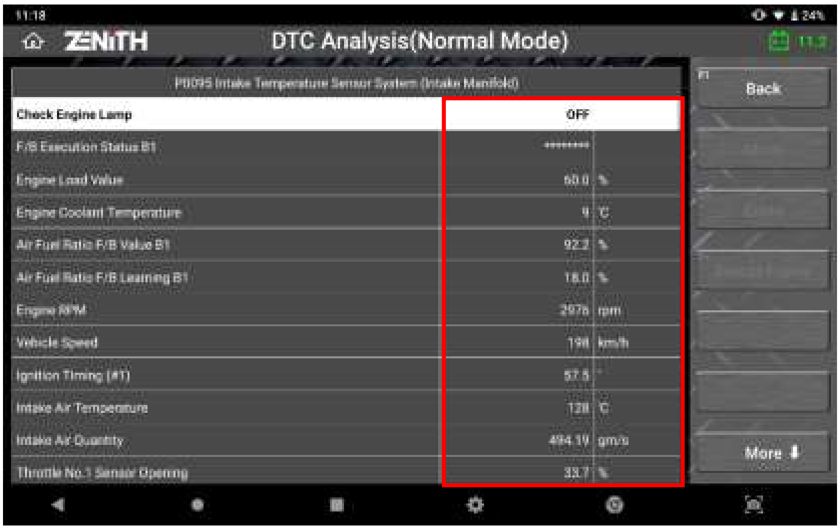
☐ Item(4/130)	Value	Unit
☐ Check Engine Lamp	OFF	
☐ F/B Execution Status B1	4 Rear Sensor	
☐ Engine Load Value	34.9	%
☐ Engine Coolant Temperat...	88	'C
☐ Air Fuel Ratio F/B Value B1	1.6	%

- **Function**

Select “Function” button to add, remove or reset min/max information.

MINMAX DISPLAY	Removes the Min & Max value columns from the data list. Results in wider parameter name column.
RESET MINMAX	Resets the Min & Max values
TC TERMINAL	ON / OFF the Old engine type (only applies for Toyota)


ZENITH
Data Analysis(All Items)
Function
Split Screen
Graph
Record
More
Zenith
MinMax No Display
Reset MinMax
TC Terminal : ON


11:18
ZENITH
DTC Analysis(Normal Mode)
Back
More

P0095 Intake Temperature Sensor System (Intake Manifold)

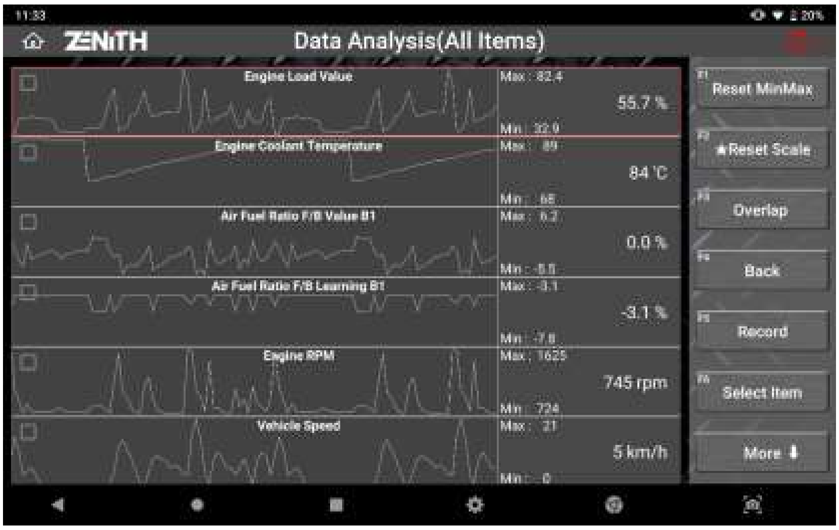
Check Engine Lamp	OFF	
F/B Execution Status B1	********	
Engine Load Value	60.0	%
Engine Coolant Temperature	9	℃
Air Fuel Ratio F/B Value B1	92.2	%
Air Fuel Ratio F/B Learning B1	18.0	%
Engine RPM	2976	rpm
Vehicle Speed	198	km/h
Ignition Timing (#1)	57.5	°
Intake Air Temperature	128	℃
Intake Air Quantity	494.19	gm/s
Throttle No.1 Sensor Opening	33.7	%

Graph Mode

Text based data parameters are switched to the dynamic graphs when the [GRAPH] button on the left is selected. [GRAPH] option is not available when the data list is displayed in Normal Mode with split screen.

Switching to Graphs

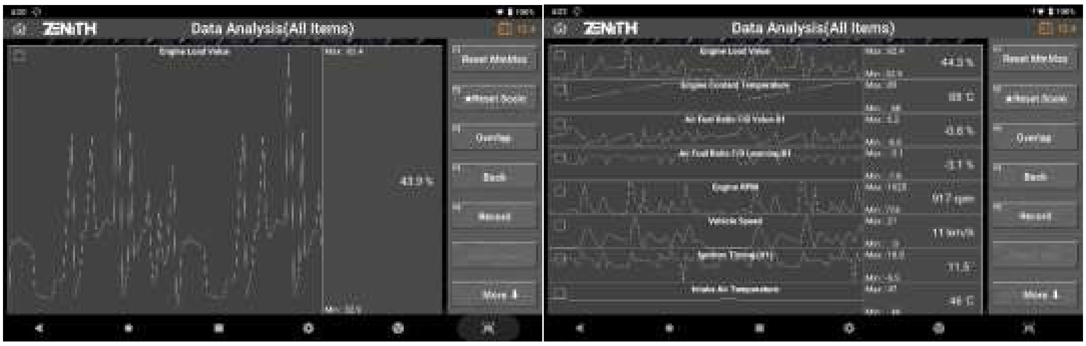
Select [GRAPH] button to switch the display mode to graphs.
At first, the graph mode runs with 6 lines for all parameters in the data list.


11:33
ZENiTH
Data Analysis(All Items)
Reset MinMax
★Reset Scale
Overlap
Back
Record
Select Item
More ⬇

Engine Load Value: Max : 82.4, 55.7 %, Min : 32.9
Engine Coolant Temperature: Max : 89, 84 'C, Min : 68
Air Fuel Ratio F/B Value B1: Max : 6.2, 0.0 %, Min : -5.5
Air Fuel Ratio F/B Learning B1: Max : -3.1, -3.1 %, Min : -7.8
Engine RPM: Max : 1625, 745 rpm, Min : 724
Vehicle Speed: Max : 21, 5 km/h, Min : 0

Graph Zoom IN & OUT

With using 2 fingers, the dynamic graph can be minimized as small as the total of 8 graphs can be displayed in a single screen. Oppositely, the graph can be maximized as big as the graph fits in the screen.


ZENiTH
Data Analysis(All Items)
Engine Load Value
43.9 %
Reset MinMax
★Reset Scale
Overlap
Back
Record
More ⬇
Engine Coolant Temperature
Air Fuel Ratio F/B Value B1
Air Fuel Ratio F/B Learning B1
Engine RPM
Vehicle Speed
Ignition Timing(#1)
Intake Air Temperature

BACK

Returns to the text based numeric data display mode.

RECORD

Refer to next section [Data Recording] for more details.

Selected Items / All Items

Too many parameters

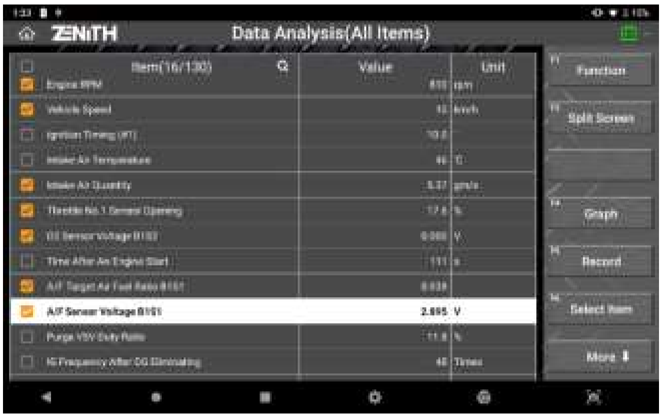
Late model vehicles provide the more parameters, sometimes hundreds of them are listed for a single system. Parameters are scattered here and there in the data list, and the increased parameters makes it more difficult to check and monitor the related parameters efficiently moving page to page for finding the desired parameters one after another.

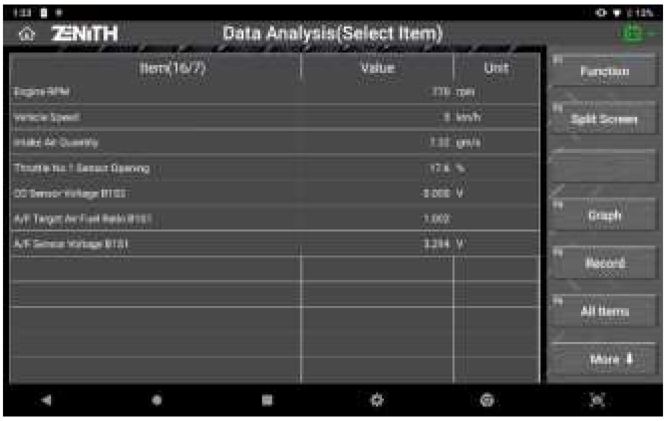
Less the parameters, faster the data refreshing rate

As the more parameters are selected, it takes more time to receive data of the increased number of parameters from the control module, and inevitably it results in slower data refreshing rate. And vice versa: the fewer parameters you select, the faster data frame refreshing rate you get.

Selected Items

Switch to the [Full Screen] Mode and select the desired parameters from the data list by ticking on the check box in the head of the parameter names. Select [Select Item] on the left, then just the selected parameters are listed in the screen as shown below.


ZENiTH
Data Analysis(All Items)
Item(16/130)
Value
Unit
Function
Split Screen
Graph
Record
Select Item
More

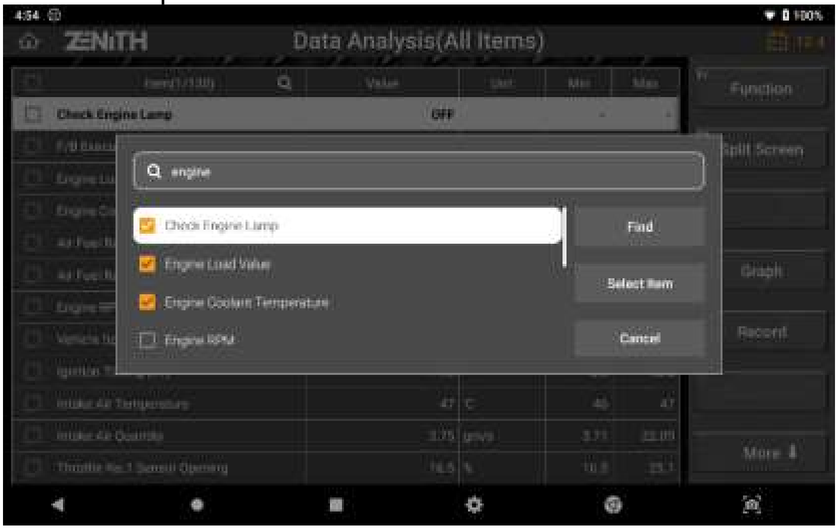

ZENiTH
Data Analysis(Select Item)
Item(16/7)
Value
Unit
Function
Split Screen
Graph
Record
All Items
More

- **All Items**

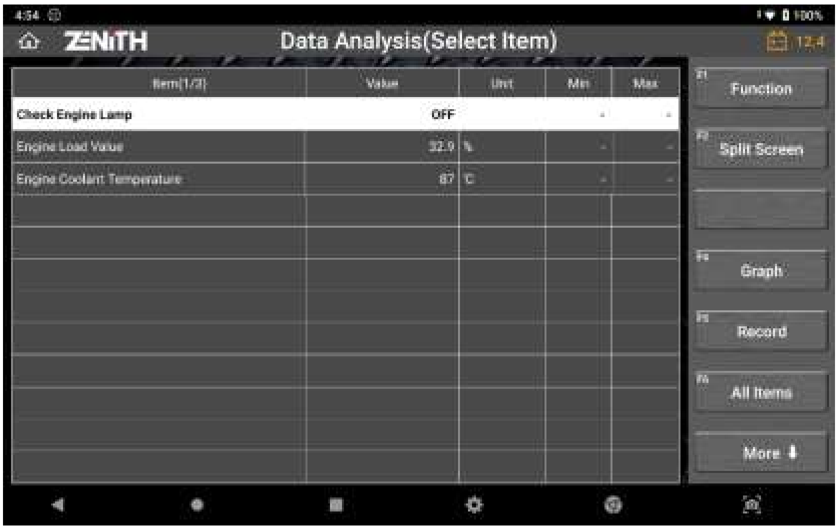
Select [ALL ITEMS] to return to the full list mode.

- **Searching**

To search specific item(s), simply hit the magnifying icon located next to the Item number at the top of the list.

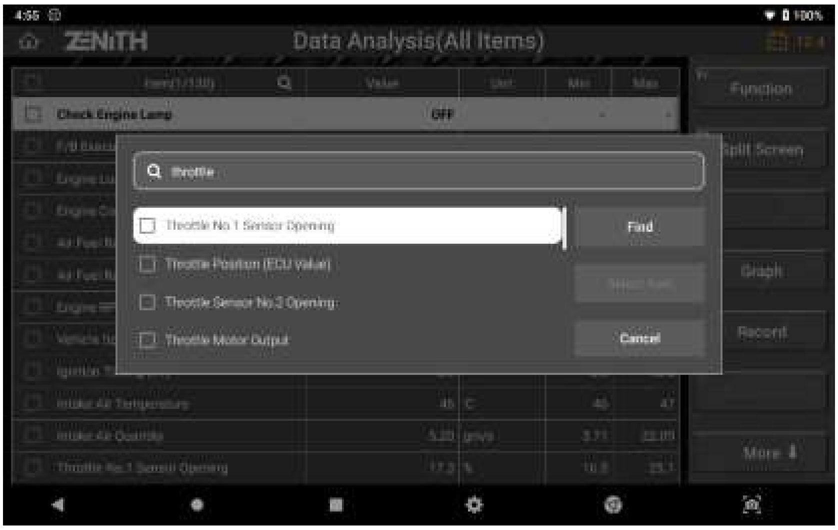

4:54
100%
ZENITH
Data Analysis(All Items)
12.4
Item(1/130)
Value
Unit
Min
Max
Check Engine Lamp
OFF
engine
☑ Check Engine Lamp
☑ Engine Load Value
☑ Engine Coolant Temperature
☐ Engine RPM
Find
Select Item
Cancel
Function
Split Screen
Graph
Record
More

To observe desired items separately, hit the checkbox in front of each item and press [Select Item] button.


4:54
100%
ZENITH
Data Analysis(Select Item)
12.4
F1 Function
F2 Split Screen
F4 Graph
F5 Record
F6 All Items
More

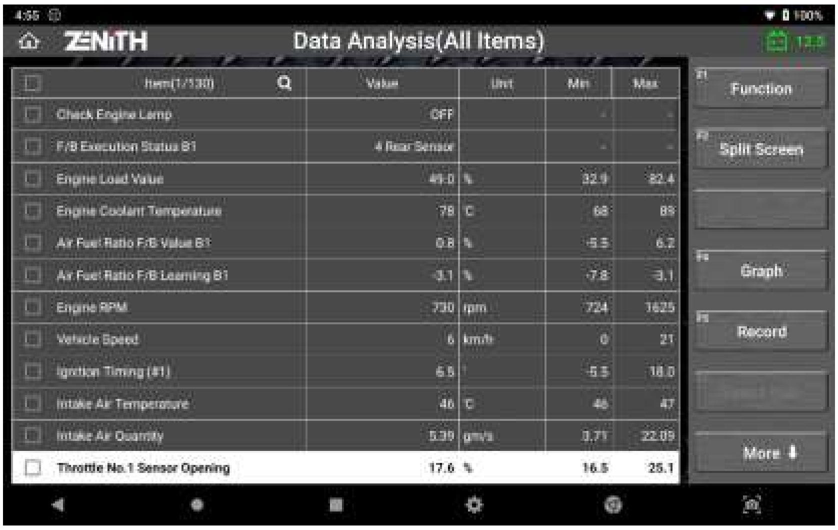
Item(1/3)	Value	Unit	Min	Max
Check Engine Lamp	OFF		-	-
Engine Load Value	32.9	%	-	-
Engine Coolant Temperature	87	℃	-	-

To jump to the page where desired item is displayed, select the item and hit the [Find] button.


4:55
100%
ZENITH
Data Analysis(All Items)
Function
Split Screen
Graph
Record
More
Find
Cancel

throttle

- ☐ Throttle No.1 Sensor Opening
- ☐ Throttle Position (ECU Value)
- ☐ Throttle Sensor No.2 Opening
- ☐ Throttle Motor Output


4:55
100%
ZENITH
Data Analysis(All Items)
12.0
Function
Split Screen
Graph
Record
More

☐ Item(1/130)	Value	Unit	Min	Max
☐ Check Engine Lamp	OFF		-	-
☐ F/B Execution Status B1	4 Rear Sensor		-	-
☐ Engine Load Value	49.0	%	32.9	82.4
☐ Engine Coolant Temperature	78	℃	68	89
☐ Air Fuel Ratio F/B Value B1	0.8	%	-5.5	6.2
☐ Air Fuel Ratio F/B Learning B1	-3.1	%	-7.8	-3.1
☐ Engine RPM	730	rpm	724	1625
☐ Vehicle Speed	6	km/h	0	21
☐ Ignition Timing (#1)	6.5	°	-5.5	18.0
☐ Intake Air Temperature	46	℃	46	47
☐ Intake Air Quantity	5.39	gm/s	3.71	22.09
☐ Throttle No.1 Sensor Opening	17.6	%	16.5	25.1

Custom Graph Mode

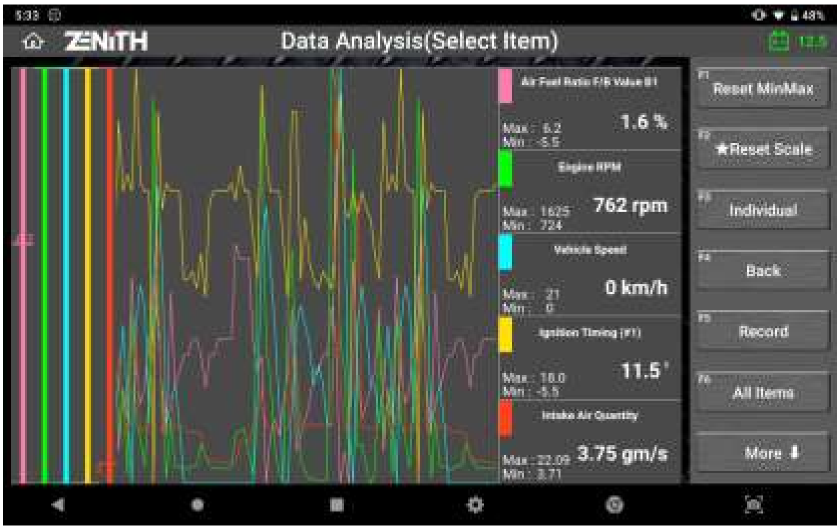
Custom mode runs when [Overlap] is selected.
In custom mode you have freedom to move the graph of each parameter horizontally and resize the vertical scale of each graph individually. Capability to customize the scale and the position of each graph offers more intuitive approach to make efficient analysis of the parameters.

Resize

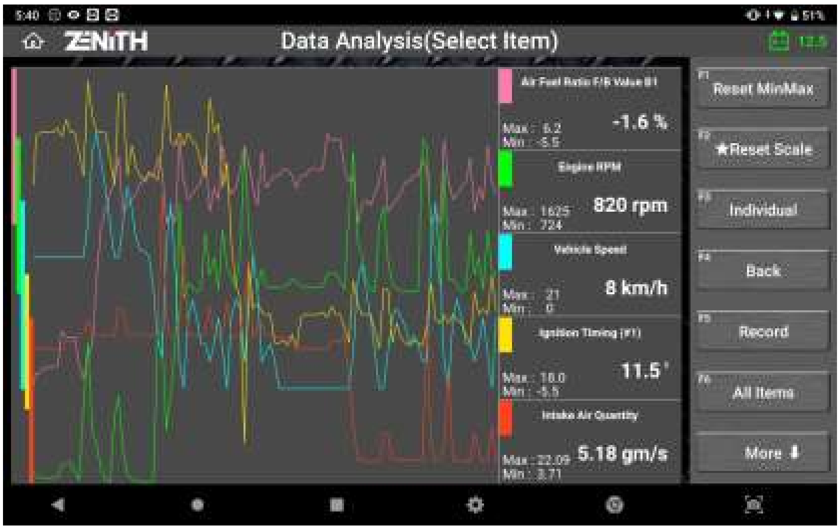
Use your 2 fingers and place them on the vertical line of the corresponding color of the parameter you want to resize. Widen or narrow the gap between the 2 fingers to make the graph larger or smaller.

Move

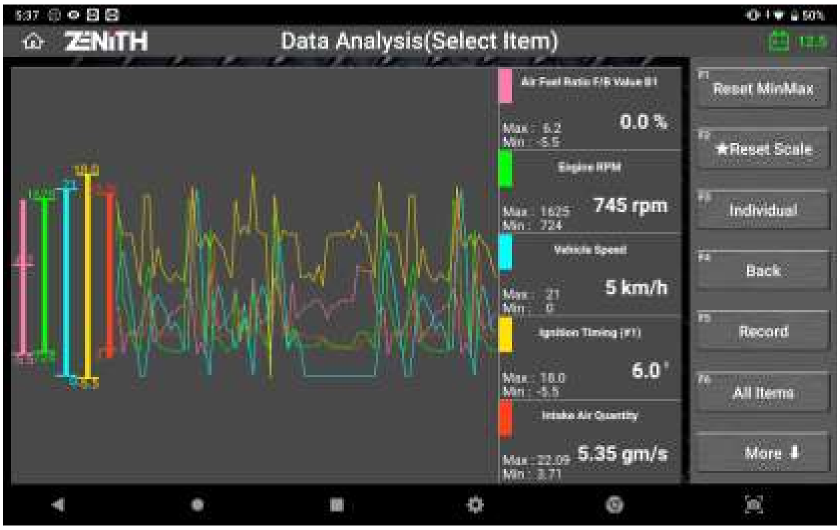
Touch the vertical line of the corresponding color with a finger or the stylus pen and drag it up and down to place the graph in the desired vertical location.


ZENiTH
Data Analysis(Select Item)
Air Fuel Ratio F/B Value B1
Max : 6.2
Min : -5.5
1.6 %
Engine RPM
Max : 1625
Min : 724
762 rpm
Vehicle Speed
Max : 21
Min : 0
0 km/h
Ignition Timing (#1)
Max : 18.0
Min : -5.5
11.5 °
Intake Air Quantity
Max : 22.09
Min : 3.71
3.75 gm/s
Reset MinMax
★Reset Scale
Individual
Back
Record
All Items
More

<Custom mode graph with no adjustment>


ZENiTH
Data Analysis(Select Item)
Air Fuel Ratio F/B Value B1
Max : 6.2
Min : -5.5
-1.6 %
Engine RPM
Max : 1625
Min : 724
820 rpm
Vehicle Speed
Max : 21
Min : 0
8 km/h
Ignition Timing (#1)
Max : 18.0
Min : -5.5
11.5 °
Intake Air Quantity
Max : 22.09
Min : 3.71
5.18 gm/s
Reset MinMax
★Reset Scale
Individual
Back
Record
All Items
More

<Custom mode graphs resized and separated>

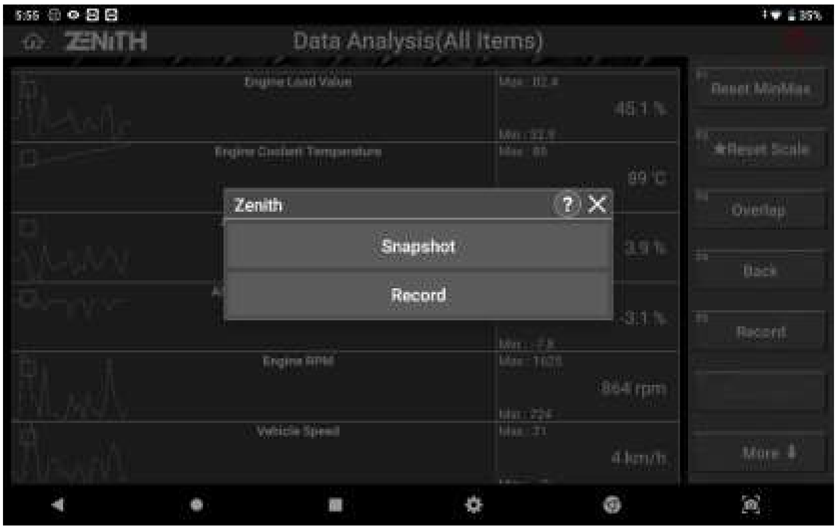

Data Analysis(Select Item)
Air Fuel Ratio F/B Value B1
Max : 6.2
Min : -5.5
0.0 %
Engine RPM
Max : 1625
Min : 724
745 rpm
Vehicle Speed
Max : 21
Min : 0
5 km/h
Ignition Timing (#1)
Max : 18.0
Min : -5.5
6.0 °
Intake Air Quantity
Max : 22.09
Min : 3.71
5.35 gm/s
Reset MinMax
★Reset Scale
Individual
Back
Record
All Items
More ⬇

<Custom mode graphs resized and overlapped in the center of the screen>

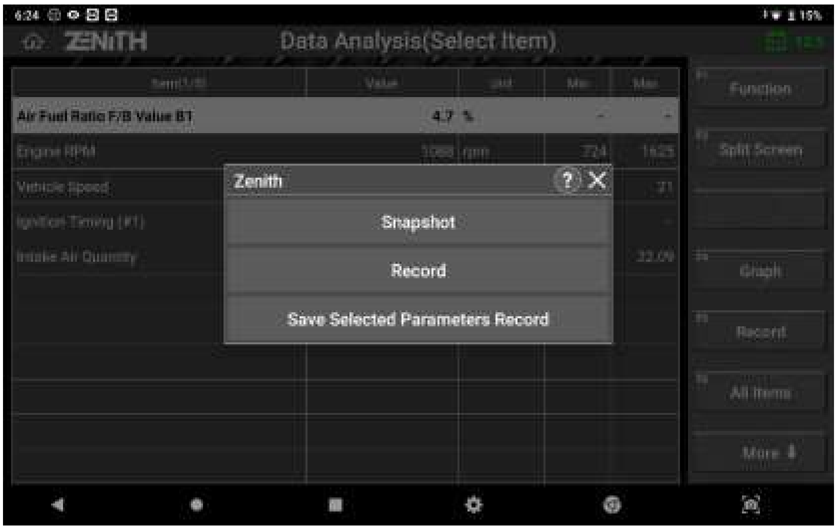
Data Recording

Record Data Options

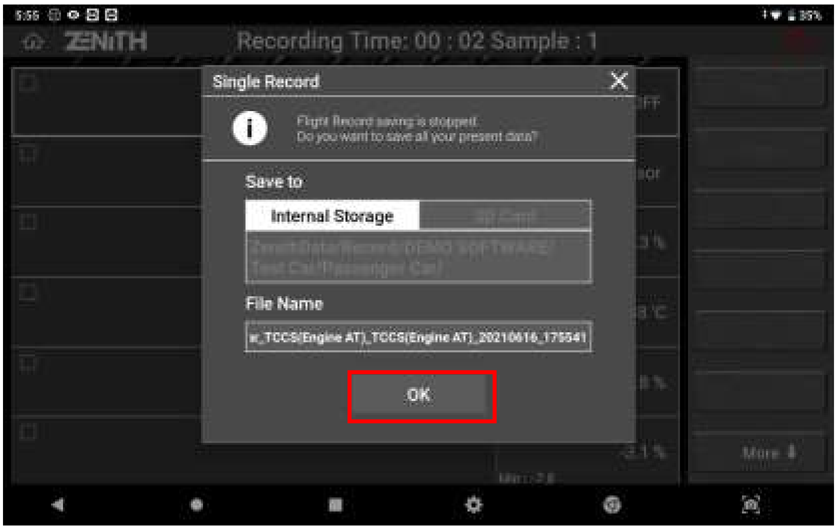
Select [Snapshot] button to start saving a screen capture of one frame containing all parameters.


Data Analysis(All Items)
Engine Load Value
Engine Coolant Temperature
Engine RPM
Vehicle Speed
Zenith
Snapshot
Record
Reset MinMax
★Reset Scale
Overlap
Back
Record
More ⬇

Select [Record] to save consecutive multiple frames containing all parameters. Selecting [Save Selected Parameters Record] button will allow the users to save the consecutive multiple frames of selected parameters that are being recorded internally since selection.


Data Analysis(Select Item)
Air Fuel Ratio F/B Value B1
4.7 %
Engine RPM
Vehicle Speed
Ignition Timing (#1)
Intake Air Quantity
Zenith
Snapshot
Record
Save Selected Parameters Record
Function
Split Screen
Graph
Record
All Items
More

- **SINGLE RECORD**
  Just like a snap shot, only a single frame at the time of touching the button is sampled and recorded.


Recording Time: 00 : 02 Sample : 1
Single Record
Save to
Internal Storage
SD Card
File Name
OK
More

Flight Record saving is stopped.
Do you want to save all your present data?

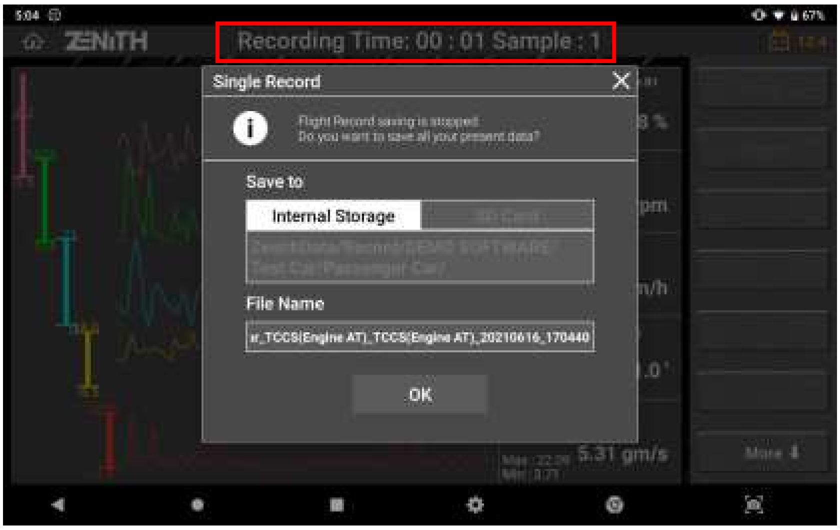
Save to: Internal Storage

File Name: e_TCCS(Engine AT)_TCCS(Engine AT)_20210616_175541

Check the record saving path and file name, modify, if necessary, then select [OK] to save the record to a file.

CONSECUTIVE RECORD

Starts recording multiple frames and continues until stopped by the user. The record time and number of samples (frames) are indicated in the top of the screen.



Recording Time: 00 : 01 Sample : 1

Single Record

Flight Record saving is stopped.
Do you want to save all your present data?

Save to: Internal Storage

File Name: r_TCCS(Engine AT)_TCCS(Engine AT)_20210616_170440

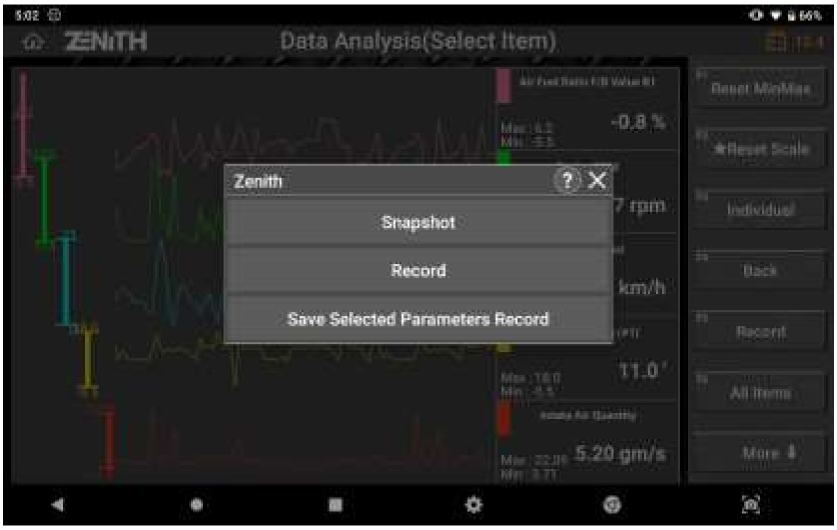
5:04
ZENiTH
67%
Internal Storage
SD Card
OK
5.31 gm/s
More

- Select “Trigger” to mark the important or critical moment, which is going to be indicated when reviewing the data.
- Select “Close” to stop recording the data and select “OK” to end, then the data is saved as the Flight Record Data in the Z5 internal memory.

SELECTED ITEMS RECORD

This option is available only when data list or graphs are being displayed in [SELECT ITEM] mode that shows just the data readings of the selected parameters.

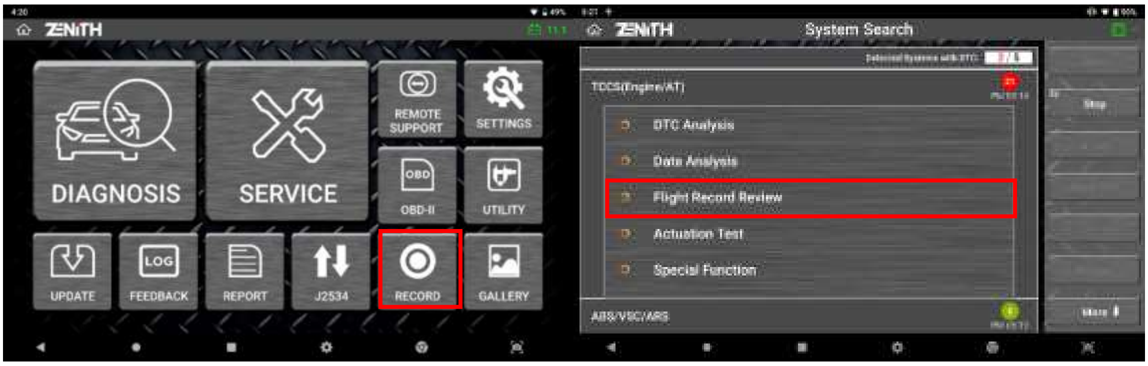
Unlike Consecutive Record that starts recoding when selected, Z5 stops recording immediately and saves the data that has been previously recorded in its temporary memory to a file when you choose [SAVE SELECTED PARAMETERS RECORD].



5:02
66%
ZENiTH
Data Analysis(Select Item)
Zenith
Snapshot
Record
Save Selected Parameters Record
-0.8 %
rpm
km/h
11.0
5.20 gm/s
Reset MinMax
★Reset Scale
Individual
Back
Record
All Items
More

- ## Recorded Data Replay

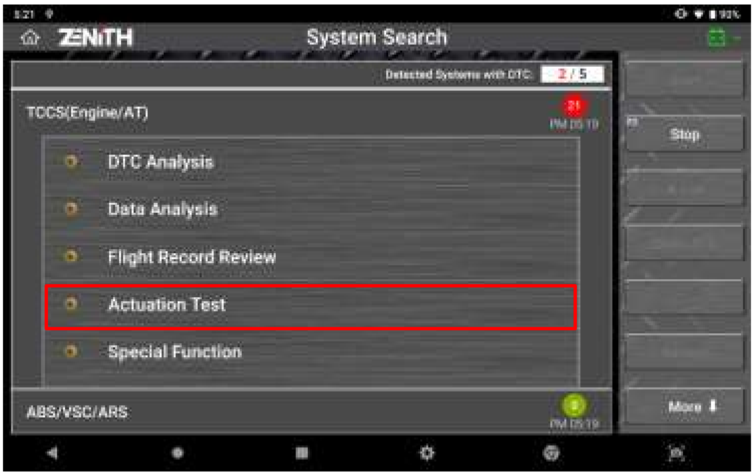
Recorded data can be reviewed and replayed by selecting “Record” function from the Z5 main screen, or “Record Review” from the diagnostic function’s menu.


ZENITH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY
ZENITH
System Search
TDCS(Engine/AT)
DTC Analysis
Data Analysis
Flight Record Review
Actuation Test
Special Function
ABS/VSC/ARS
Stop
More

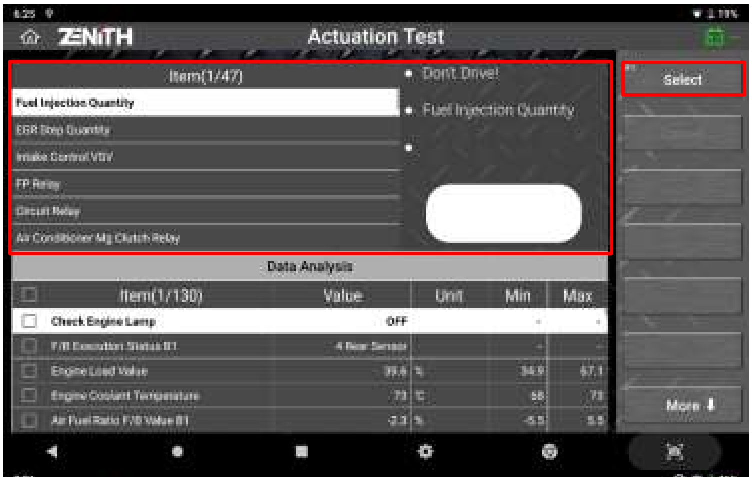
5.6 Actuation Test

This is a function that runs or stops the active parts on the output side of the control module such as injector, fans and valves, and examines the operation of the active parts and the related circuits. * Supported actuation test items vary depending on the control systems of vehicles.

● Actuation Test Item Selection


5:21
ZENiTH
System Search
Detected Systems with DTC: 2 / 5
TCCS(Engine/AT)
21
PM 05:19
DTC Analysis
Data Analysis
Flight Record Review
Actuation Test
Special Function
ABS/VSC/ARS
0
PM 05:19
Stop
More

Select [Actuation Test] from diagnostic functions menu after selecting a control system for diagnosis


6:25
ZENiTH
Actuation Test
Item(1/47)
Fuel Injection Quantity
EGR Step Quantity
Intake Control VSV
FP Relay
Circuit Relay
Air Conditioner Mg Clutch Relay
Don't Drive!
Fuel Injection Quantity
Select
More

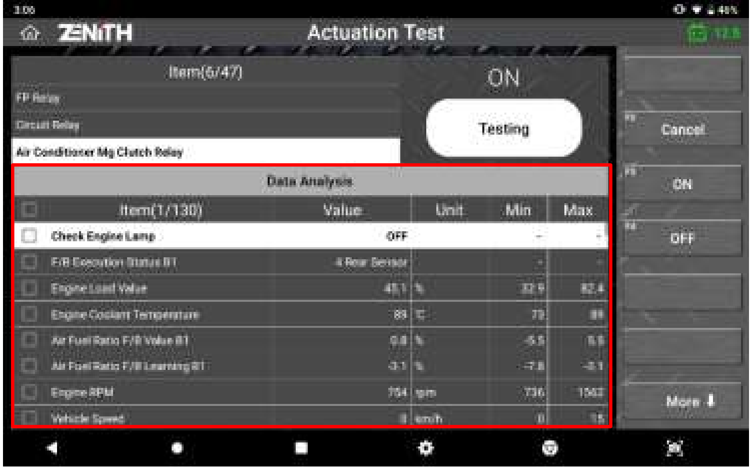
Data Analysis

☐	Item(1/130)	Value	Unit	Min	Max
☐	Check Engine Lamp	OFF		-	-
☐	F/B Execution Status B1	4 Rear Sensor		-	-
☐	Engine Load Value	39.6	%	34.9	67.1
☐	Engine Coolant Temperature	73	℃	58	73
☐	Air Fuel Ratio F/B Value B1	-2.3	%	-5.5	5.5

Select an auction test item from the list in the upper section of the screen.

>> Observe the vehicle condition for each test on the Left side screen.

>> Select [SELECT] button on the right of the screen.


3:06
ZENiTH
Actuation Test
Item(6/47)
FP Relay
Circuit Relay
Air Conditioner Mg Clutch Relay
ON
Testing
Cancel
ON
OFF
More

Data Analysis

☐	Item(1/130)	Value	Unit	Min	Max
☐	Check Engine Lamp	OFF		-	-
☐	F/B Execution Status B1	4 Rear Sensor		-	-
☐	Engine Load Value	45.1	%	32.9	82.4
☐	Engine Coolant Temperature	89	℃	73	89
☐	Air Fuel Ratio F/B Value B1	0.8	%	-5.5	5.5
☐	Air Fuel Ratio F/B Learning B1	-3.1	%	-7.8	-0.1
☐	Engine RPM	754	rpm	736	1562
☐	Vehicle Speed	0	km/h	0	15

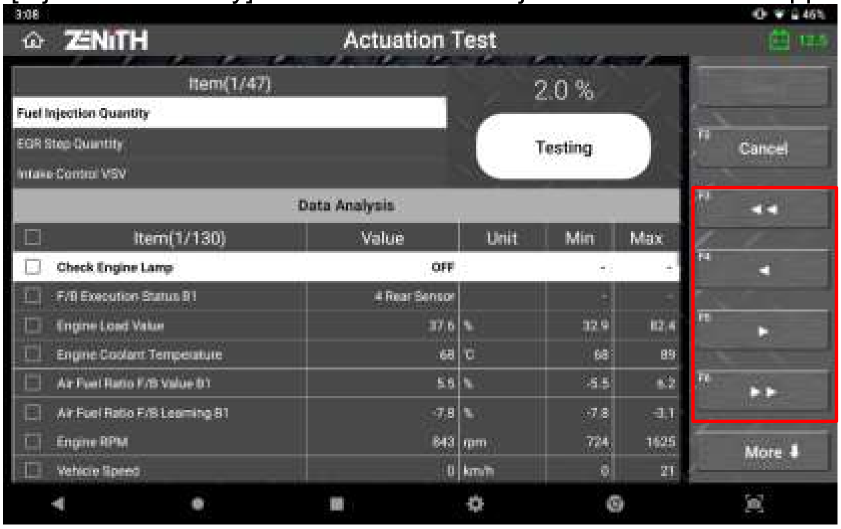
Search and select the related data parameters in the lower section of the screen for reference.

>> When done, select the option for ◄ ► control on the left and check the response of the selected active parts and the vehicle control system's reactions by monitoring the live data provided in the lower half of the screen

● Actuator Run / Stop control

Please note that the options for Run / Stop control of the actuators are offered differently according to the type of the active part and its attribute, i.e. Switches: ON/OFF, Volume control: Increase / Decrease, Function: Execute / Unexecuted. Please check the buttons on the right of the screen to comprehend how the test function runs and how to stop it before starting the actuation test.

Example A: [Injection Quantity] is selected where injection time control applies.


3:08
46%
ZENITH
Actuation Test
Item(1/47)
Fuel Injection Quantity
EGR Step Quantity
Intake Control VSV
2.0 %
Testing
F2
Cancel
F3
◄◄
F4
◄
F5
►
F6
►►
More

Data Analysis

☐ Item(1/130)	Value	Unit	Min	Max
☐ Check Engine Lamp	OFF		-	-
☐ F/B Execution Status B1	4 Rear Sensor		-	-
☐ Engine Load Value	37.6	%	32.9	82.4
☐ Engine Coolant Temperature	68	℃	68	89
☐ Air Fuel Ratio F/B Value B1	5.5	%	-5.5	6.2
☐ Air Fuel Ratio F/B Learning B1	-7.8	%	-7.8	-3.1
☐ Engine RPM	843	rpm	724	1625
☐ Vehicle Speed	0	km/h	0	21

Example B: [VVT Control] is selected where the function execution control applies

● Different Items Supported

Not all active parts of a control system are supported for this function.
The list of the active parts available for the actuation test is predefined by the automakers, therefore different items are supported according to the brands and models.

5.7 Record Review

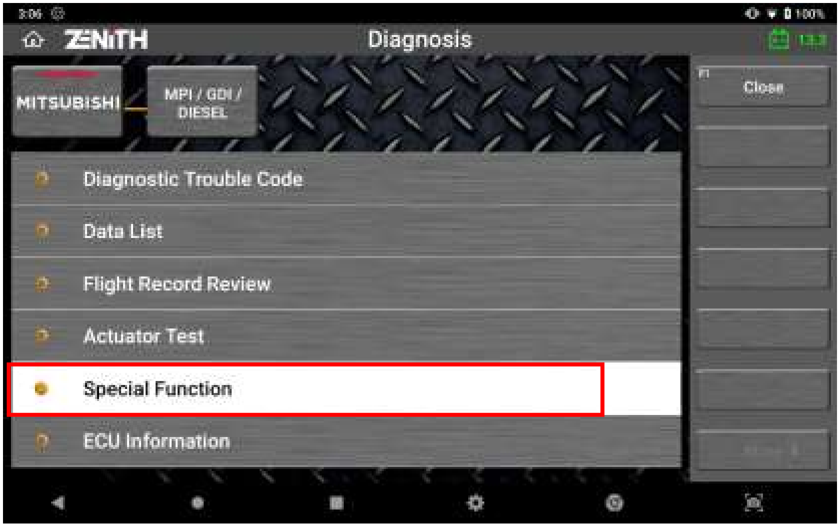
Reviews the recorded data and the function works the same as selecting the [Record] from the Z5 main menu. Please refer to [Chapter 9. Record & Gallery] in this manual for further details.

5.8 Special Function

While DTC Analysis, Data Analysis, Actuation Test and System Identification functions are considered basic diagnostic functions, there are more advanced functions that are needed for the completion of the service and maintenance for the late model vehicles such as adaptive value reset, immobilizer registration, control module coding, sensor calibration, as well as various test functions are collectively called [Special Function].

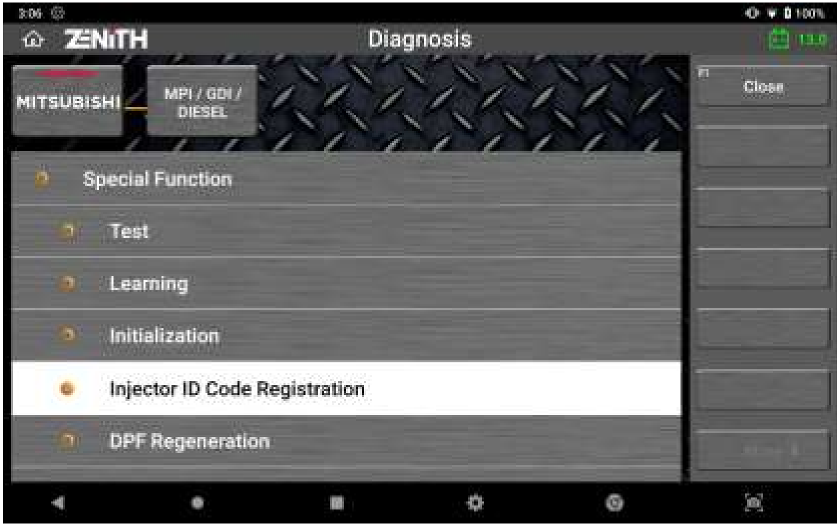
Selecting Special Function

Select [Special Function] from the diagnostic functions menu, then the list of the special functions available for the selected control system follows.

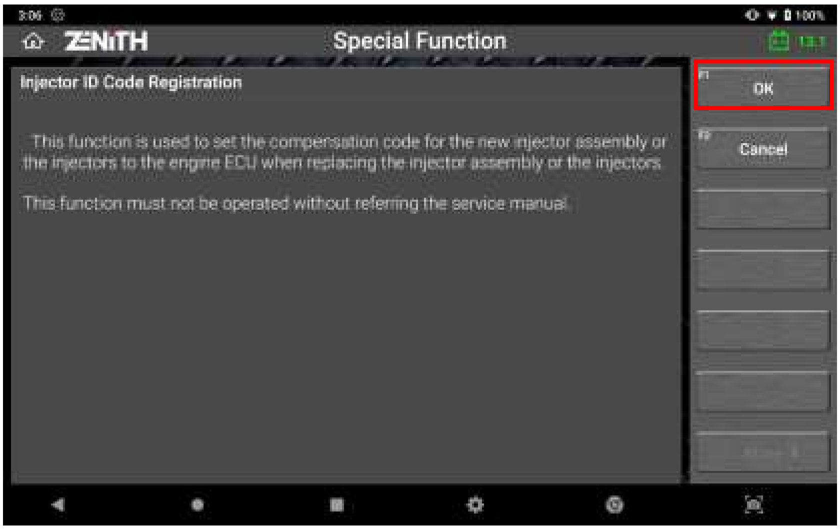

ZENITH
Diagnosis
MITSUBISHI
MPI / GDI / DIESEL
Close
Diagnostic Trouble Code
Data List
Flight Record Review
Actuator Test
Special Function
ECU Information

Following screen captures are taken while conducting [Injector ID Code Registration] function on a MITSUBISHI

Find and select the desired special function from the list


ZENITH
Diagnosis
MITSUBISHI
MPI / GDI / DIESEL
Close
Special Function
Test
Learning
Initialization
Injector ID Code Registration
DPF Regeneration

Read the introduction and instruction provided on the screen carefully and select [START] or [OK] button on the right of the screen.

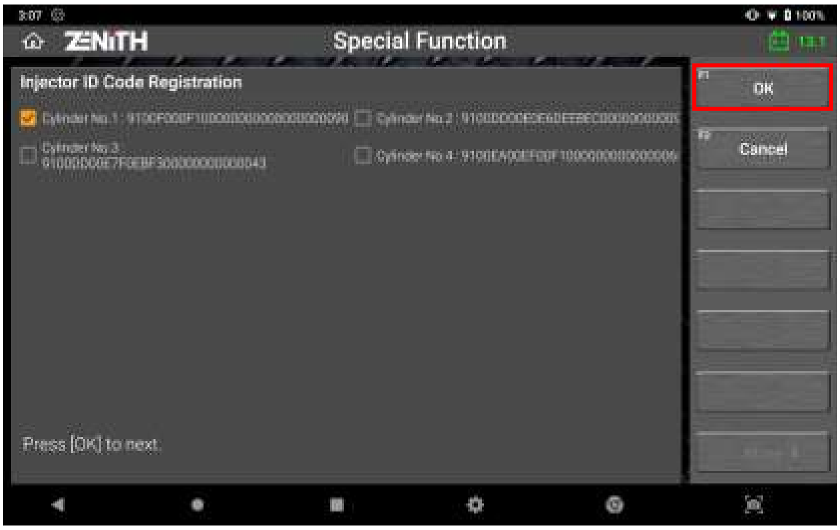

Special Function
OK
Cancel

Injector ID Code Registration

This function is used to set the compensation code for the new injector assembly or the injectors to the engine ECU when replacing the injector assembly or the injectors.

This function must not be operated without referring the service manual.

Select one of the injectors to code and select [OK].

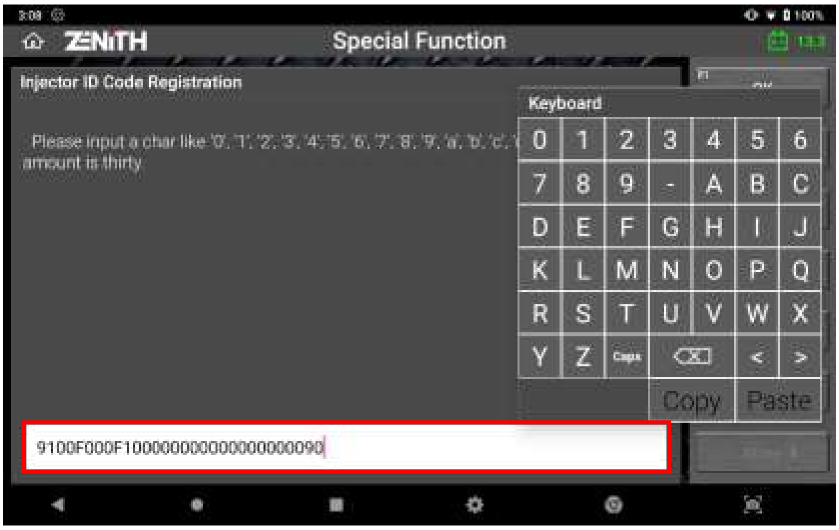

Special Function
OK
Cancel
☑ Cylinder No.1
☐ Cylinder No.2
☐ Cylinder No.3
☐ Cylinder No.4

Injector ID Code Registration

Press [OK] to next.

Type in the injector code for the selected one using the keypad on the screen.
Select OK when done.

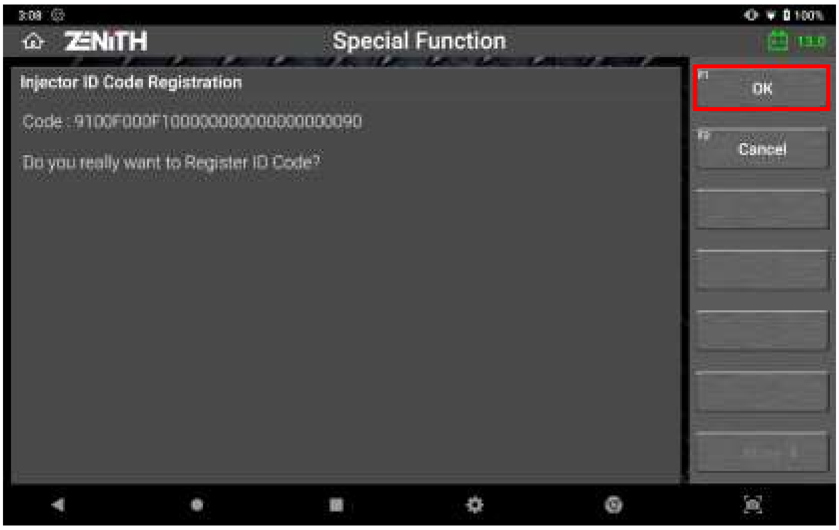
Check if the code has been inputted correctly, then select OK to code the injector.


Special Function
Keyboard
0 1 2 3 4 5 6
7 8 9 - A B C
D E F G H I J
K L M N O P Q
R S T U V W X
Y Z Caps ⌫ < >
Copy Paste

Injector ID Code Registration

Please input a char like '0', '1', '2', '3', '4', '5', '6', '7', '8', '9', 'a', 'b', 'c', '
amount is thirty

9100F000F1000000000000000000090

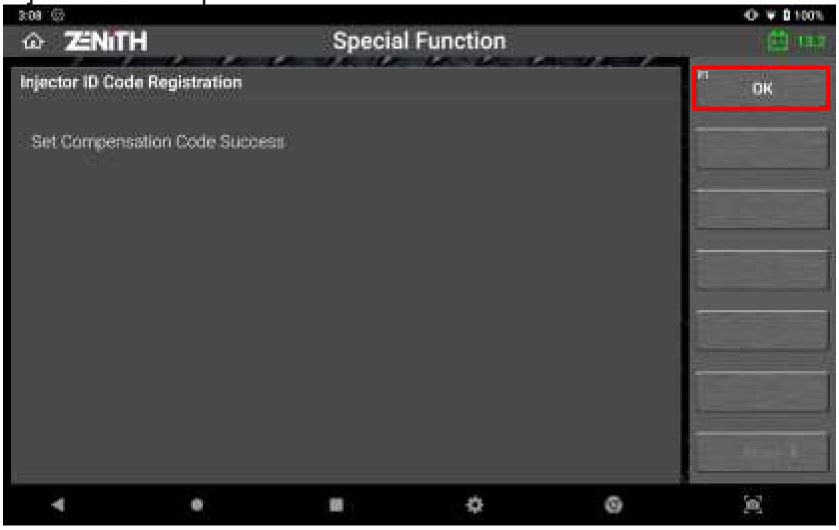

Special Function
OK
Cancel

Injector ID Code Registration

Code : 9100F000F1000000000000000000090

Do you really want to Register ID Code?

Function Completed message is displayed when the code value is entered without error.
Select [OK] to end the Special Function.


Special Function
OK

Injector ID Code Registration

Set Compensation Code Success

Notice

Different functions supported

The list of the Special Functions available for the selected vehicle is predefined by the car manufacturers, therefore please mind that different special functions are supported according to the brands and models.

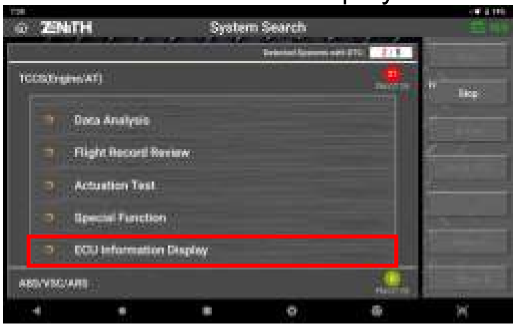
Test Conditions

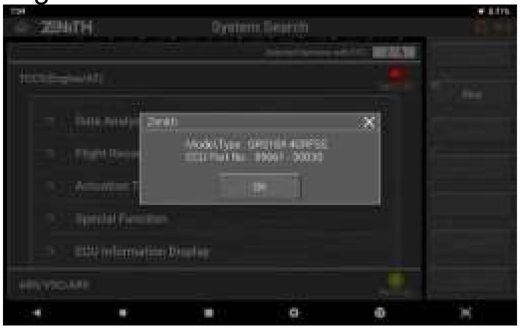
An unfulfilled condition such as slightly misaligned steering wheel, engine not fully warmed up or released parking brake may lead to the failure of the function, so please make sure to observe the test conditions and get the vehicle ready as instructed on screen before commencing, otherwise the function will fail.

5.9 ECU Information Display

ECU Part Number and other information needed for identifying the control unit is provided as one of the basic diagnostic functions

Select ECU Information Display from the diagnostic function menu.


ZENITH
System Search
Skip
TCCS(Engine/AT)
Data Analysis
Flight Record Review
Actuation Test
Special Function
ECU Information Display
ABS/VSC/ARS


ZENITH
System Search
Zenith
OK
Special Function
ECU Information Display

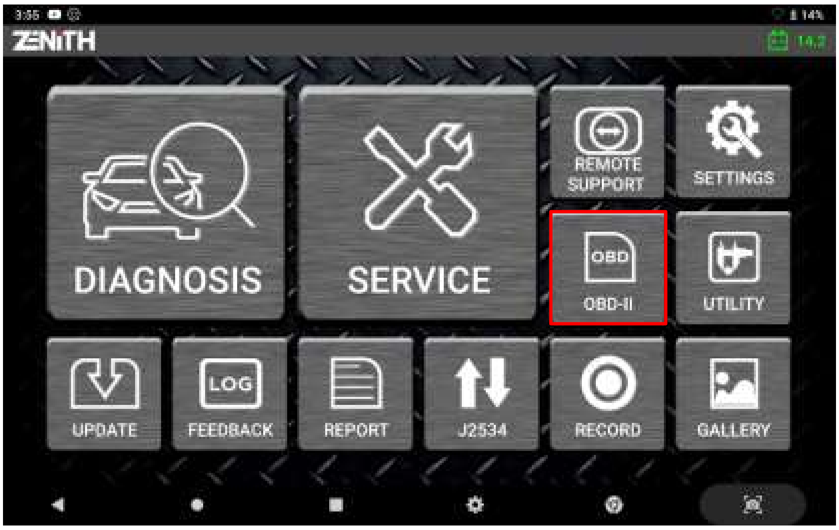
Then the ECU information of the selected system is displayed.

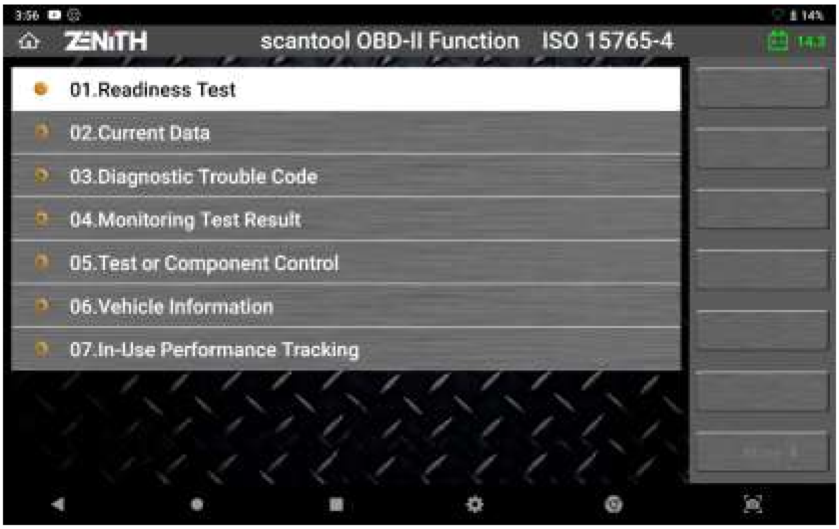
Chapter 6. OBD-II Mode (Service)

OBD-II Function

OBD-II function is used for diagnosis of OBD-II or EOBD complaint vehicle’s emission-related powertrain control system and inter-system network that support the industrial standard protocols.

Please extend the main DLC cable to the vehicle side diagnostic socket and select [OBD-II].


3:55
ZENITH
14%
14.2
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD
OBD-II
UTILITY
UPDATE
LOG
FEEDBACK
REPORT
J2534
RECORD
GALLERY


3:56
ZENITH
scantool OBD-II Function ISO 15765-4
14%
14.2
01.Readiness Test
02.Current Data
03.Diagnostic Trouble Code
04.Monitoring Test Result
05.Test or Component Control
06.Vehicle Information
07.In-Use Performance Tracking

Typical OBD2 menu for a CAN-Bus type vehicle

OBD-II Test Mode (Diagnostic Service)

There are 9 diagnostic services described in the latest OBD-II standard SAE J1979. Before 2002, J1979 referred to these services as "modes" and they are as follows:

Service	Description
01	Show current data
02	Show freeze frame data
03	Show stored Diagnostic Trouble Codes
04	Clear Diagnostic Trouble Codes and stored values
05	Test results, oxygen sensor monitoring (non CAN only)
06	Test results, other component/system monitoring (Test results, oxygen sensor monitoring for CAN only)
07	Show pending Diagnostic Trouble Codes (detected during current or last driving cycle)
08	Control operation of on-board component/system
09	Request vehicle information

Test Modes supported by Z5

Vehicle manufacturers are not required to support all services, and Z5 does not support all these generic test modes (diagnostic services) under the standard service names because the product is built to conduct manufacturer specific diagnostic functions.

- Service 01 is supported by Z5 in 2 functions, 01. Readiness Test and 02. Current Data. You can check the readiness of on-board diagnostic system by selecting [01. Readiness test] and monitor the data readings of powertrain control system parameters by selecting [02. Current Data].

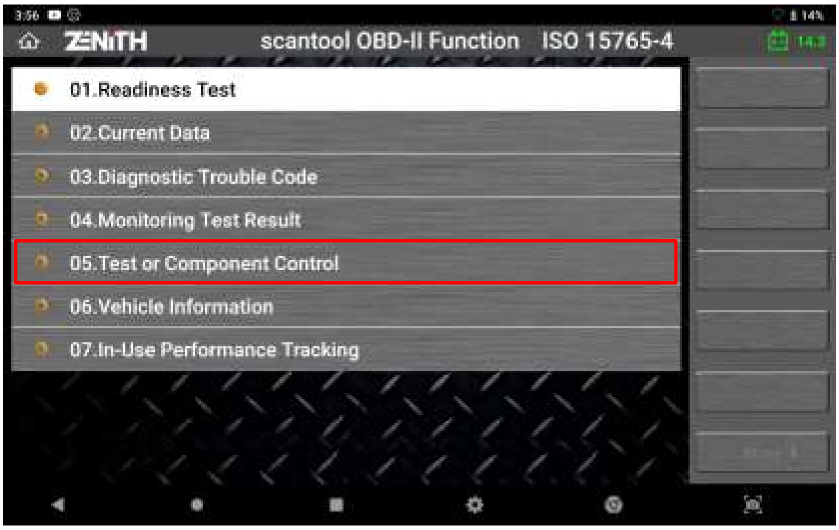
- Service 02, 03, 04 and 07 are supported by Z5 when selecting [03. Diagnostic Trouble Code] from the menu.

- Service 05 is supported just for non-CAN vehicles, and Z5 shows [04. O2 Test Results] in the menu for this service in case the vehicle is a non-CAN type that supports the function.

- Service 06 is supported just for CAN vehicles, and Z5 shows [04. Monitoring Test Result] instead of [04. O2 Test Results] automatically if the vehicle communicates in CAN-Bus protocols.

- Service 08 is supported when [05. Test or Component Control] is selected.

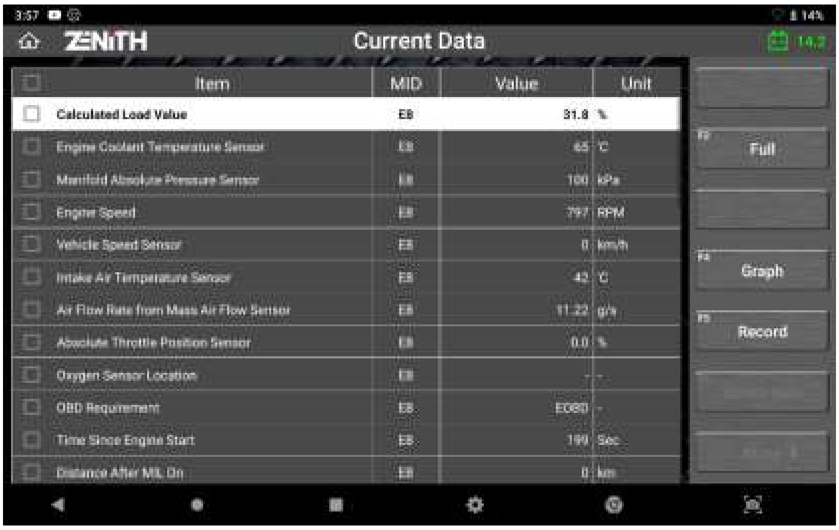
- Service 09 is available under [06. Vehicle Information] menu, and PID 08 of Service 09 that is reading “In-use performance tracking of spark ignition vehicles” data is supported under [07. In-use Performance Tracking] menu separately.


3:56
14%
ZENiTH
scantool OBD-II Function
ISO 15765-4
14.3
01.Readiness Test
02.Current Data
03.Diagnostic Trouble Code
04.Monitoring Test Result
05.Test or Component Control
06.Vehicle Information
07.In-Use Performance Tracking

Typical OBD2 menu for a non-CAN type vehicle

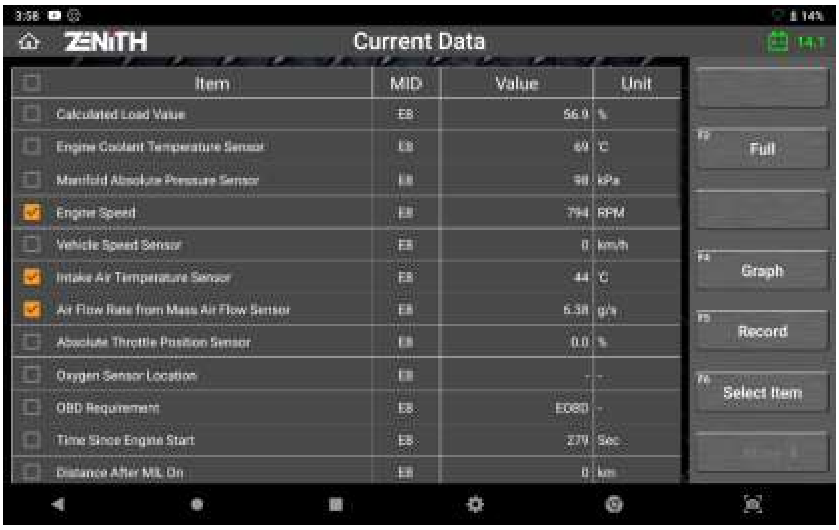
OBD-II / EOBD Current Data

As explained above, when [1. Readiness Test] and [2. Current Data] are selected from the OBD-II menu, Current data that is equivalent to OBD2 Service 01 is displayed as shown below:


3:57
14%
ZENiTH
Current Data
14.3
F2
Full
F4
Graph
F5
Record

☐	Item	MID	Value	Unit
☐	Calculated Load Value	E8	31.8	%
☐	Engine Coolant Temperature Sensor	E8	65	℃
☐	Manifold Absolute Pressure Sensor	E8	100	kPa
☐	Engine Speed	E8	797	RPM
☐	Vehicle Speed Sensor	E8	0	km/h
☐	Intake Air Temperature Sensor	E8	42	℃
☐	Air Flow Rate from Mass Air Flow Sensor	E8	11.22	g/s
☐	Absolute Throttle Position Sensor	E8	0.0	%
☐	Oxygen Sensor Location	E8	-	-
☐	OBD Requirement	E8	EOBD	-
☐	Time Since Engine Start	E8	199	Sec
☐	Distance After MIL On	E8	0	km

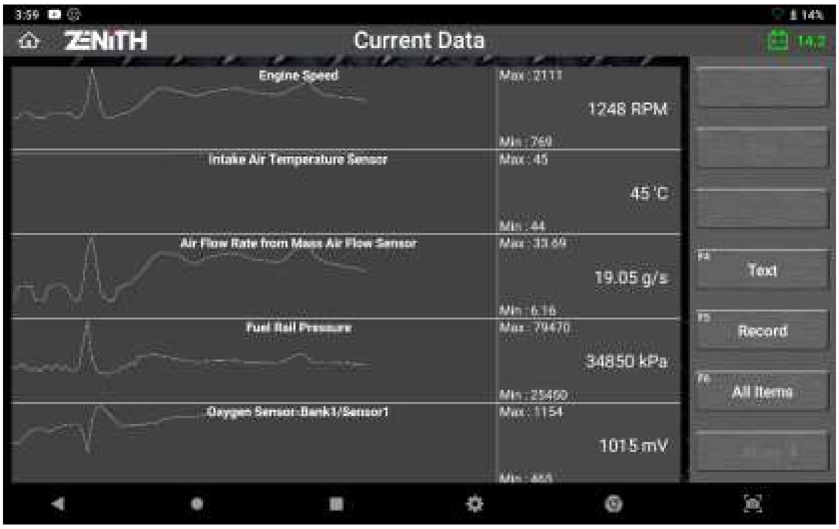
Readiness Test



3:58
ZENiTH
Current Data
14.1
F2 Full
F4 Graph
F5 Record
F6 Select Item

☐	Item	MID	Value	Unit
☐	Calculated Load Value	E8	56.9	%
☐	Engine Coolant Temperature Sensor	E8	69	°C
☐	Manifold Absolute Pressure Sensor	E8	98	kPa
☑	Engine Speed	E8	794	RPM
☐	Vehicle Speed Sensor	E8	0	km/h
☑	Intake Air Temperature Sensor	E8	44	°C
☑	Air Flow Rate from Mass Air Flow Sensor	E8	6.38	g/s
☐	Absolute Throttle Position Sensor	E8	0.0	%
☐	Oxygen Sensor Location	E8	-	-
☐	OBD Requirement	E8	EOBD	-
☐	Time Since Engine Start	E8	279	Sec
☐	Distance After MIL On	E8	0	km

Current Data in Text Mode



3:59
ZENiTH
Current Data
14.2
F4 Text
F5 Record
F6 All Items

Engine Speed
Max : 2111
1248 RPM
Min : 769

Intake Air Temperature Sensor
Max : 45
45 °C
Min : 44

Air Flow Rate from Mass Air Flow Sensor
Max : 33.69
19.05 g/s
Min : 6.16

Fuel Rail Pressure
Max : 79470
34850 kPa
Min : 25450

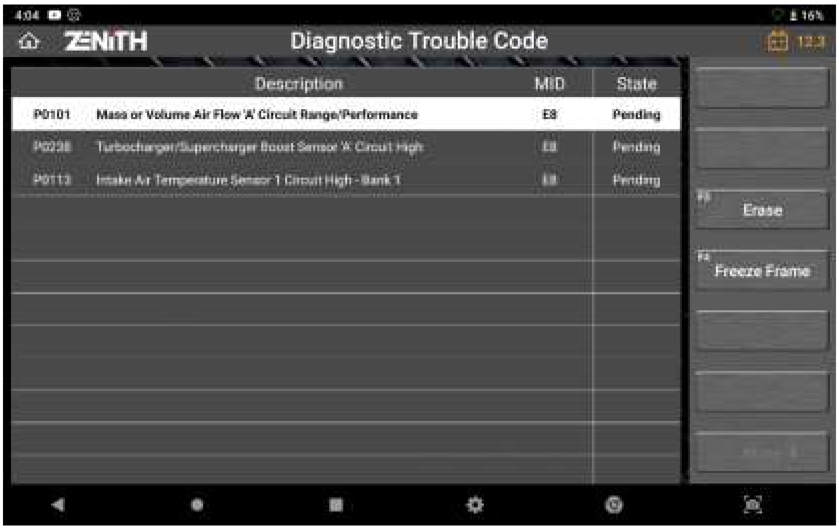
Oxygen Sensor-Bank1/Sensor1
Max : 1154
1015 mV

Current Data in Graph Mode

When a function is selected from the OBD-II menu, the result may come up with “NOT SUPPORTED” reading, and it means the selected function is not supported by the vehicle.

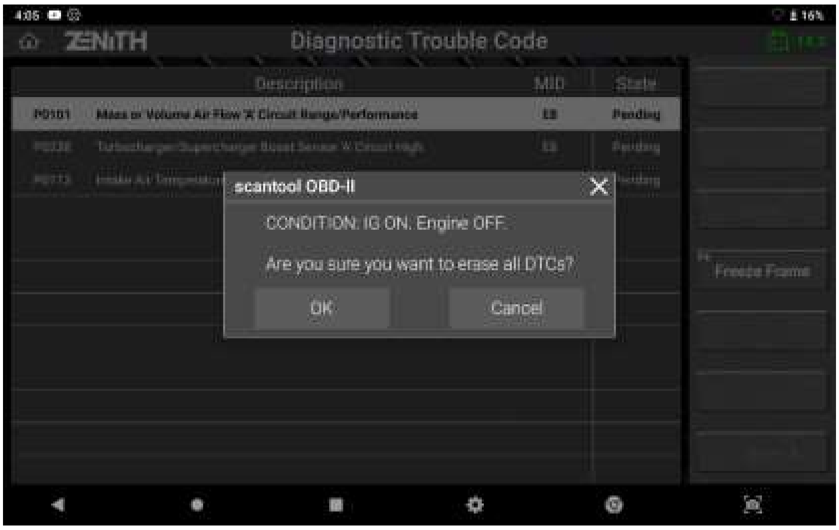
OBD-II / EOBD Diagnostic Trouble Codes

OBD-II Service 02, 03, 04 and 07 that are used for reading 'freeze frame data', 'pending' and 'current' DTCs and erasing them from the control system memory are collectively supported under [03. Diagnostic Trouble Code] menu.


4:04
16%
ZENITH
Diagnostic Trouble Code
12.3
Erase
Freeze Frame

	Description	MID	State
P0101	Mass or Volume Air Flow 'A' Circuit Range/Performance	E8	Pending
P0238	Turbocharger/Supercharger Boost Sensor 'A' Circuit High	E8	Pending
P0113	Intake Air Temperature Sensor 1 Circuit High - Bank 1	E8	Pending

OBD-II DTC Reading


4:05
16%
ZENITH
Diagnostic Trouble Code
Freeze Frame
OK
Cancel

scantool OBD-II

CONDITION: IG ON. Engine OFF.

Are you sure you want to erase all DTCs?

OBD-II DTC Erasing

Please refer to the generic OBD-II related standard documents for use of the other OBD-II services.

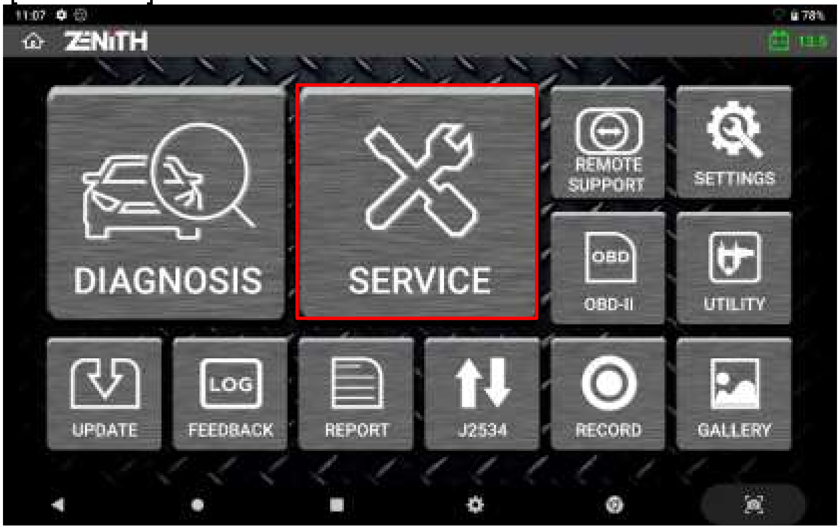
Chapter 7. Service function

7.1 Procedure of Service function

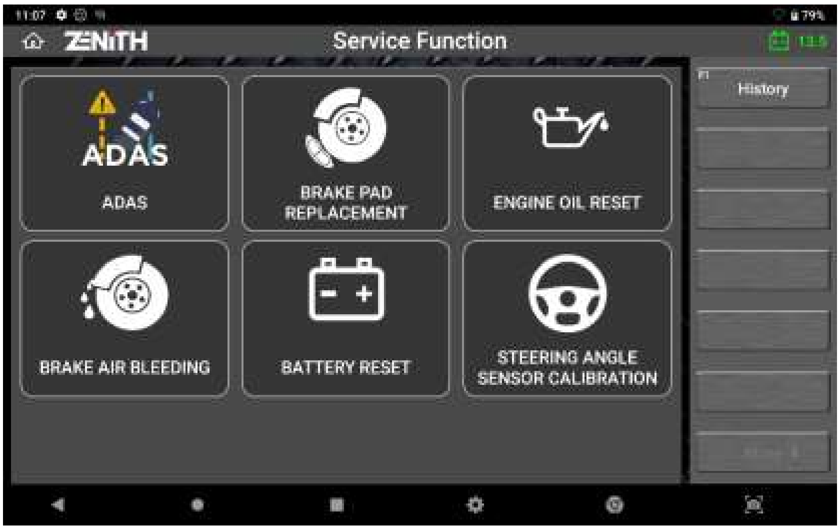
Service function offers shortcut to the most frequently used special function in workshop such as ADAS, Brake Pad Replacement, Engine Oil Reset, Brake Air Bleeding, Battery Reset, and Steering Angle Sensor Calibration*

*The list of service function will grow in the future.

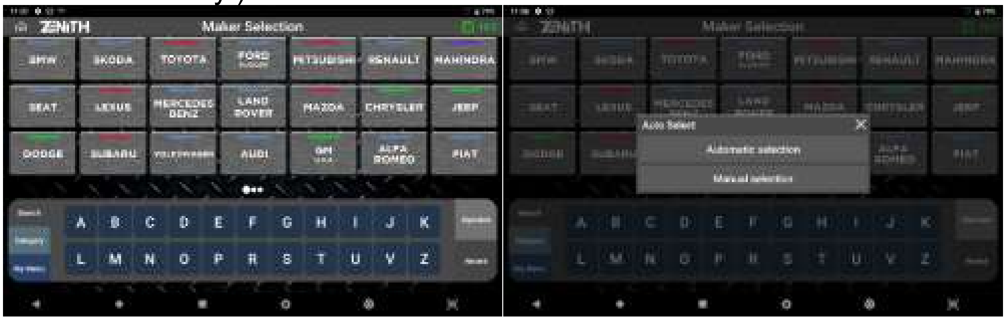
A. Select [SERVICE] in the menu.

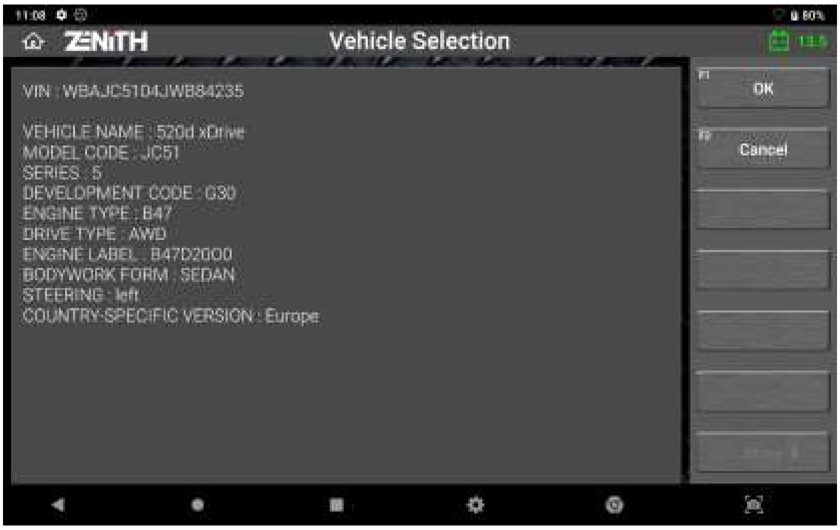

11:07
78%
ZENITH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY

B. Select the desired function.


11:07
79%
ZENITH
Service Function
History
ADAS
BRAKE PAD REPLACEMENT
ENGINE OIL RESET
BRAKE AIR BLEEDING
BATTERY RESET
STEERING ANGLE SENSOR CALIBRATION

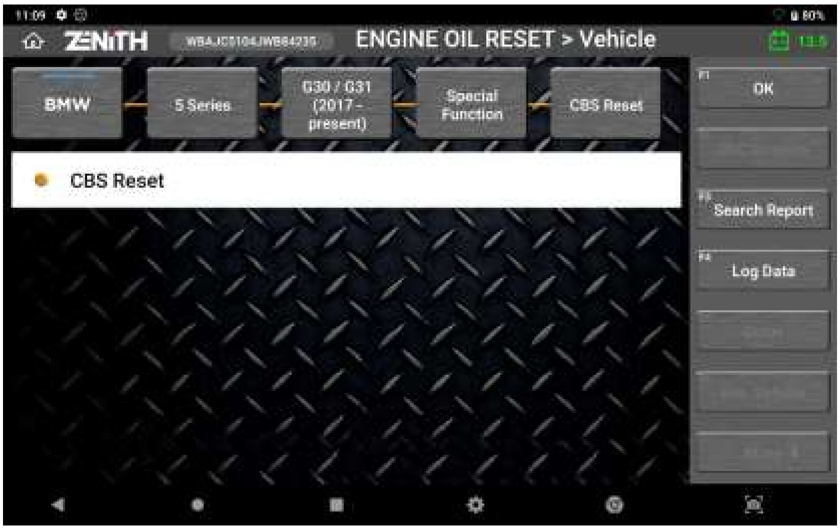
C. Select the carline you wish to diagnose.
(If Automatic selection is not available, vehicle model, year and engine type have to be selected manually.)


Maker Selection
BMW
SKODA
TOYOTA
FORD
MITSUBISHI
RENAULT
MAHINDRA
SEAT
LEXUS
MERCEDES BENZ
LAND ROVER
MAZDA
CHRYSLER
JEEP
DODGE
SUBARU
VOLKSWAGEN
AUDI
GM
ALFA ROMEO
FIAT
A B C D E F G H I J K
L M N O P R S T U V Z
Auto Select
Automatic selection
Manual selection


11:08
80%
ZENITH
Vehicle Selection
13.5
F1
OK
F2
Cancel

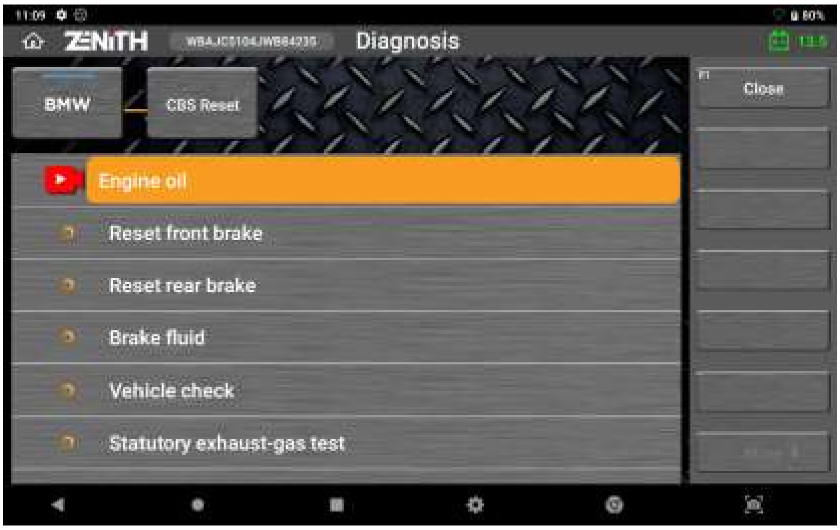
VIN : WBAJC5104JWB84235

VEHICLE NAME : 520d xDrive
MODEL CODE : JC51
SERIES : 5
DEVELOPMENT CODE : G30
ENGINE TYPE : B47
DRIVE TYPE : AWD
ENGINE LABEL : B47D20O0
BODYWORK FORM : SEDAN
STEERING : left
COUNTRY-SPECIFIC VERSION : Europe

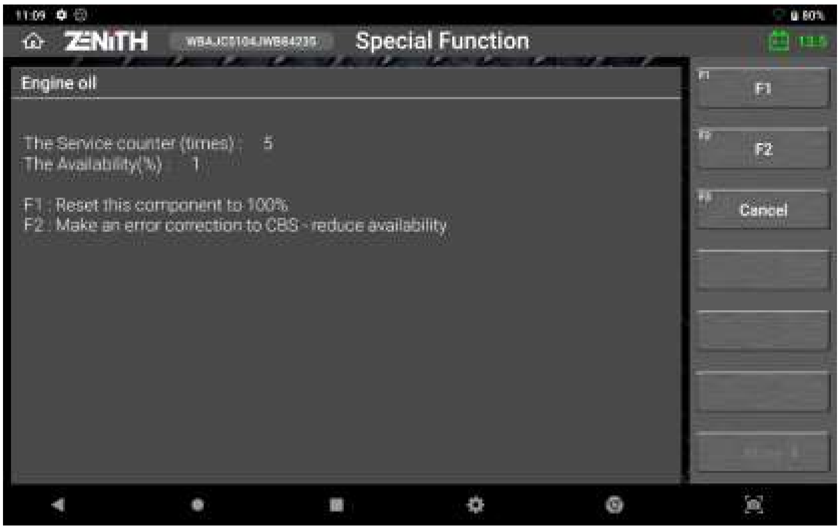

11:09
80%
ZENITH
WBAJC5104JWB84235
ENGINE OIL RESET > Vehicle
13.5
BMW
5 Series
G30 / G31 (2017 - present)
Special Function
CBS Reset
CBS Reset
F1
OK
F3
Search Report
F4
Log Data

Once the vehicle is detected automatically, confirm the vehicle information and press [OK] button. To establish communication with the system, select [OK] button located at the side menu.

- Note that certain models display one or more systems in the list and require two or more special functions to complete the task.


11:09
ZENiTH
WBAJC5104JWB84235
Diagnosis
BMW
CBS Reset
Engine oil
Reset front brake
Reset rear brake
Brake fluid
Vehicle check
Statutory exhaust-gas test
Close

D. After communication is successful, required service function will be highlighted. (If there is a tutorial video available for the specific function in EZDS official Youtube channel, play icon will be displayed in front of the function. By hitting the icon, Z5 will open the browser to play the Youtube video)


11:09
ZENiTH
WBAJC5104JWB84235
Special Function
F1
F2
Cancel

Engine oil

The Service counter (times) : 5
The Availability(%) : 1

F1 : Reset this component to 100%
F2 : Make an error correction to CBS - reduce availability

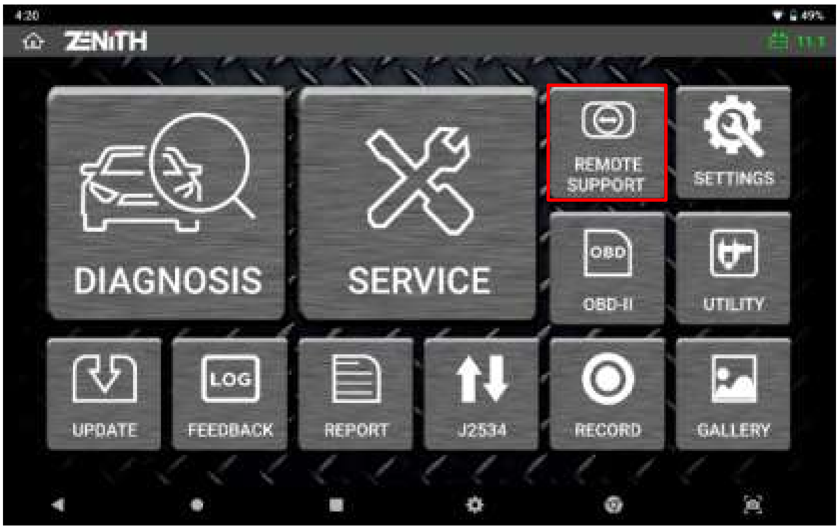
E. Always follow the description prior to start the function.

Chapter 8. Remote support & J2534 PassThru

8.1 Remote support

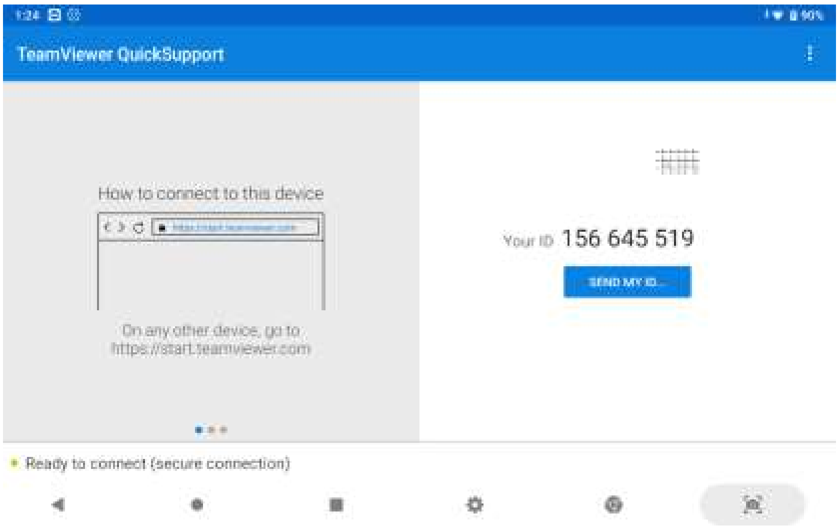
Remote support function allows connection between Zenith Z5 and mobile or PC via TeamViewer application.

*Remote support function allows another device to control Zenith Z5 only.


4:20
49%
ZENITH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD
OBD-II
UTILITY
UPDATE
LOG
FEEDBACK
REPORT
J2534
RECORD
GALLERY

- **How to connect**

Select [REMOTE SUPPORT] button in the Z5 main screen. Your device's ID will be displayed next to "Your ID". Enter this code in another device's TeamViewer application. Once the ID is entered, popup screen will be displayed in your Z5 as shown below. Pressing 'Allow' button will establish connection between the devices.

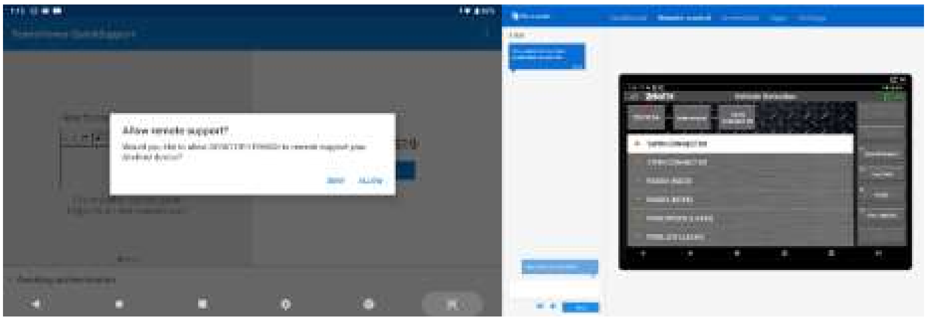

1:24
90%
TeamViewer QuickSupport
SEND MY ID...

How to connect to this device

On any other device, go to https://start.teamviewer.com

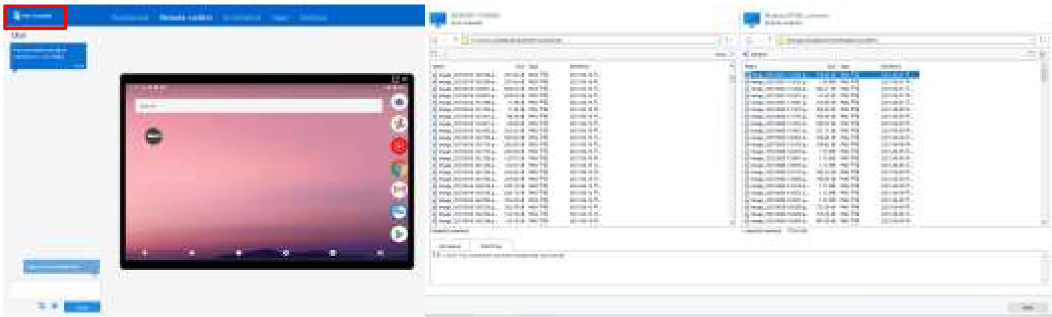
Your ID 156 645 519

Ready to connect (secure connection)



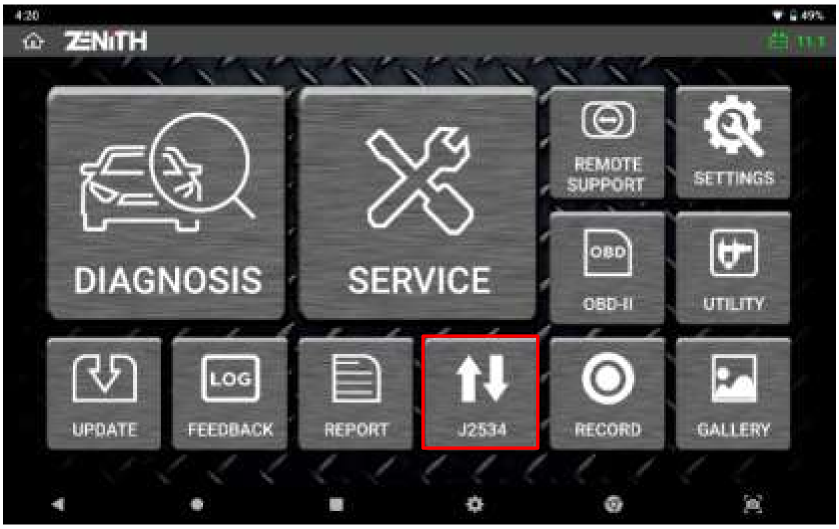
- ## File Transfer

User can transfer files from Z5 to a connected device.
Hit ‘File Transfer’ and select the file in Zenith Z5 folder. Then hit the ‘Receive’ button to proceed transfer.



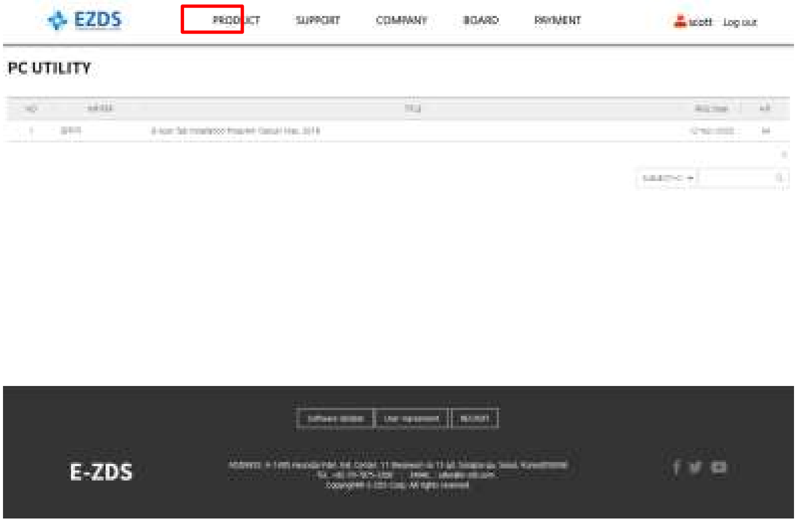
8.2 J2534 PassThru Function

Zenith Z5 functions as a 'Pass-Thru' device for programming the ECUs for multiple carlines.


ZENITH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD
OBD-II
UTILITY
UPDATE
LOG
FEEDBACK
REPORT
J2534
RECORD
GALLERY

How to Setup:

A. From your PC, go to EZDS website at www.zenithdiag.com and download 'Zenith J2534 PC Library' file under PC Utility menu in Support tab


EZDS
PRODUCT
SUPPORT
COMPANY
BOARD
PAYMENT
scott
Log out
PC UTILITY
E-ZDS

B. Unzip downloaded folder and install the file in the PC.
C. Connect the USB – C Type cable between Z5 and the PC.
D. Run the J2534 program provided from vehicle manufacturer in the PC.
E. Select [J2534] function in Z5.
F. Set the interface as 'Zenith' in the J2534 program.
G. Connect a DLC cable to the vehicle and start diagnosis.

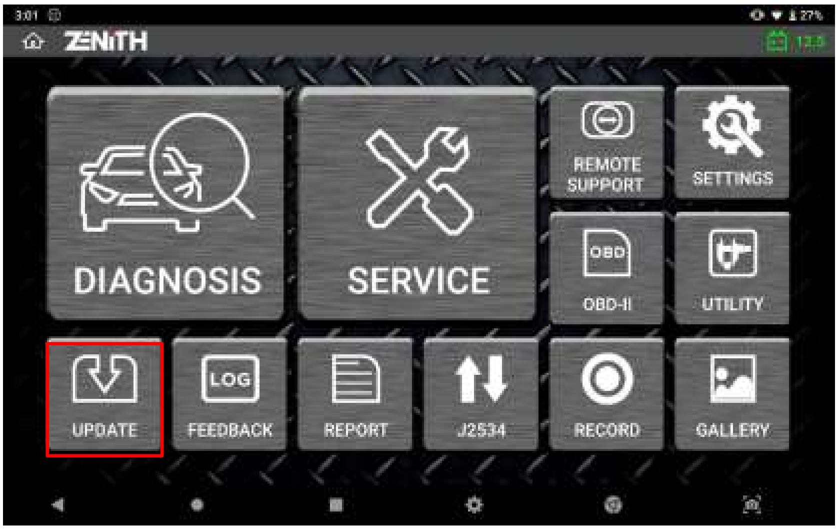
Zenith Z5 serves as the "passthru" device only in this mode and the data files required for reprogramming must be downloaded from the car manufacturer's service website at user's own risk and responsibility.

Chapter 9. Update & Feedback

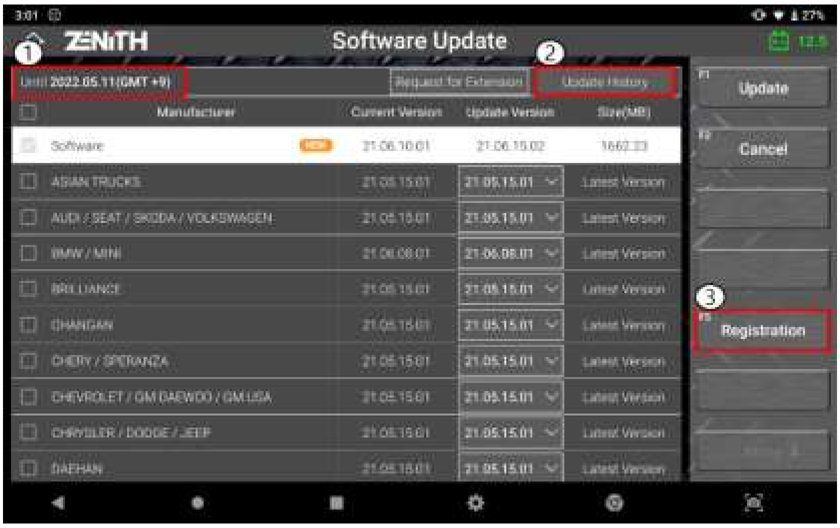
9.1 Software Update

● Update List

Select [Software Update] from the main menu to go to the software update list.


3:01
ZENITH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY

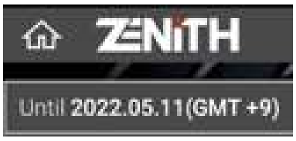
If Z5 is properly registered and activated, the software list will be displayed like below and you can scroll up and down to navigate the list.


3:01
ZENITH
Software Update
①
②
③
Request for Extension
Update History
F1 Update
F2 Cancel
Registration

Until 2022.05.11(GMT +9)

☐	Manufacturer	Current Version	Update Version	Size(MB)
☐	Software NEW	21.06.10.01	21.06.15.02	1662.23
☐	ASIAN TRUCKS	21.05.15.01	21.05.15.01	Latest Version
☐	AUDI / SEAT / SKODA / VOLKSWAGEN	21.05.15.01	21.05.15.01	Latest Version
☐	BMW / MINI	21.06.08.01	21.06.08.01	Latest Version
☐	BRILLIANCE	21.05.15.01	21.05.15.01	Latest Version
☐	CHANGAN	21.05.15.01	21.05.15.01	Latest Version
☐	CHERY / SPERANZA	21.05.15.01	21.05.15.01	Latest Version
☐	CHEVROLET / GM DAEWOO / GM USA	21.05.15.01	21.05.15.01	Latest Version
☐	CHRYSLER / DODGE / JEEP	21.05.15.01	21.05.15.01	Latest Version
☐	DAEHAN	21.05.15.01	21.05.15.01	Latest Version

① **Until: Date expiry date**



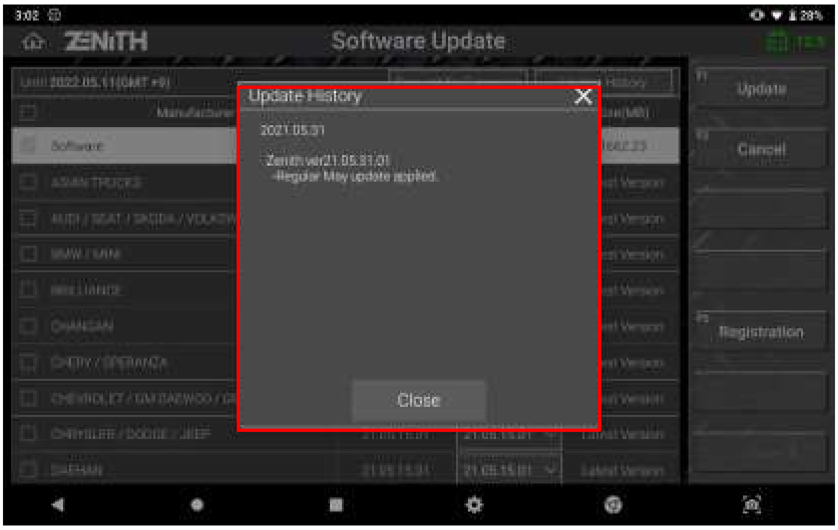
Until 2022.05.11(GMT +9)

Date indicated in top left corner of the screen with the prefix “Until” indicates the expiry date of software update subscription.

In case the update subscription has been expired or approaching the expiry date, send a request for update extension by clicking on the “Request for Extension” button. When the request is submitted, the download server automatically relays the provided contact Information to the authorized local distributor in the Z5’s designated country / region so that they can take care of the request.

② Update History

Select the [Update History] button in the upper right corner to view the details of the latest and the previous updates.

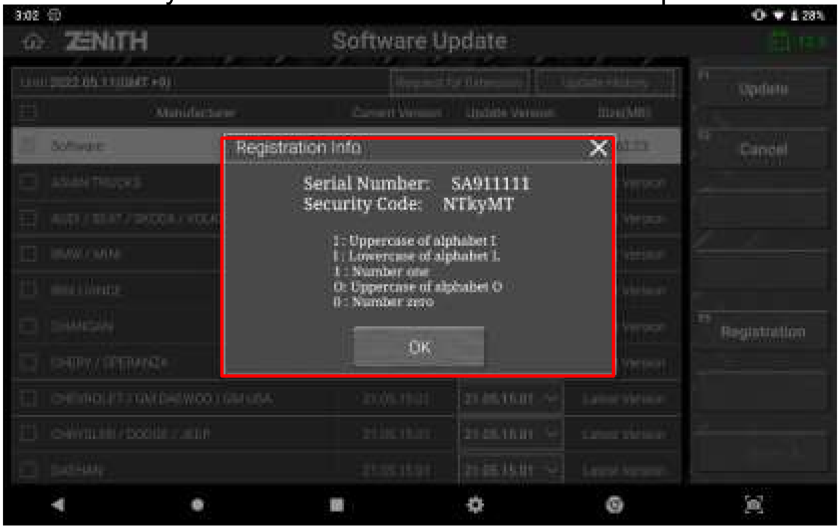

Software Update
Update
Cancel
Registration
Update History
Close

2021.05.31

Zenith ver21.05.31.01
-Regular May update applied.

③ Registration

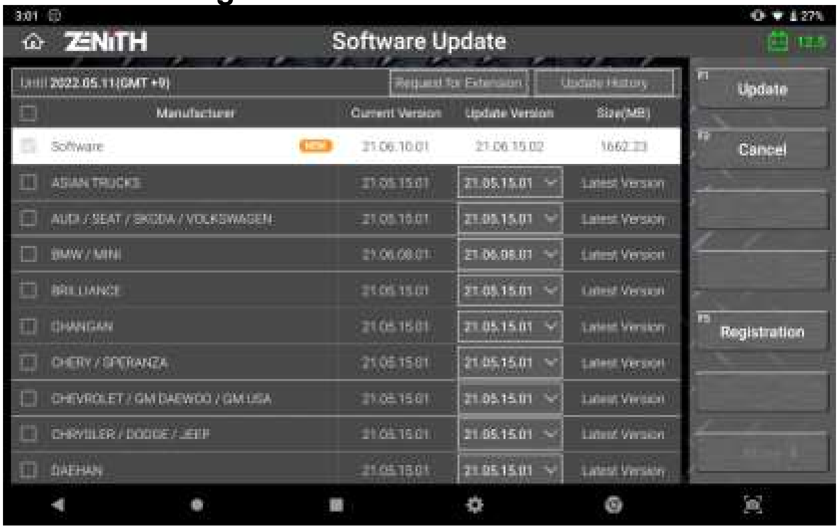
Select the [REGISTRATION] button on the left to view the serial number and the security code needed for website membership enrollment.


Software Update
Update
Cancel
Registration
Registration Info
OK

Serial Number: SA911111
Security Code: NTkyMT

I : Uppercase of alphabet I
l : Lowercase of alphabet L
1 : Number one
O: Uppercase of alphabet O
0 : Number zero

④ Software Downloading

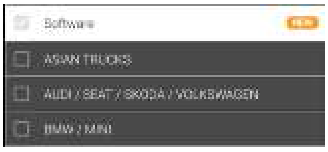


Until 2022.05.11(GMT +9)

☐	Manufacturer	Current Version	Update Version	Size(MB)
☐	Software	21.06.10.01	21.06.15.02	1662.23
☐	ASIAN TRUCKS	21.05.15.01	21.05.15.01	Latest Version
☐	AUDI / SEAT / SKODA / VOLKSWAGEN	21.05.10.01	21.05.15.01	Latest Version
☐	BMW / MINI	21.06.08.01	21.06.08.01	Latest Version
☐	BRILLIANCE	21.05.15.01	21.05.15.01	Latest Version
☐	CHANGAN	21.05.15.01	21.05.15.01	Latest Version
☐	CHERY / SPERANZA	21.05.15.01	21.05.15.01	Latest Version
☐	CHEVROLET / GM DAEWOO / GM USA	21.05.15.01	21.05.15.01	Latest Version
☐	CHRYSLER / DODGE / JEEP	21.05.15.01	21.05.15.01	Latest Version
☐	DAEHAN	21.05.15.01	21.05.15.01	Latest Version

A. [NEW] mark

When a new version software or a patch is released for an automaker, it is indicated by putting [NEW] mark right after the name of each car manufacturer's brand name.

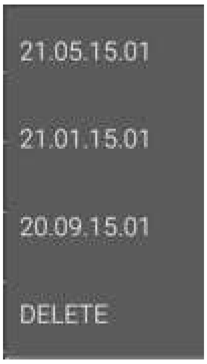


☐ Software
☐ ASIAN TRUCKS
☐ AUDI / SEAT / SKODA / VOLKSWAGEN
☐ BMW / MINI

B. Downloadable Versions List

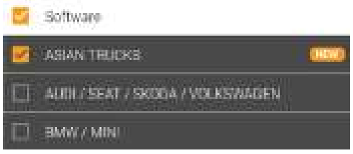
You can check the version numbers of the software currently loaded on the Z5, and the other versions that can be downloaded from the server. It allows you to restore the older version if you are not satisfied with the new update.
The software versions are listed in the order of released date. The version numbers are indicating the release date in [YY.MM.DD.**] format.

If you want to remove the automakers that are not necessary, you can also delete the application from the list by selecting [DELETE] on the left of the software version list.



C. Select and Start Download

Select the automakers to download software either by selecting the checkbox in the head of each line, or Tick on the checkbox in the table header, and it will select or deselect all the brands at a time.

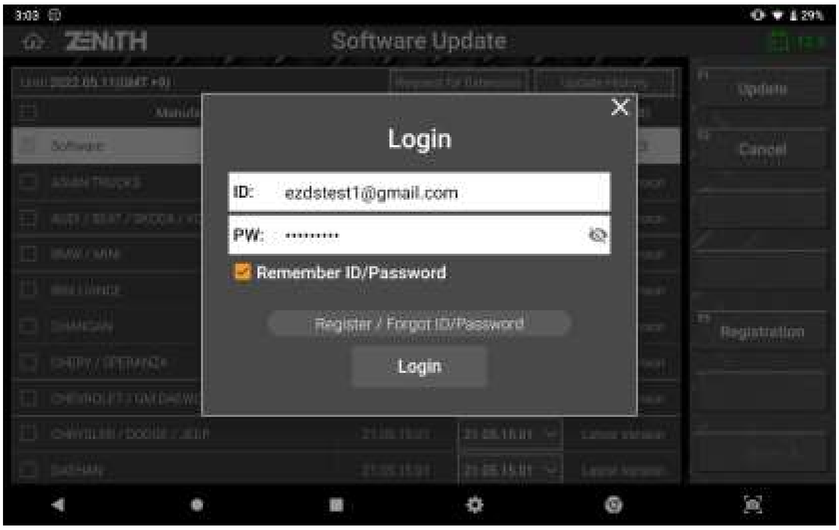


☑ Software
☑ ASIAN TRUCKS
☐ AUDI / SEAT / SKODA / VOLKSWAGEN
☐ BMW / MINI

When done, select [UPDATE] on the right corner to start downloading.

D. Log in

You need to log on to the download server using the ID and Password that have been used for website membership enrollment in the process of activating the device.
You can save your ID to avoid inconvenience of entering the email address every time by selecting the [Remember ID] checkbox, however, for protection of private information, Z5 is not allowed to save the password in the device, therefore you are required to enter the password each time.


3:03
ZENiTH
Software Update
Update
Cancel
Registration

Login

ID: ezdstest1@gmail.com

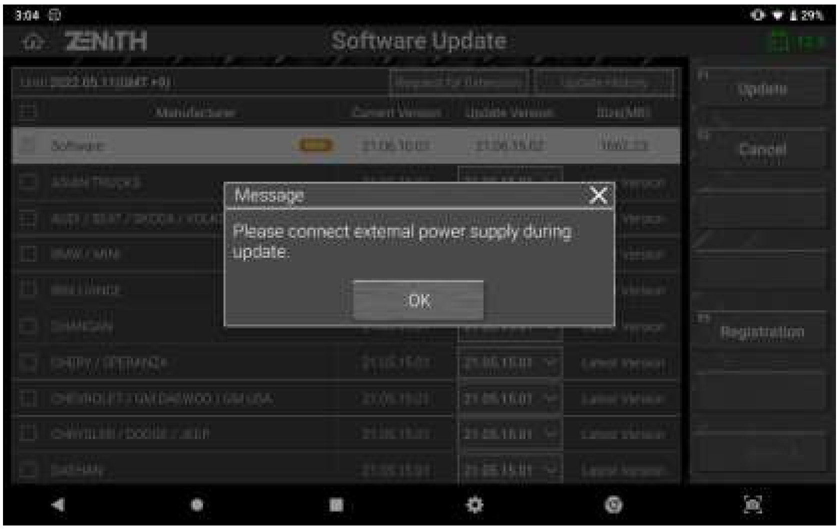
PW: ••••••••••

☑ Remember ID/Password

Register / Forgot ID/Password
Login

E. External Power supply

If the log-in ID and password are correctly entered, a message pops-up to remind to use of the external power while downloading and updating software. It is always recommended to use stable external power source such as AC power from the wall outlet through the AC/DC adapter.


3:04
ZENiTH
Software Update
Update
Cancel
Registration

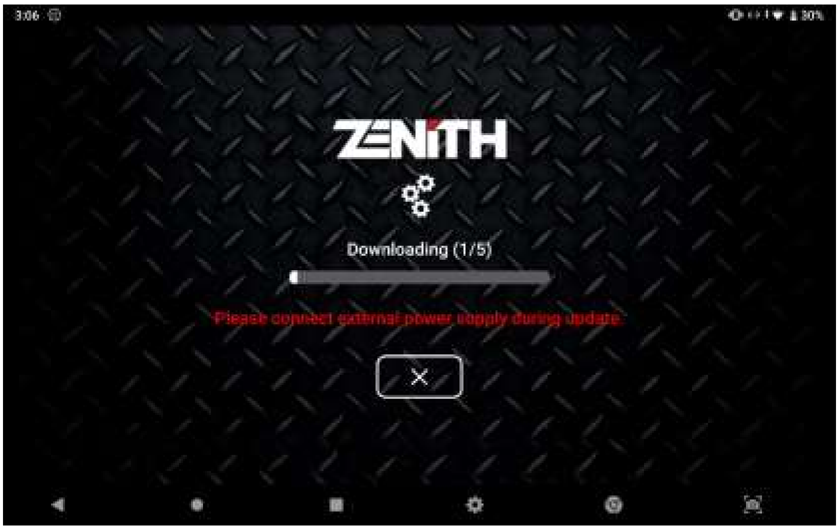
Message

Please connect external power supply during update.

OK

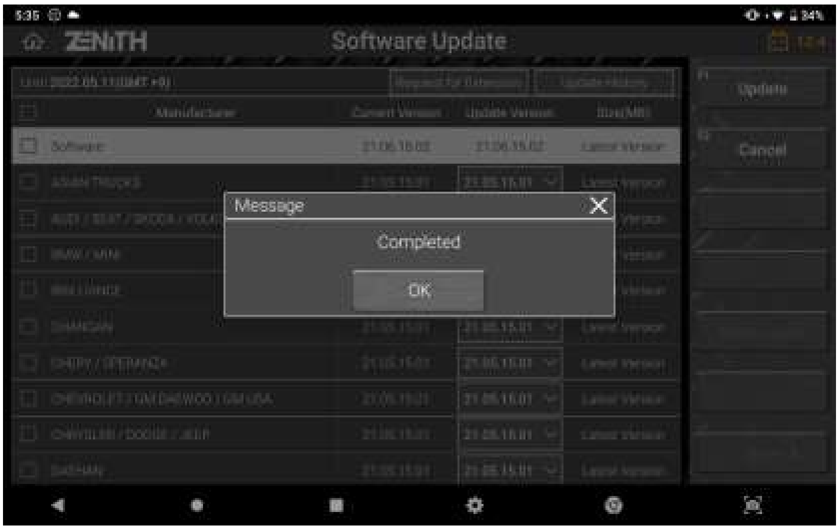
F. Software Downloading

When you select [OK] then software download begins. It takes more time as the more automakers are selected and the time required for downloading varies considerably according to the internet download speed.



Downloading (1/5)

Please connect external power supply during update

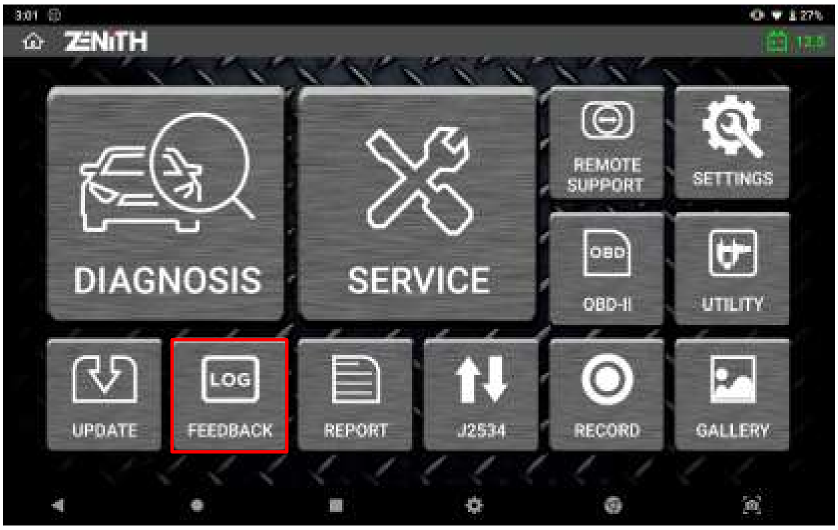


Message

Completed

OK

9.2 Feedback


ZENITH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY

Purpose of Feedback

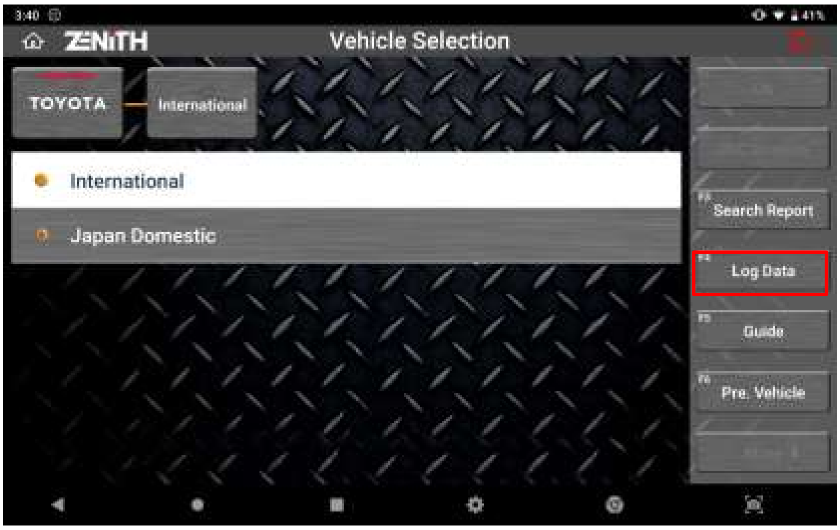
Data Log function was designed as a to utilize Zenith as a terminal for interacting with the individual Zenith users by allowing them to provide accurate and sufficient feedback information to Korea in case of function failure or error, with which the software developers could pinpoint the cause of the problem and find out the solution precisely.

How to log data

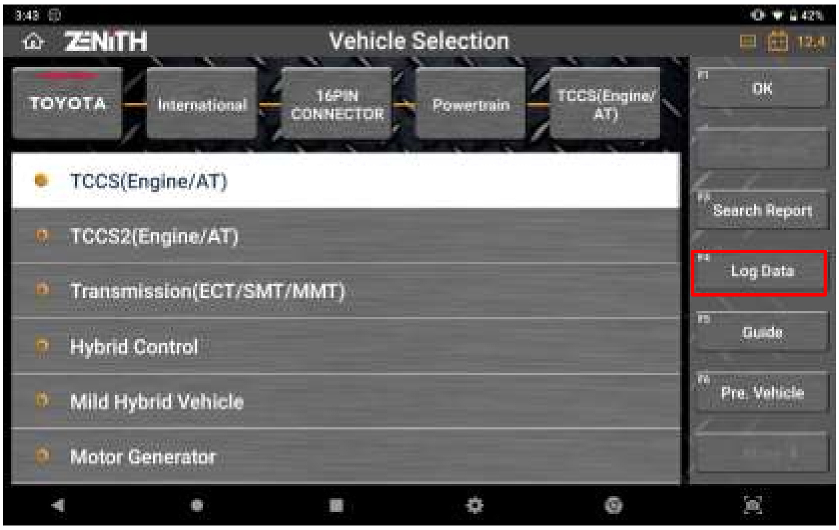
In case any diagnostic function fails or does not work properly as intended, you can log the data transmission between Z5 and the vehicle control unit by 1) starting Data Log mode, 2) repeating the same function until it finally fails like experienced previously, 3) stopping Data Log mode.

A. Start Data Log Mode

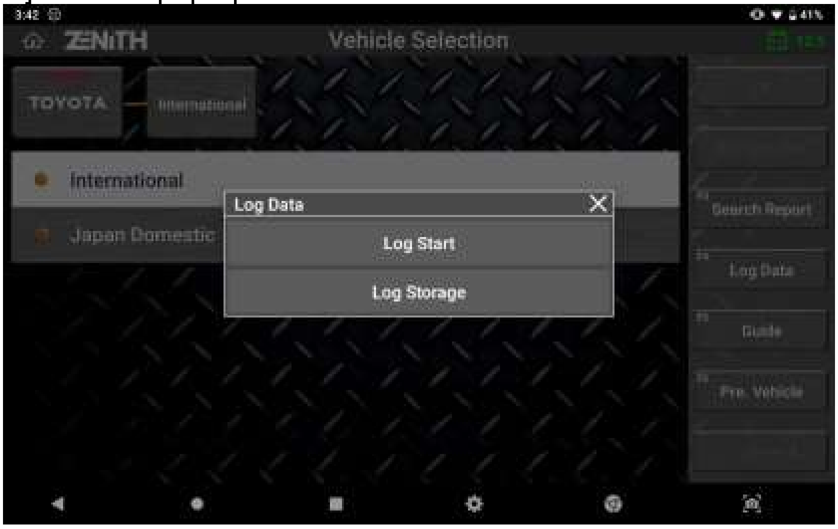
You can start Data Log mode by selecting [Log Data] button on the left of the screen.


ZENITH
Vehicle Selection
TOYOTA
International
International
Japan Domestic
Search Report
Log Data
Guide
Pre. Vehicle

[Log Data] button is available on various levels of menu selection – the button appears when you select a car manufacturer from the menu and remains there at every step you make selections to specify the vehicle. It becomes no longer available when you select a system and the diagnostic functions menu is displayed.
So, if you experience function failure or an error, move back to upper level menu and select [Log Data] button on the left of the screen, then the Data Log mode begins.


3:43
ZENiTH
Vehicle Selection
12.4
TOYOTA
International
16PIN CONNECTOR
Powertrain
TCCS(Engine/AT)
TCCS(Engine/AT)
TCCS2(Engine/AT)
Transmission(ECT/SMT/MMT)
Hybrid Control
Mild Hybrid Vehicle
Motor Generator
OK
Search Report
Log Data
Guide
Pre. Vehicle

When [Log Data] is selected, you can select either [LOG START] or [LOG STORAGE] from the pop-up menu.


3:42
ZENiTH
Vehicle Selection
TOYOTA
International
International
Japan Domestic
Log Data
Log Start
Log Storage
Search Report
Log Data
Guide
Pre. Vehicle

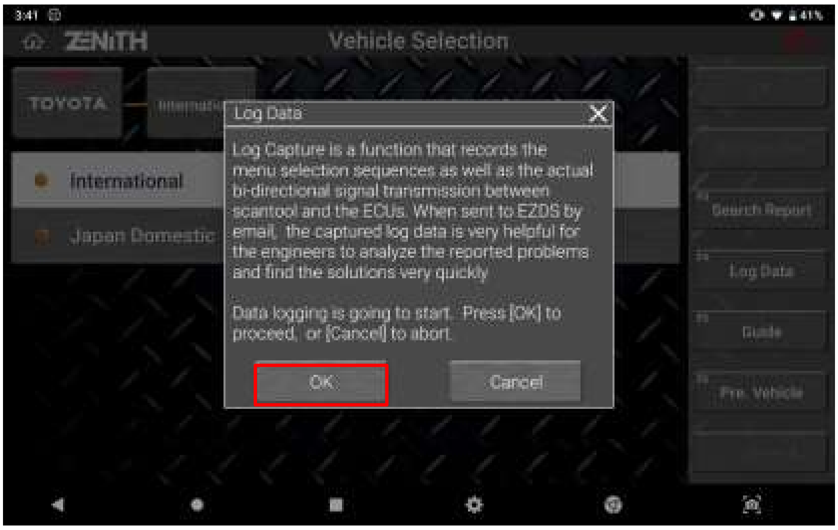
LOG START

Start Data Logging. When Z5 is logging data, this menu will change to [LOG STOP]

LOG STORAGE

Go to the Log Data Storage where you can select a log data and send it to the software developers.

A short introduction to Data Log function pops up, and you can read and select [OK] to proceed.


3:41
ZENiTH
Vehicle Selection
TOYOTA
Internatio
International
Japan Domestic
Search Report
Log Data
Guide
Pre. Vehicle
OK
Cancel

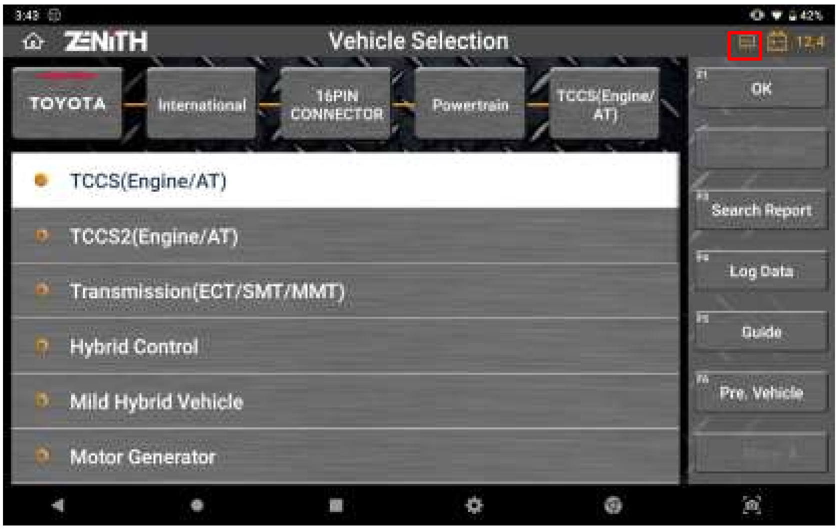
Log Data

Log Capture is a function that records the menu selection sequences as well as the actual bi-directional signal transmission between scantool and the ECUs. When sent to EZDS by email, the captured log data is very helpful for the engineers to analyze the reported problems and find the solutions very quickly

Data logging is going to start. Press [OK] to proceed, or [Cancel] to abort.

B. Repeat the function

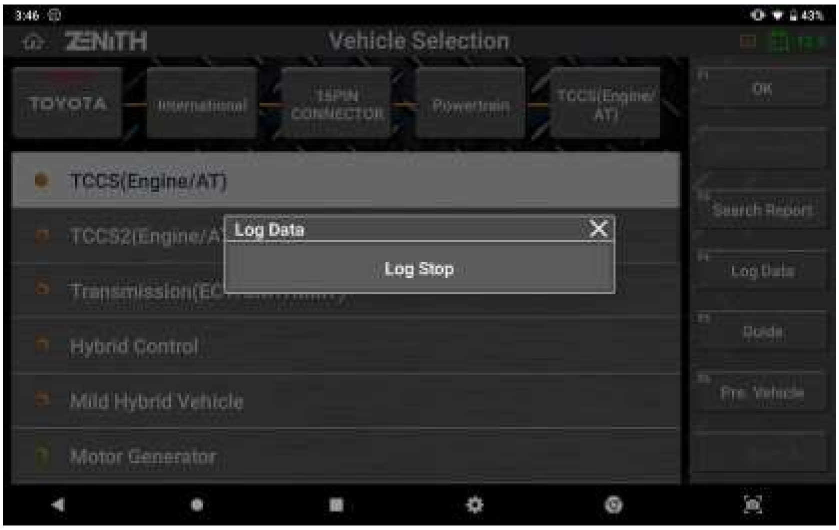
When the Log Data Mode has started, the tape recorder sign in the top left corner of the screen indicates that the data transmission between Z5 and the vehicle control system is being logged.


3:43
42%
ZENiTH
Vehicle Selection
12.4
TOYOTA
International
16PIN CONNECTOR
Powertrain
TCCS(Engine/AT)
TCCS(Engine/AT)
TCCS2(Engine/AT)
Transmission(ECT/SMT/MMT)
Hybrid Control
Mild Hybrid Vehicle
Motor Generator
OK
Search Report
Log Data
Guide
Pre. Vehicle

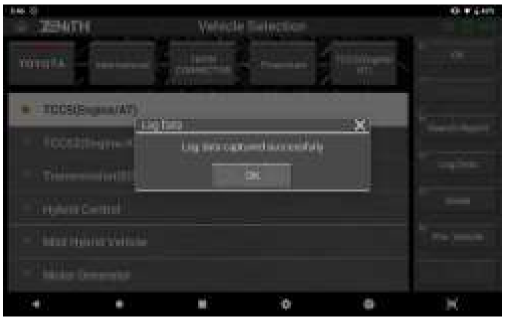
Please repeat the same function until you encounter the same symptom or function failure you experienced previously.

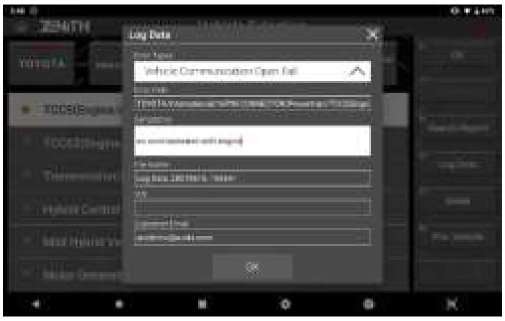
C. Stop Data Log Mode

Select the [LOG DATA] button again in order to stop data logging and it will be followed by a pop-up menu with a single entry [LOG STOP].


3:46
ZENITH
Vehicle Selection
TOYOTA
International
15PIN CONNECTOR
Powertrain
TCCS(Engine/AT)
TCCS(Engine/AT)
TCCS2(Engine/A
Transmission(EC
Hybrid Control
Mild Hybrid Vehicle
Motor Generator
Log Data
Log Stop
OK
Search Report
Log Data
Guide
Pre. Vehicle

Select [LOG STOP] and the captured log data is stored in the Z5 internal memory.


ZENITH
Vehicle Selection
TOYOTA
Log Data
Log data captured successfully
OK


Log Data
Vehicle Communication Open Fail
OK

Select the type of error or failure that best describes your problem from the drop down menu.
The vehicle model and system information is automatically entered according to the menu selection you made. You can change this by typing in the new description if you want, but we recommend to leave it as default.

Select OK then the log data is saved as a log file that can be transferred to the developers by email.

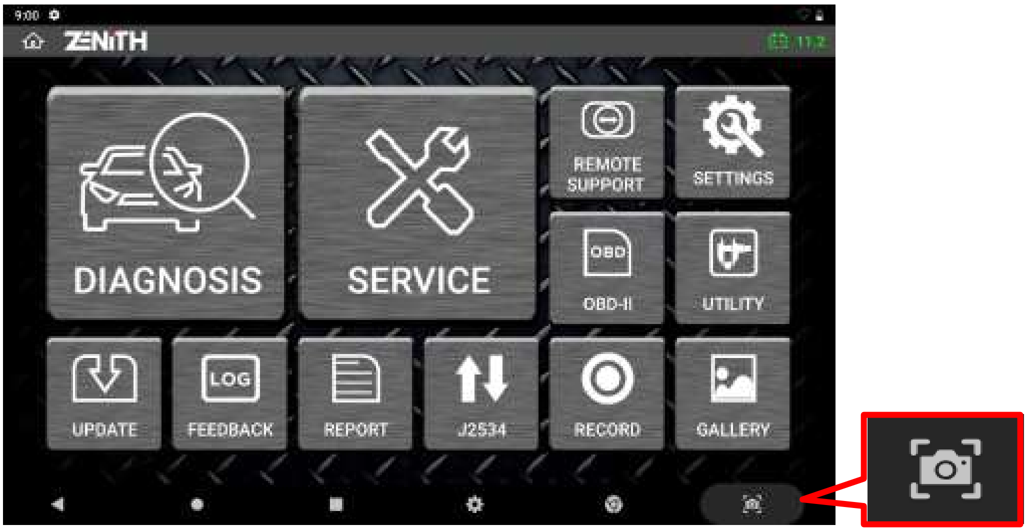
Chapter 10. Record & Gallery

10.1 Data Record

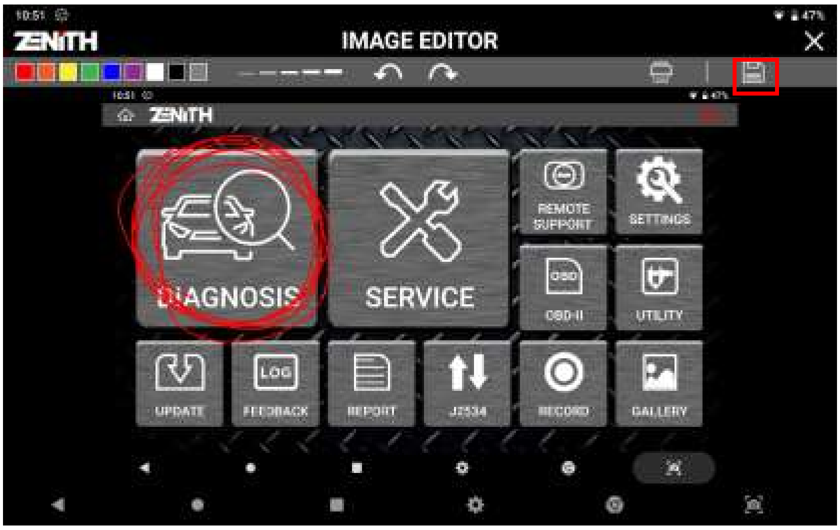
● Screen Capture saving

Screen capture function is used for saving screen capture images, live data and graphs in memory and reloading them later for review and analysis.

Any time you need to capture the current screen display, just touch the [Screen Capture] button on the bottom right corner of the screen, which is a part of basic Android system function.


9:00
ZENiTH
11.2
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY

When the screen is captured as an image, the [Imaged Editor] application automatically runs, and you can add your handwritten notes by touching the screen with the finger or the stylus pen.


10:51
ZENiTH
IMAGE EDITOR
47%
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY

When done, select the [SAVE] button in the upper right corner of the screen.

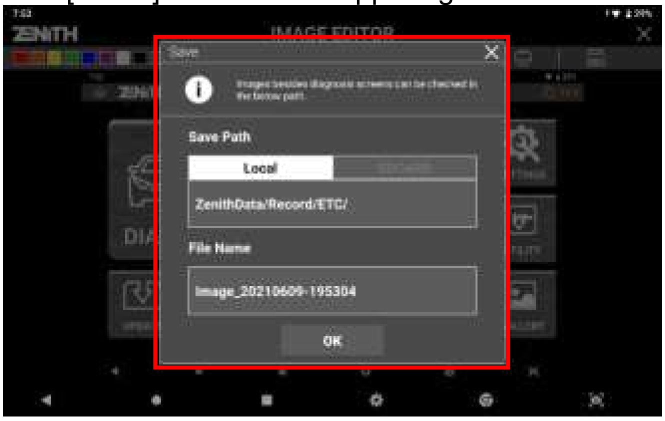
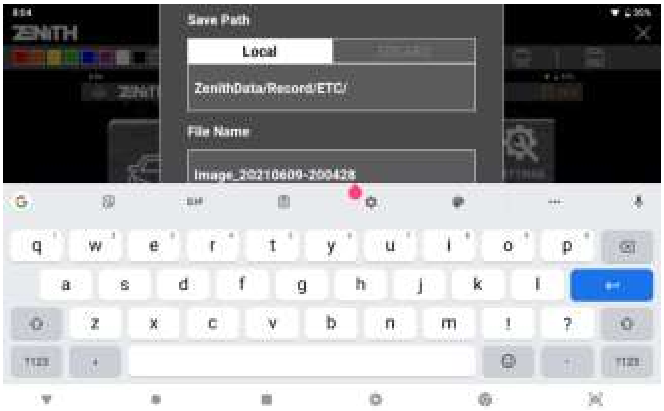


IMAGE EDITOR
Save
OK

Save Path: Local
ZenithData/Record/ETC/
File Name: Image_20210609-195304

Check the file saving path and type in the file name if you want to change the file name from the default one that is named based on the system date and time, then select [OK] to save the file. The screen capture is saved as an image file in the pre-defined folder of Z5 memory.

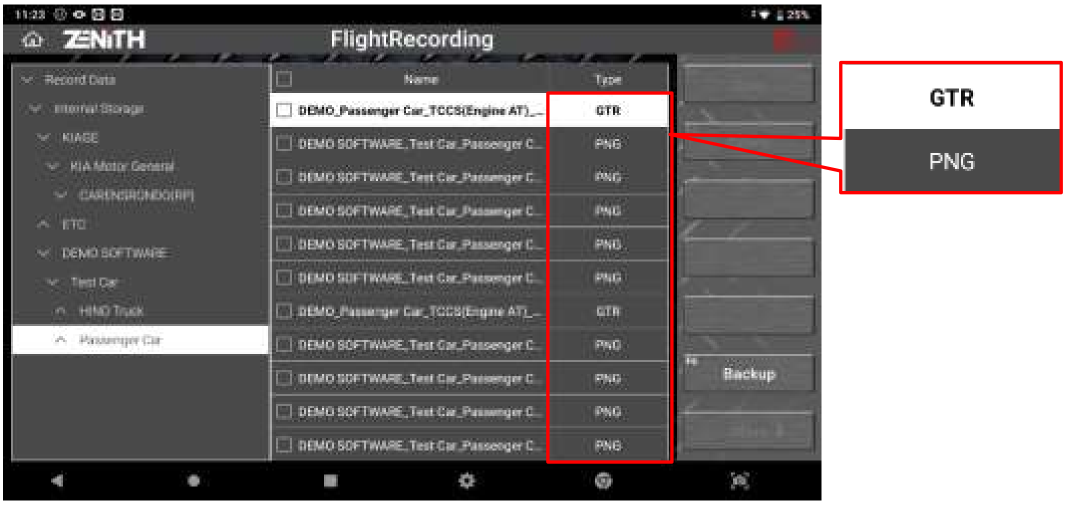


Save Path: Local
ZenithData/Record/ETC/
File Name: Image_20210609-200428

Saved File Format

Screen captures are saved as image files of PNG format while live data readings are saved as spreadsheet files of GTR format.

- Screen Capture: *.PNG image files
- Live Data: *.GTR spreadsheet files.

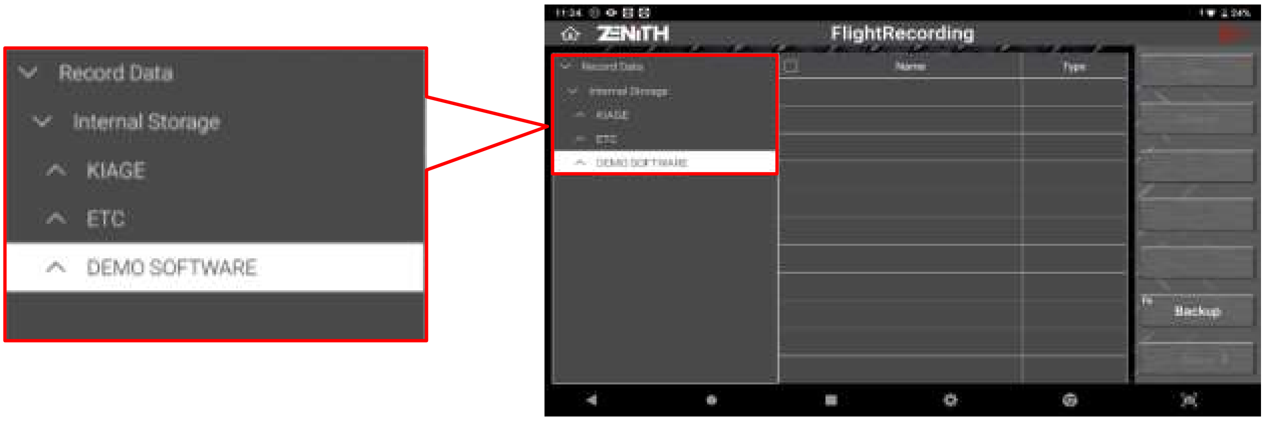

FlightRecording
Record Data
Internal Storage
KIASE
KIA Motor General
CARENS(RONDO)(RP)
ETC
DEMO SOFTWARE
Test Car
HINO Truck
Passenger Car
Backup
GTR
PNG

☐ Name	Type
☐ DEMO_Passenger Car_TCCS(Engine AT)_...	GTR
☐ DEMO SOFTWARE_Test Car_Passenger C...	PNG
☐ DEMO SOFTWARE_Test Car_Passenger C...	PNG
☐ DEMO SOFTWARE_Test Car_Passenger C...	PNG
☐ DEMO SOFTWARE_Test Car_Passenger C...	PNG
☐ DEMO SOFTWARE_Test Car_Passenger C...	PNG
☐ DEMO_Passenger Car_TCCS(Engine AT)_...	GTR
☐ DEMO SOFTWARE_Test Car_Passenger C...	PNG
☐ DEMO SOFTWARE_Test Car_Passenger C...	PNG
☐ DEMO SOFTWARE_Test Car_Passenger C...	PNG
☐ DEMO SOFTWARE_Test Car_Passenger C...	PNG

10.2 Data Reloading

- **Save Data Path**

When you select [Record] from the Z5 main menu or [Record] from the diagnostic functions menu of each automaker software, folder structure of the Z5 internal data storage is displayed on the screen as below.


Record Data
Internal Storage
KIAGE
ETC
DEMO SOFTWARE
ZENITH
FlightRecording
Name
Type
Backup

When you save data while running diagnostic functions on a specific vehicle, the files are saved in the folders of multiple levels that are created in the same structure as the vehicle selection menu.

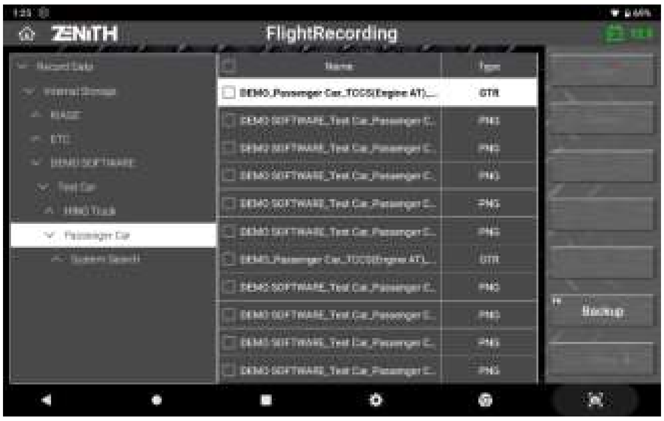
Examples.

Internal Storage >> Toyota >> International >> 16PIN Connector
Internal Storage >> Mazda >> International >> CX6
Internal Storage >> Hyundai >> Maxcruze (NC)

This folder structure is intended to help locate and identify the files of a specific vehicle among the tons of files in the vast memory of Z5 when reloading.

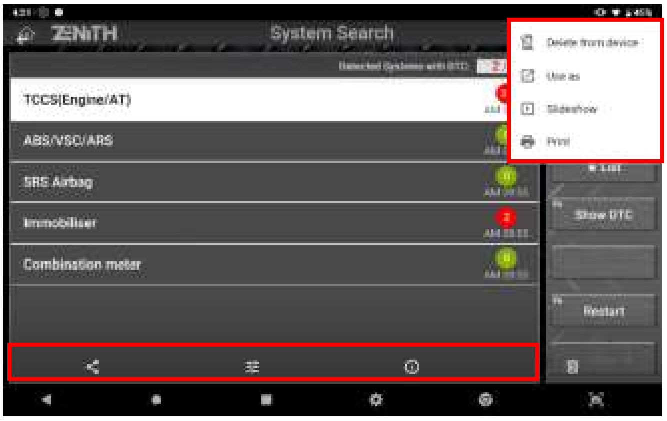
Following example is when you are looking for the data files that have been saved while working on a Toyota.

You can select Toyota under Internal Storage folder and the next level folders that are named just like you had selected in the menu before saving the data files.


ZENITH
FlightRecording
Record Data
Internal Storage
KIAGE
ETC
DEMO SOFTWARE
Test Car
Passenger Car
Name
Type
Backup

● Image File

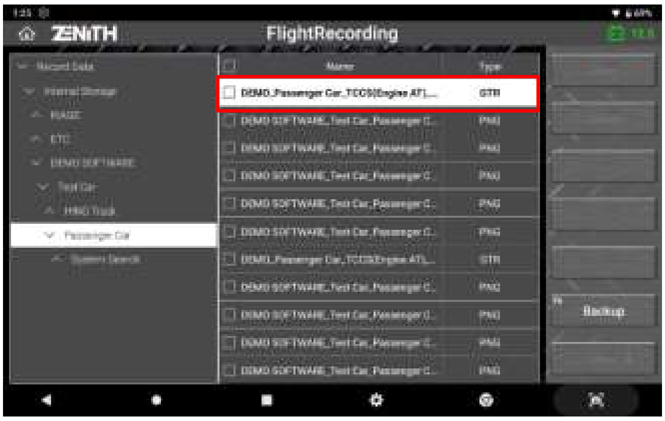
Select a PNG file among the saved file list Then the Gallery application runs to open and show the selected PNG file on the screen.


ZENiTH
System Search
Delete from device
Use as
Slideshow
Print
TCCS(Engine/AT)
ABS/VSC/ARS
SRS Airbag
Immobiliser
Combination meter
Show DTC
Restart

You can print or share the file by selecting the additional function buttons in the top right corner of the screen. Please refer to the next chapter for printing function details.

● Recorded Data Loading

Select the GTR file in the selecteda2 storage folder and select the “OPEN” button. Then the Record function is activated, and you can replay the recorded live data parameters in text mode as shown below.


ZENiTH
FlightRecording
Name
Type
DEMO_Passenger Car_TCCS(Engine AT)...
GTR
PNG
Backup

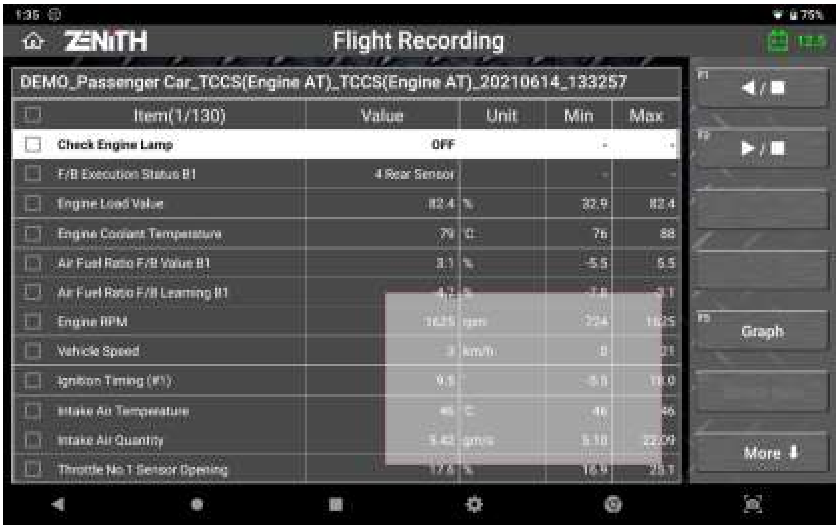
● Replay Control

If the data readings of multiple frames have been saved by selecting Consecutive Record or Selected Items Record when saving the data, you can replay the frames of saved data forward or backward using the buttons on the left of the screen.

Control button	Description
◄ ►	Replay the recorded data forward and backward
GRAPH	Switch to the graphical mode.

Current Frame Indication

When replaying forward and reverse, the horizontal location of the current frame is indicated on the map that appears on the left right corner of the screen for quick reference.


Flight Recording
◄/■
►/■
Graph
More ⬇

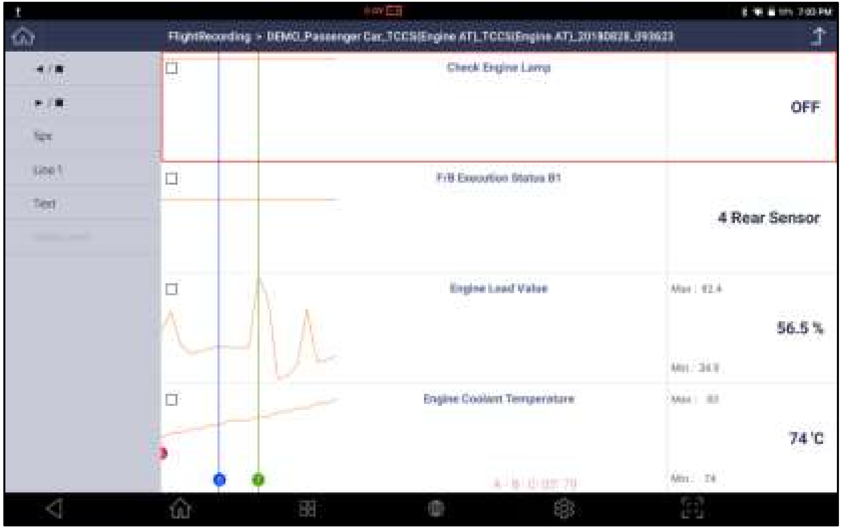
DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210614_133257

☐ Item(1/130)	Value	Unit	Min	Max
☐ Check Engine Lamp	OFF		-	-
☐ F/B Execution Status B1	4 Rear Sensor		-	-
☐ Engine Load Value	82.4	%	32.9	82.4
☐ Engine Coolant Temperature	79	°C	76	88
☐ Air Fuel Ratio F/B Value B1	3.1	%	-5.5	5.5
☐ Air Fuel Ratio F/B Learning B1	4.2	%	-7.8	3.1
☐ Engine RPM	1625	rpm	224	1625
☐ Vehicle Speed	3	km/h	0	21
☐ Ignition Timing (#1)	9.5	°	-5.5	19.0
☐ Intake Air Temperature	46	°C	46	46
☐ Intake Air Quantity	5.42	gm/s	5.10	22.09
☐ Throttle No.1 Sensor Opening	17.6	%	16.9	25.1

Graph Mode

Basic operation of Flight Recording function in Graph mode works the same as Data Analysis function except that it is not live, but you are reloading the data saved in the past.

When [GRAPH] button is selected in Text mode, the data readings are converted to dynamic graphs and up to 4 parameters are displayed on the screen.


FlightRecording > DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20180828_093623
◄/■
►/■
Line 1
Text
☐ Check Engine Lamp
OFF
☐ F/B Execution Status B1
4 Rear Sensor
☐ Engine Load Value
Max : 82.4
56.5 %
Min : 34.9
☐ Engine Coolant Temperature
Max : 83
74 'C
Min : 74

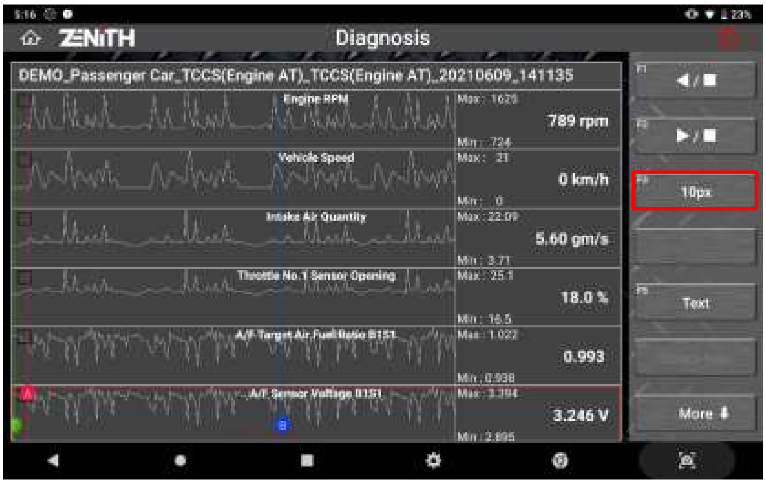
You can replay the frames of saved data forward or backward using the buttons on the left of the screen

◄ ►	Replay the recorded data forward and backward

Graph Horizontal Scale Control

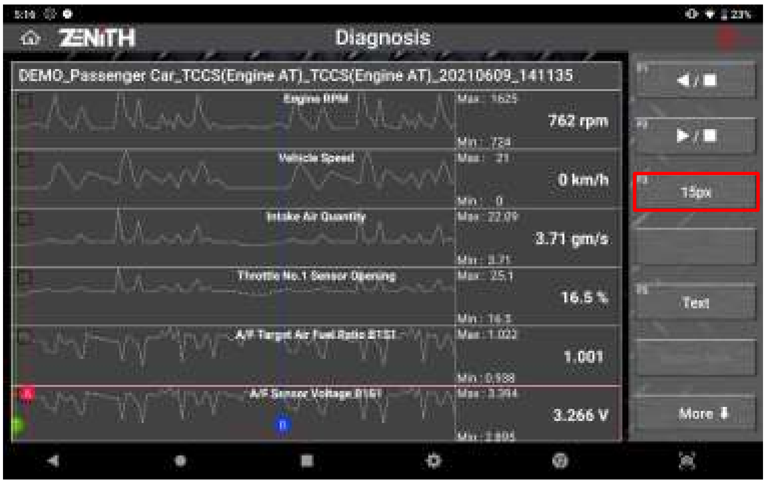
You can change the horizontal scale of the graphs or number.

15px	Graph scale can be controlled by selecting the pixel per frame (1px -> 5px -> 15px). The more pixels per frame, the bigger the graphs, and vice versa.


ZENiTH
Diagnosis
DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210609_141135
Engine RPM
Max : 1625
789 rpm
Min : 724
Vehicle Speed
Max : 21
0 km/h
Min : 0
Intake Air Quantity
Max : 22.09
5.60 gm/s
Min : 3.71
Throttle No.1 Sensor Opening
Max : 25.1
18.0 %
Min : 16.5
A/F Target Air Fuel Ratio B1S1
Max : 1.022
0.993
Min : 0.938
A/F Sensor Voltage B1S1
Max : 3.394
3.246 V
Min : 2.895
10px
Text
More

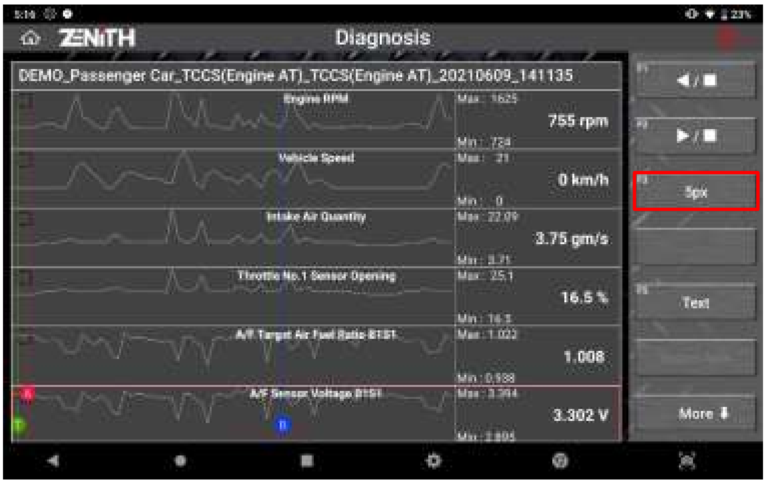
Horizontally Smallest scale when 5 pixels represent 1 frame of data readings.

>> You can change the scale to 10 pixels per frame, which is 2x bigger in width.


ZENiTH
Diagnosis
DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210609_141135
Engine RPM
Max : 1625
762 rpm
Min : 724
Vehicle Speed
Max : 21
0 km/h
Min : 0
Intake Air Quantity
Max : 22.09
3.71 gm/s
Min : 3.71
Throttle No.1 Sensor Opening
Max : 25.1
16.5 %
Min : 16.5
A/F Target Air Fuel Ratio B1S1
Max : 1.022
1.001
Min : 0.938
A/F Sensor Voltage B1S1
Max : 3.394
3.266 V
Min : 2.895
15px
Text
More

10 pixels represent 1 frame of data readings.

>> You can change the scale to 15 pixels per frame, which is 1.5x bigger in width.


ZENiTH
Diagnosis
DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210609_141135
Engine RPM
Max : 1625
755 rpm
Min : 724
Vehicle Speed
Max : 21
0 km/h
Min : 0
Intake Air Quantity
Max : 22.09
3.75 gm/s
Min : 3.71
Throttle No.1 Sensor Opening
Max : 25.1
16.5 %
Min : 16.5
A/F Target Air Fuel Ratio B1S1
Max : 1.022
1.008
Min : 0.938
A/F Sensor Voltage B1S1
Max : 3.394
3.302 V
Min : 2.895
5px
Text
More

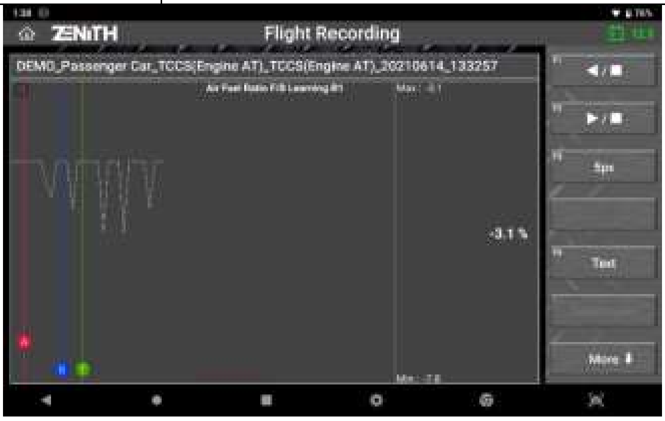
Largest scale graphs with 15 pixels per 1 frame.

>> You can go back to the smallest scale of 5 pixels per frame, which is 3x narrower in width

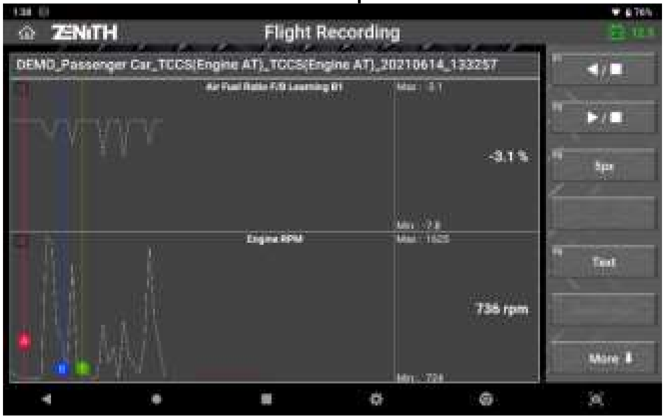
- **Number of Graphs Control**

You can change the number of graphs displayed on the screen at a time.

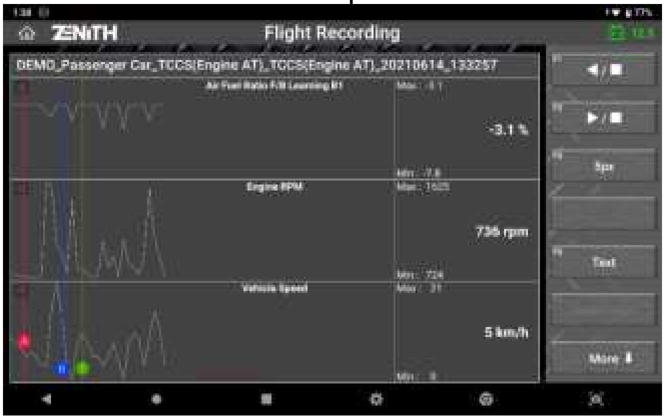
Line 4	Number of graphs that appear on the screen can be selected among 1, 2, 3 or 4 line(s).


ZENiTH
Flight Recording
DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210614_133257
Air Fuel Ratio F/B Learning B1
-3.1 %
Text
More

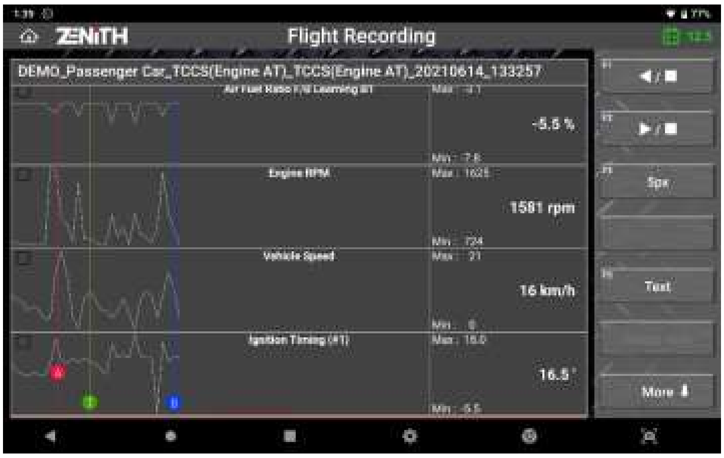
<1 Graph>


ZENiTH
Flight Recording
DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210614_133257
Air Fuel Ratio F/B Learning B1
-3.1 %
Engine RPM
736 rpm
Text
More

<2 Graphs>


ZENiTH
Flight Recording
DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210614_133257
Air Fuel Ratio F/B Learning B1
-3.1 %
Engine RPM
736 rpm
Vehicle Speed
5 km/h
Text
More

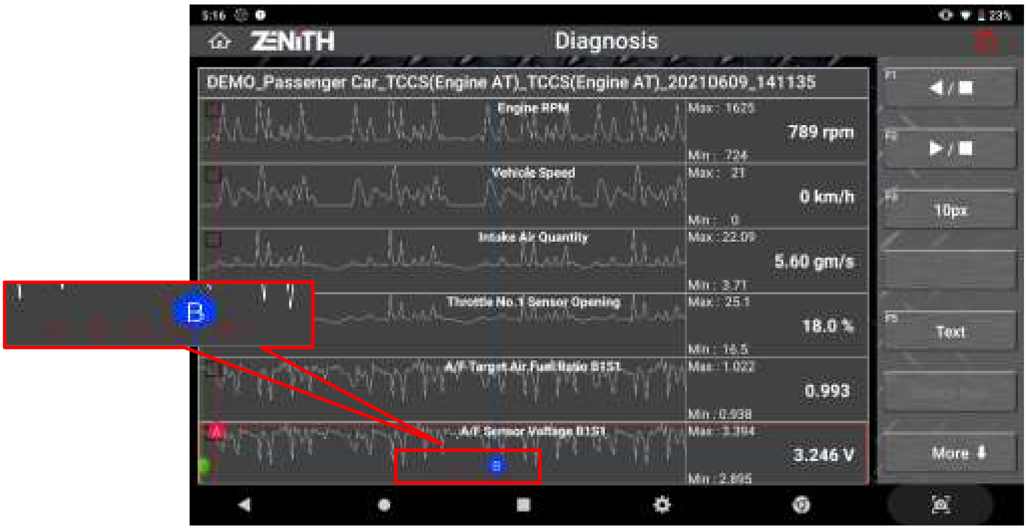
<3 Graphs>


Flight Recording
DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210614_133257
Air Fuel Ratio F/B Learning B1
-5.5 %
Engine RPM
1581 rpm
Vehicle Speed
16 km/h
Ignition Timing (#1)
16.5 °
A
B
Spx
Text
More

<4 Graphs>

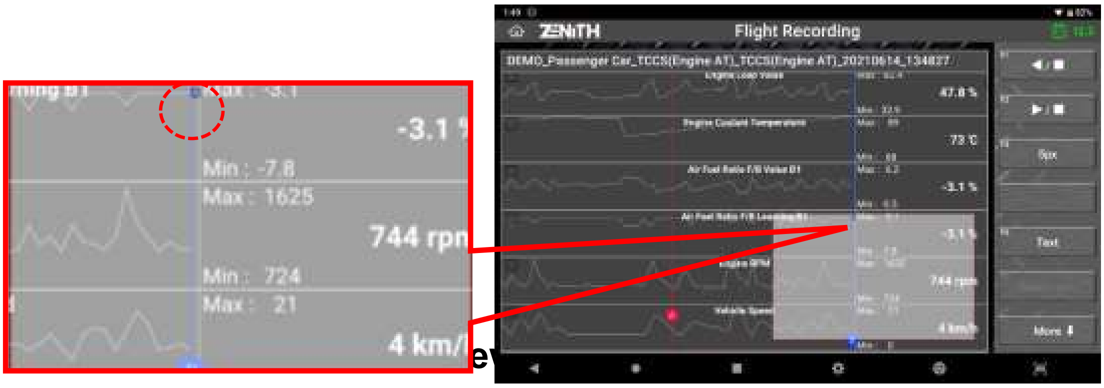
Cursor

Cursors are available when replaying the recorded data in graph mode. Touch the red dot and drag it to change the horizontal position of Cursor A, and do the same on a blue dot for Cursor B. Then the time difference between Cursor A and B is indicated on the left of the screen.


Diagnosis
DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210609_141135
Engine RPM
789 rpm
Vehicle Speed
0 km/h
Intake Air Quantity
5.60 gm/s
Throttle No.1 Sensor Opening
18.0 %
A/F Target Air Fuel Ratio B1S1
0.993
A/F Sensor Voltage B1S1
3.246 V
A
B
10px
Text
More

Current Frame Indication

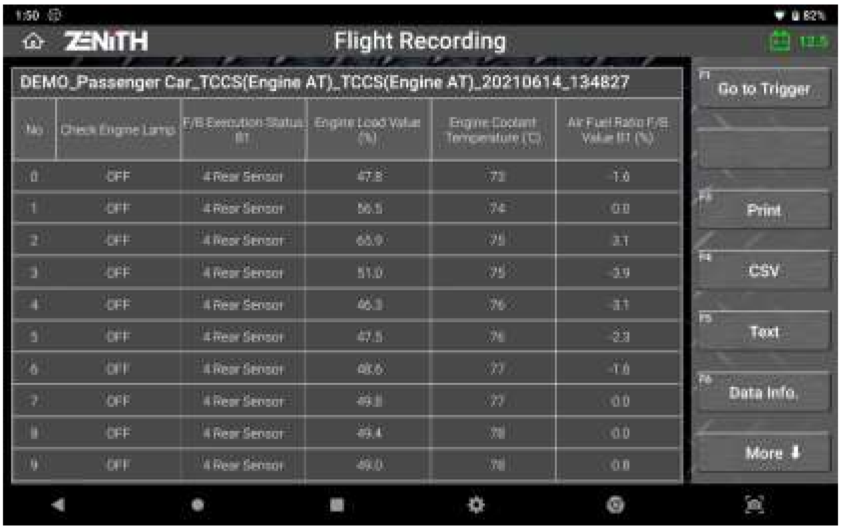
When replaying forward and reverse, the horizontal location of the current frame is indicated on the map that appears on the left right corner of the screen for quick reference.


Flight Recording
DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210614_134827
Engine Load Value
47.8 %
Engine Coolant Temperature
73 °C
Air Fuel Ratio F/B Value B1
-3.1 %
Air Fuel Ratio F/B Learning B1
Engine RPM
744 rpm
Vehicle Speed
4 km/h
Min : -7.8
Max : 1625
Min : 724
Max : 21
Spx
Text
More

Select [TEXT] among the graph control buttons in Graph mode, then the display mode changes to Text mode, but initially the data readings will be displayed in the form of spreadsheet.

➢ Spreadsheet format

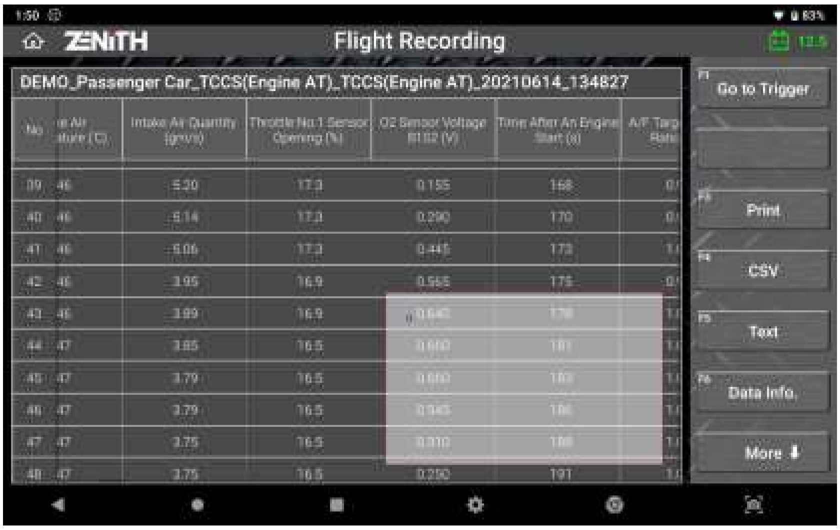
In spreadsheet format, the parameter names are listed horizontally, and the data readings are stacked down vertically frame by frame. You can scroll left and right to find the parameter names and scroll up and down to navigate the data along the elapsed time, frame to frame.



DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210614_134827

No	Check Engine Lamp	F/B Execution Status B1	Engine Load Value (%)	Engine Coolant Temperature (C)	Air Fuel Ratio F/B Value B1 (%)
0	OFF	4 Rear Sensor	47.8	73	-1.0
1	OFF	4 Rear Sensor	56.5	74	0.0
2	OFF	4 Rear Sensor	65.9	75	3.1
3	OFF	4 Rear Sensor	51.0	75	-3.9
4	OFF	4 Rear Sensor	46.3	76	-3.1
5	OFF	4 Rear Sensor	47.5	76	-2.3
6	OFF	4 Rear Sensor	48.6	77	-1.0
7	OFF	4 Rear Sensor	49.8	77	0.0
8	OFF	4 Rear Sensor	49.4	78	0.0
9	OFF	4 Rear Sensor	49.0	78	0.8

When navigating the spreadsheet, vertical location of the current row is indicated on the map that appears on the left right corner of the screen for quick reference while scrolling.



DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210614_134827

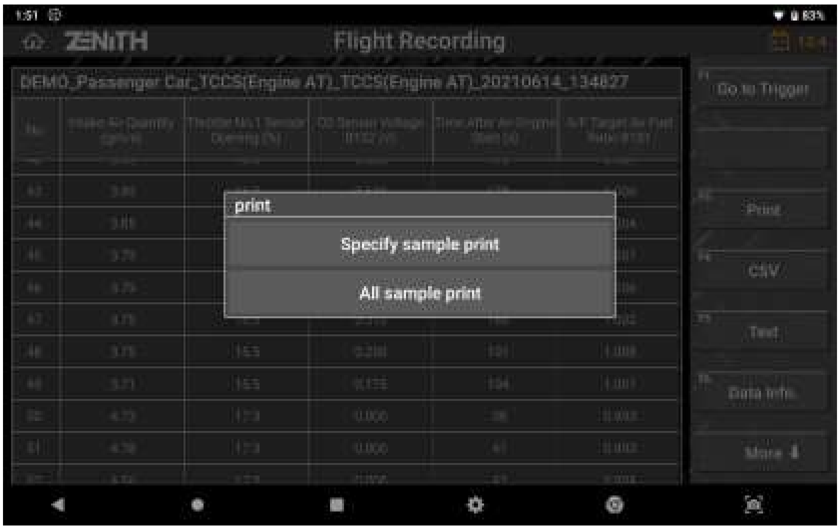
No	e Air ature (C)	Intake Air Quantity (gm/s)	Throttle No.1 Sensor Opening (%)	O2 Sensor Voltage B1S2 (V)	Time After An Engine Start (s)	A/F Targ Rati
39	46	5.20	17.3	0.155	168	0.
40	46	5.14	17.3	0.290	170	0.
41	46	5.06	17.3	0.445	173	1.
42	46	3.95	16.9	0.565	175	0.
43	46	3.89	16.9	0.640	178	1.
44	47	3.85	16.5	0.600	181	1.
45	47	3.79	16.5	0.610	183	1.
46	47	3.79	16.5	0.545	186	1.
47	47	3.75	16.5	0.310	188	1.
48	47	3.75	16.5	0.250	191	1.

➢ GO TO TRIGGER

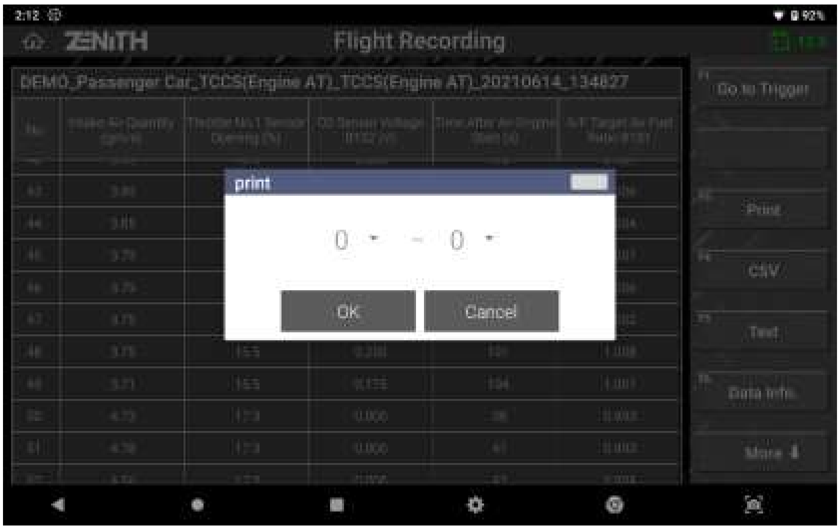
If the trigger was marked before the data readings were saved, then you can jump to the frame when the trigger was set by selecting [GO TO TRIGGER] button.

- **PRINT**

Print the spreadsheet using the printers connected to Z5 or into the PDF files.
You can select SPECIFY SAMPLE PRINT or ALL SAMPLE PRINT.


1:51
ZENiTH
Flight Recording
DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210614_134827
print
Specify sample print
All sample print
Go to Trigger
Print
CSV
Text
Data Info.
More

Select [SPECIFY SAMPLE PRINT] if you want to print a single sample (frame) of data readings or a part of entire recorded data. You can get the range of sample(s) to be printed by specifying the numbers of “Start” and “End” samples for printing.
Just select [ALL SAMPLE PRINT] to print the whole recorded data from the first sample to the end.


2:12
ZENiTH
Flight Recording
DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210614_134827
print
0 - 0
OK
Cancel
Go to Trigger
Print
CSV
Text
Data Info.
More

Please refer to the next chapter to learn more about printer set up and printing function.

- **TEXT**

Change to normal Data Analysis text mode.

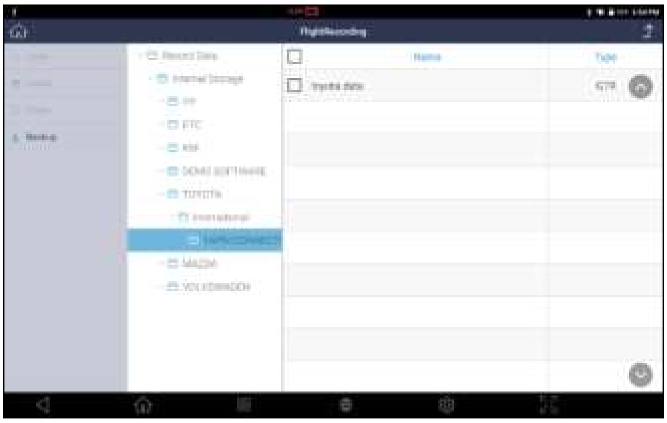
10.3 Data Backup

You can transfer the image and data files saved in Z5's internal storage to an external storage device by selecting [BACKUP] from the menu on the left of the Flight Recoding function menu.

- ### External Storage Device

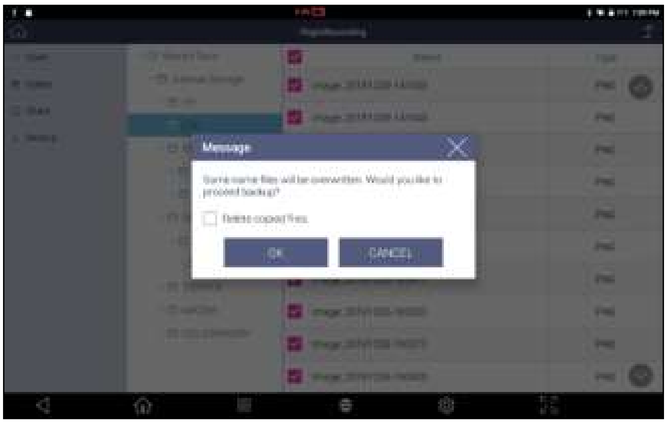
A micro SD Card can be inserted to Z5 directly, or you can use external storage device through the USB port. Make sure that the external storage device file system is in FAT32 format.

When you insert the micro SD Card or connect the USB storage device, it is recognized as an external storage device by Z5 and indicated in the Flight Recording menu's folder structure like below

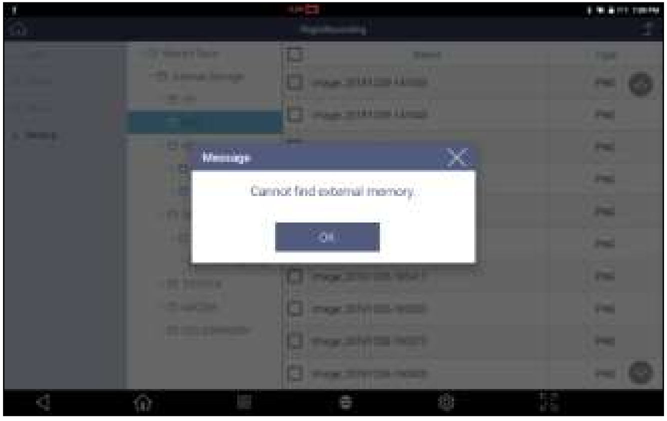


- ### Backup

Select [BACKUP] to transfer the folders and files contained in the Internal Storage to External Storage.
You can opt either overwriting or skipping the transfer of the same name files at the pop-up message that follows. If you select [OK], then please note that entire folders and files are transferred, and the existing files with the same names in the external storage are overwritten by the new files.



If you happen to remove the external storage device before transferring the files or select [BACKUP] when the external storage device has not been recognized by Z5 properly, an error message will come up and file transfer will fail.



Cannot find external memory.

10.4 Data Printing

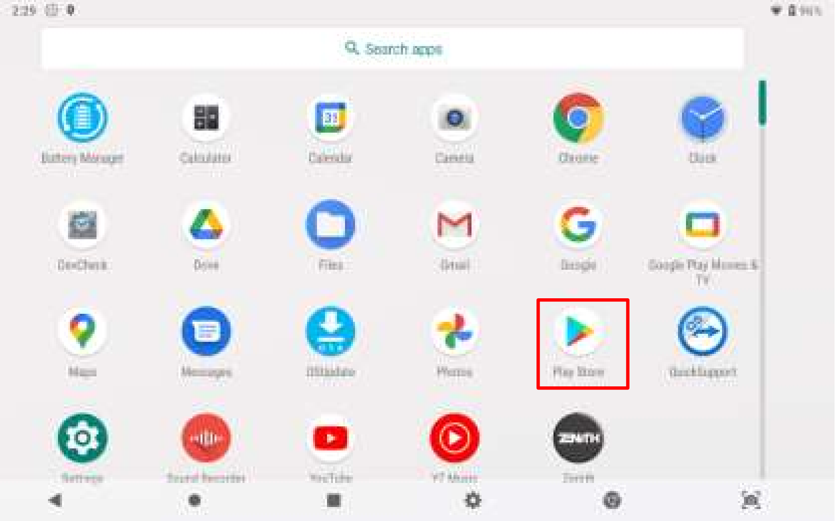
You can print the image, recorded data and diagnostic report saved in Zenith Z5's internal storage via wireless printer.

● Print Setup

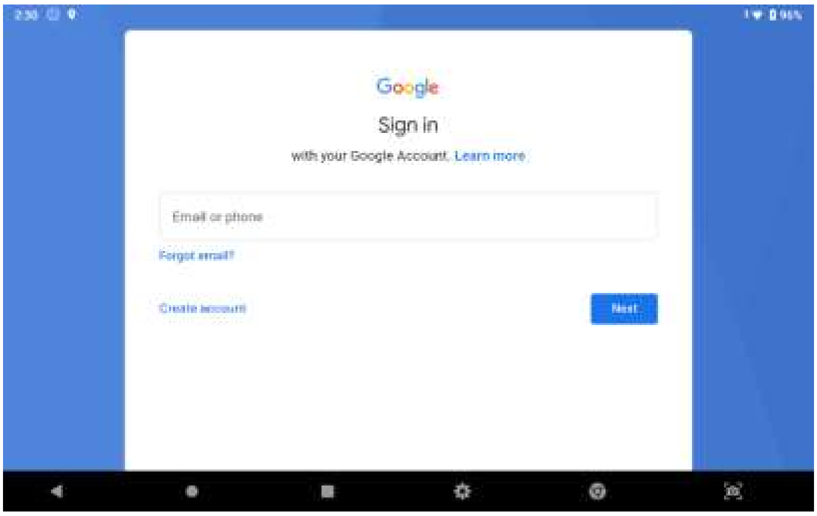
A. In order to connect Z5 to your wireless printer, you need to install a print driver application that is matching with your printer.

* Only print drivers authorized by EZDS can be installed in the Z5. Other applications are not allowed to download due to possible reduction in performance or error in the software. If any suspicious attempt to download unauthorized applications in the Z5, warranty may be void.

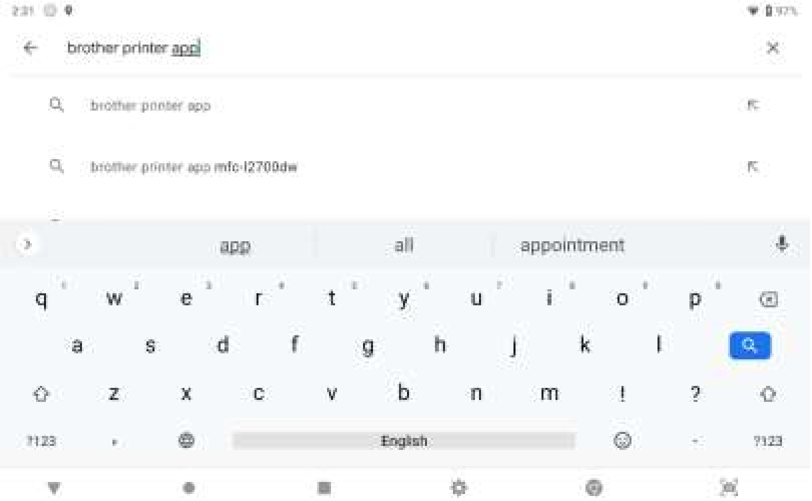
- Example (Brother Printer):


Search apps
Battery Manager
Calculator
Calendar
Camera
Chrome
Clock
DevCheck
Drive
Files
Gmail
Google
Google Play Movies & TV
Maps
Messages
OSUpdate
Photos
Play Store
QuickSupport
Settings
Sound Recorder
YouTube
YT Music
Zenith

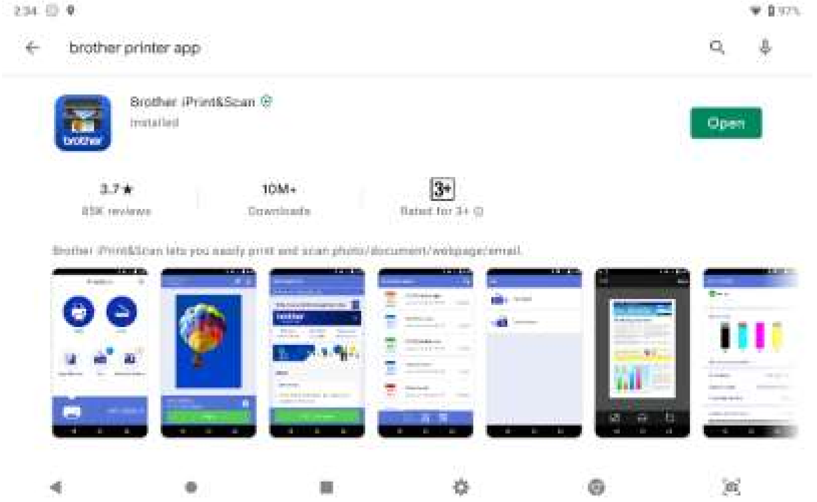
B. You will be required to log in to your Google account to get access to the Play Store.


Google
Sign in
with your Google Account. Learn more
Email or phone
Forgot email?
Create account
Next

C. After successful login to your Google account, search for the driver of the printer you wish to connect.

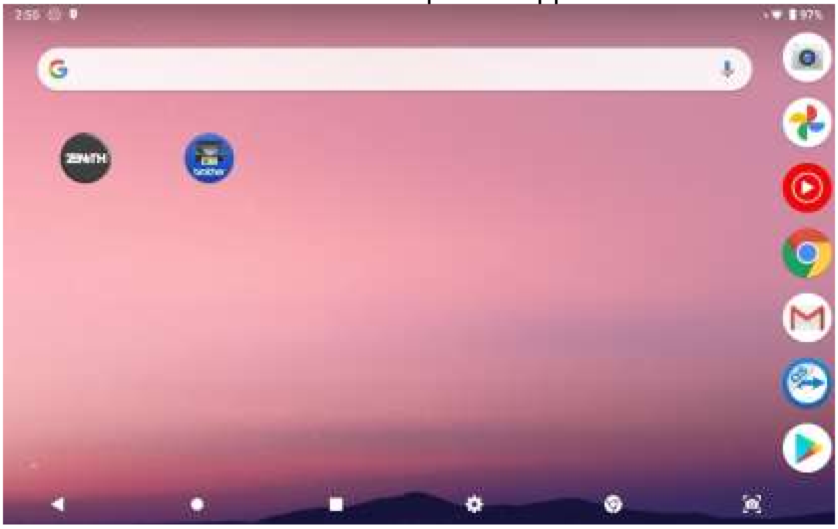

2:31
97%
brother printer app
brother printer app
brother printer app mfc-l2700dw
app
all
appointment
q w e r t y u i o p
a s d f g h j k l
z x c v b n m ! ?
?123
English
?123

D. Download the driver.

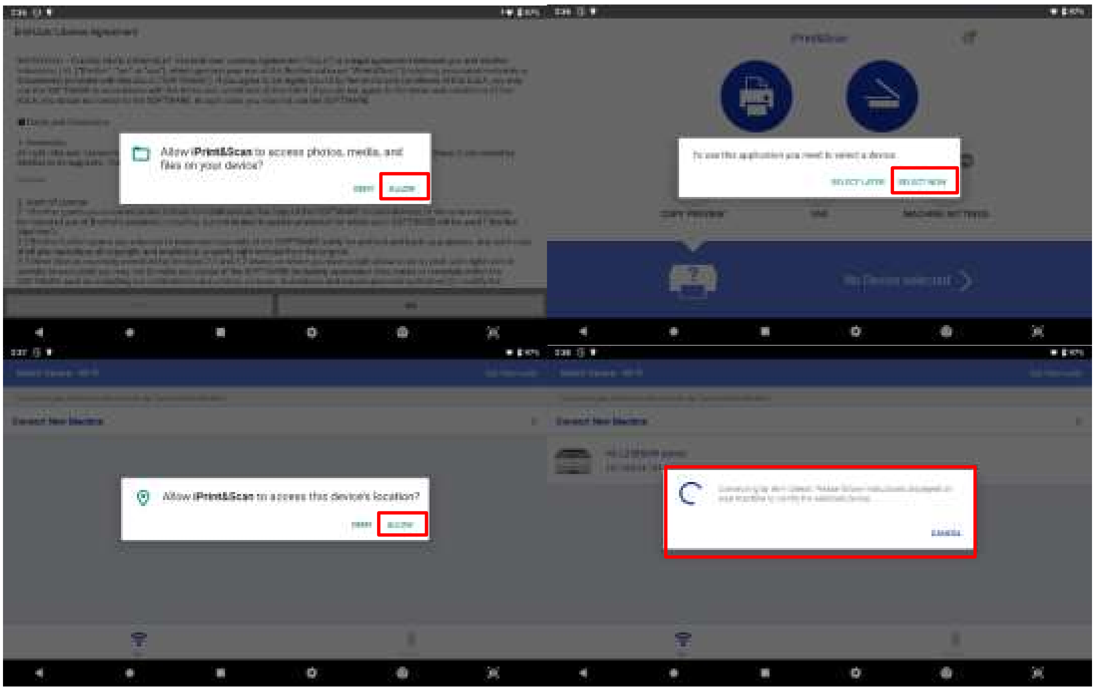

2:34
97%
brother printer app
Brother iPrint&Scan
Installed
Open
3.7★
85K reviews
10M+
Downloads
3+
Rated for 3+

Brother iPrint&Scan lets you easily print and scan photo/document/webpage/email.

E. After successful installation, printer icon will be appeared in the main screen. Run the printer App.


2:55
97%
ZENITH
brother

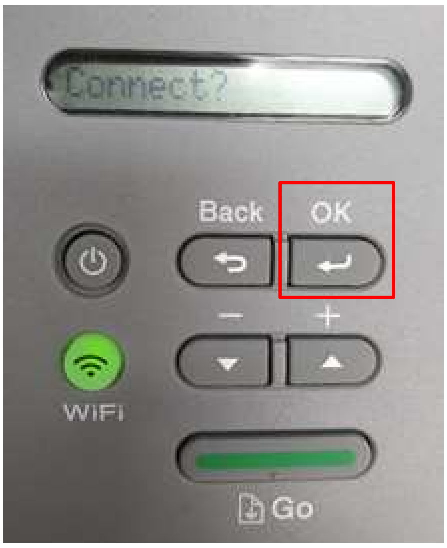
F. Allow the printer App. to access photos, media, and files in the device. Then connect the printer.

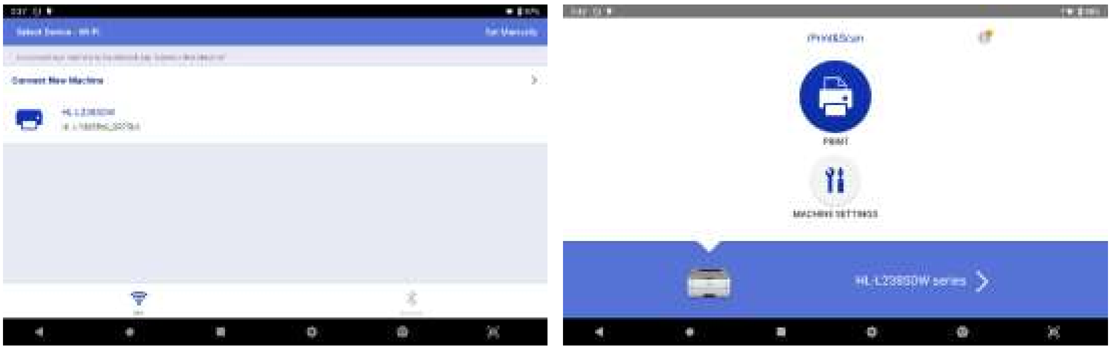


Allow iPrint&Scan to access photos, media, and files on your device?

Allow iPrint&Scan to access this device's location?

G. From the printer, press OK when it asks to connect with the device (Z5).

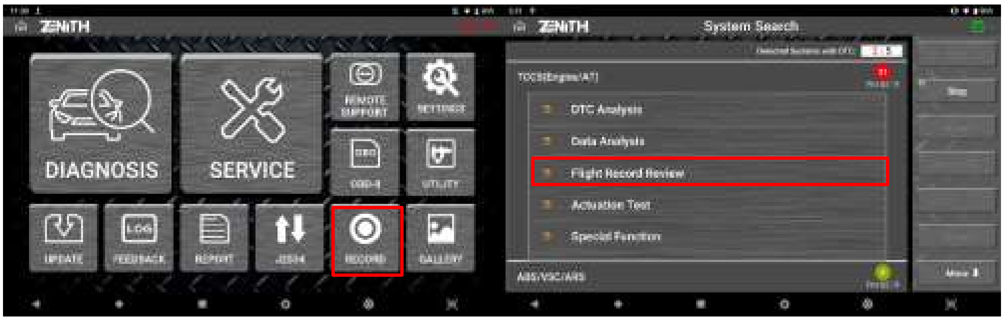

Connect?
Back
OK
WiFi
Go


Connect New Machine
iPrint&Scan
PRINT
MACHINE SETTINGS

Printing Image

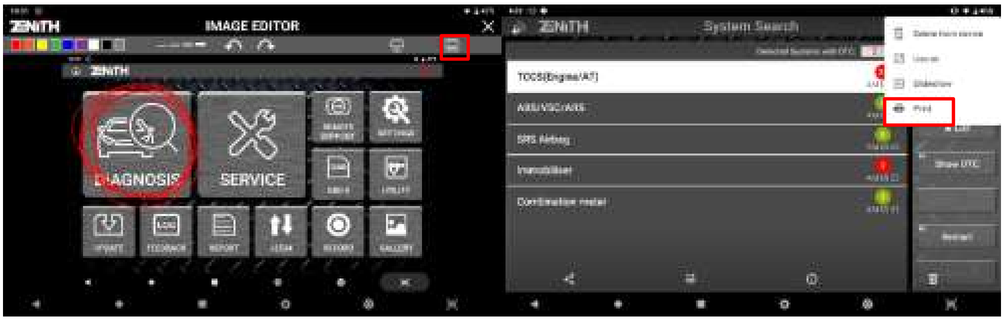
Saved images can be printed from either photo folder located at home screen or inside Z5 application in [Record]. For the purpose of this manual, only Z5 application will be explained.

Select [Record] to search for an image that is going to be printed.


ZENITH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY
System Search
TOCS(Engine/AT)
DTC Analysis
Data Analysis
Flight Record Review
Actuation Test
Special Function
ABS/VSC/ARS

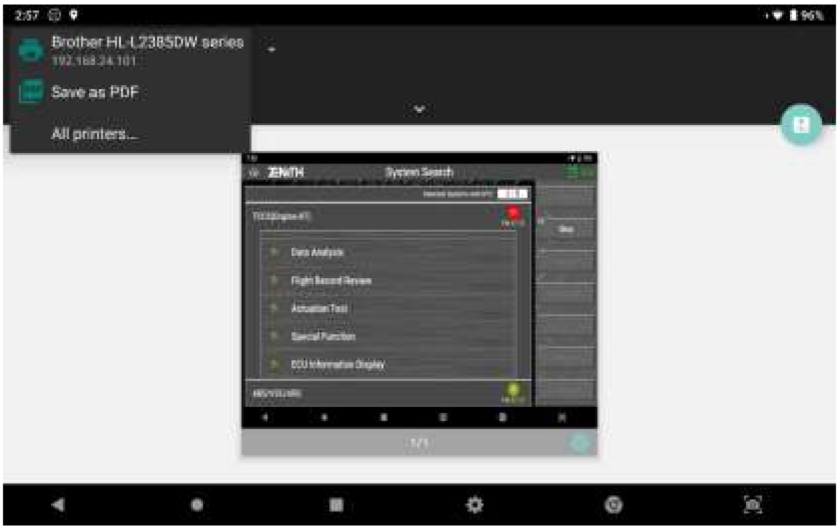
Whenever you capture an image or record data during diagnosis, specific make folder is created under 'Record Data' and 'Internal Storage' folder. Screenshot image is saved as PNG format in Z5.

Once you find desired image, select [OPEN] to view the image.

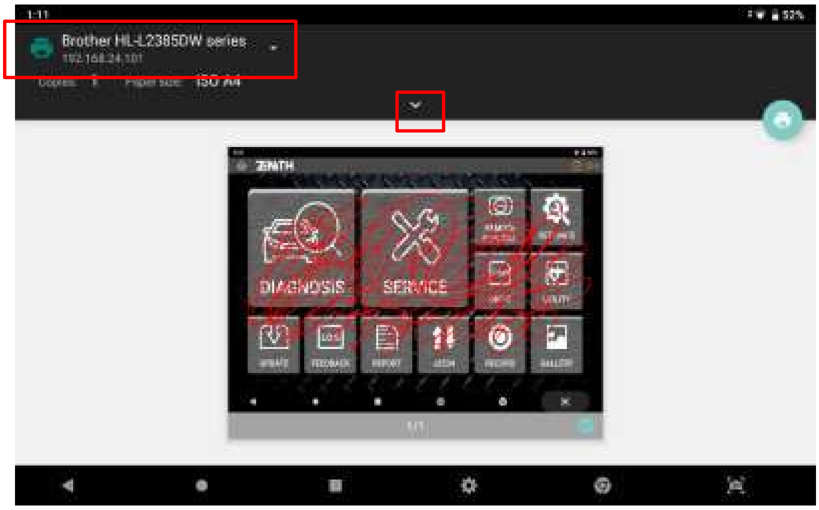

ZENITH
IMAGE EDITOR
DIAGNOSIS
SERVICE
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY
System Search
TOCS(Engine/AT)
ABS/VSC/ARS
SRS Airbag
Immobiliser
Combination meter
Print
Show DTC

If you select option icon at the top right corner, drop down menu will appear and you will see print option as shown below.

Select [Print] to begin printing the image.

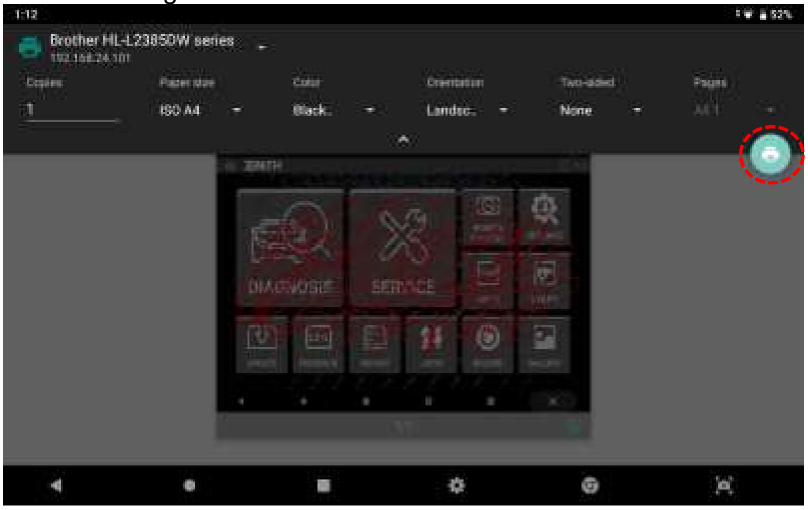

2:57
96%
Brother HL-L2385DW series
192.168.24.101
Save as PDF
All printers...
ZENITH
System Search
TOCS(Engine/AT)
Data Analysis
Flight Record Review
Actuation Test
Special Function
ECU Information Display
ABS/VSC/ARS
1/1

If your wireless printer is properly connected to Z5, you will see the printer's name displayed at left top corner as shown below.



Brother HL-L2385DW series
192.168.24.101
Copies: 1 Paper size: ISO A4

If you slide down the top bar or select pointing down arrow button, you can edit print setting such as paper size, color, and orientation. Selecting print icon as shown below will print the image with desired setting.

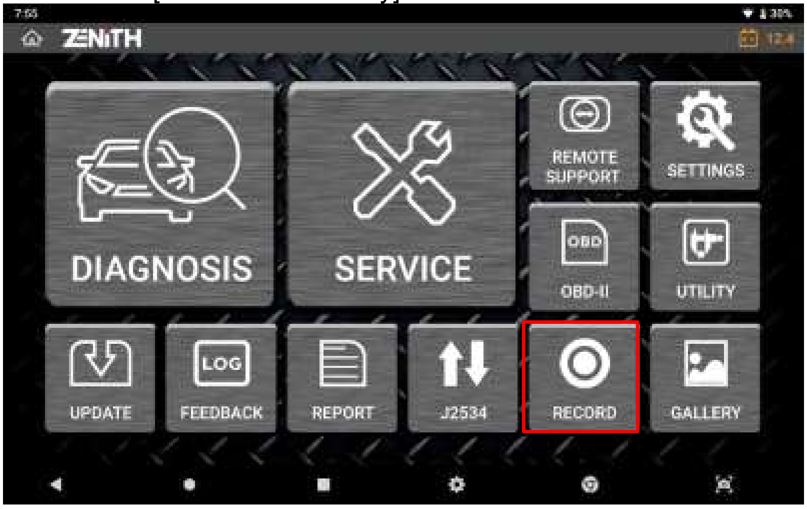


Brother HL-L2385DW series
192.168.24.101

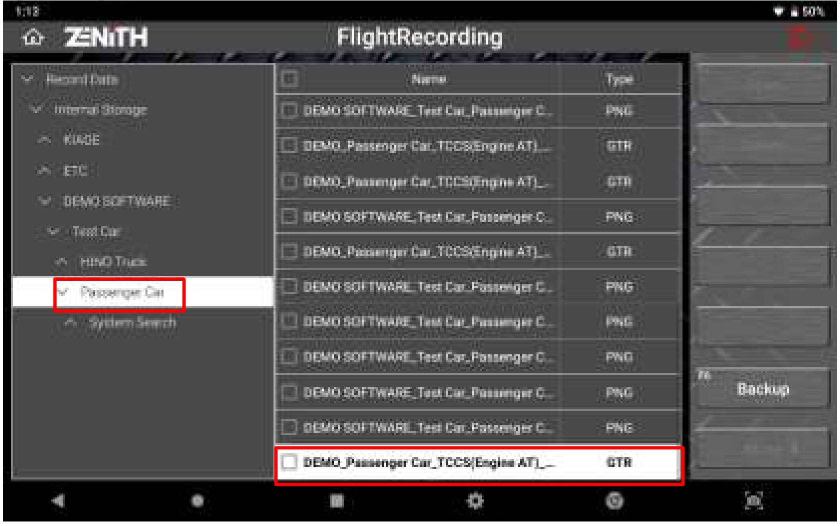
Copies	Paper size	Color	Orientation	Two-sided	Pages
1	ISO A4	Black..	Landsc..	None	All 1

- **Printing Recorded Data**

After recording live data in [Data Analysis], you can print those parameters captured at each frame. Please refer to [9. Record & Gallery] to search for recorded data


ZENITH
12.4
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY

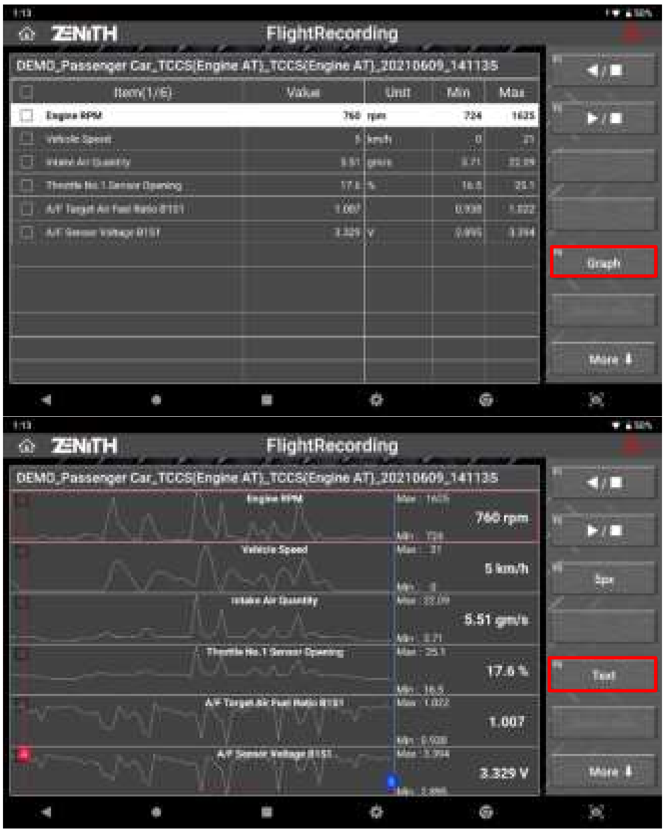
Under ‘Recorded Data’ and ‘Internal Storage’ folder located in left side of the screen, you will find specific make folder that is created whenever you captured an image or recorded data during diagnosis. Data recorded during [Data Analysis] is saved as ‘GTR’ format. Select the file and select [OPEN] to view the data.


FlightRecording
Record Data
Internal Storage
KIADE
ETC
DEMO SOFTWARE
Test Car
HINO Truck
Passenger Car
System Search
Backup

☐	Name	Type
☐	DEMO SOFTWARE_Test Car_Passenger C...	PNG
☐	DEMO_Passenger Car_TCCS(Engine AT)_...	GTR
☐	DEMO_Passenger Car_TCCS(Engine AT)_...	GTR
☐	DEMO SOFTWARE_Test Car_Passenger C...	PNG
☐	DEMO_Passenger Car_TCCS(Engine AT)_...	GTR
☐	DEMO SOFTWARE_Test Car_Passenger C...	PNG
☐	DEMO SOFTWARE_Test Car_Passenger C...	PNG
☐	DEMO SOFTWARE_Test Car_Passenger C...	PNG
☐	DEMO SOFTWARE_Test Car_Passenger C...	PNG
☐	DEMO SOFTWARE_Test Car_Passenger C...	PNG
☐	DEMO_Passenger Car_TCCS(Engine AT)_...	GTR

In order to print recorded data, you must switch to Spreadsheet format text mode by selecting [GRAPH] firstly and then select [TEXT] as shown below images.

All recorded samples are displayed in sequence in Spreadsheet format. First column [No.] represents number of frame and they are all displayed in the order of elapsed time from start recording.

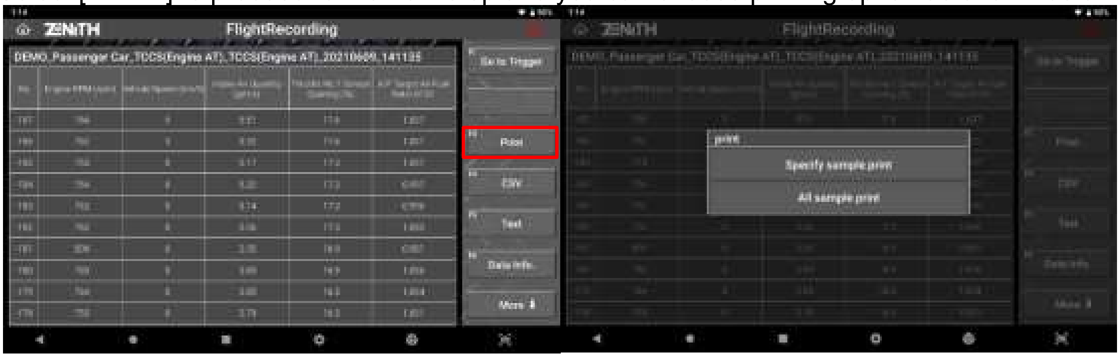

FlightRecording
Graph
More
Text
760 rpm
5 km/h
5.51 gm/s
17.6 %
1.007
3.329 V

DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210609_141135

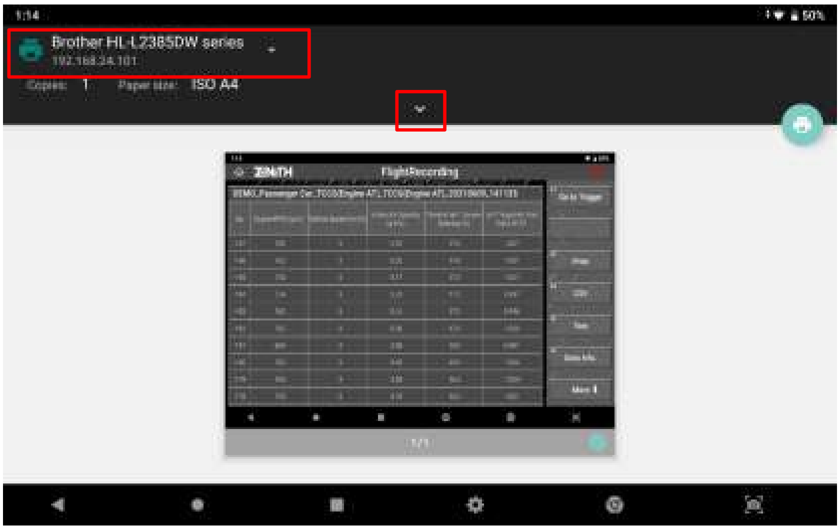
☐	Item(1/6)	Value	Unit	Min	Max
☐	Engine RPM	760	rpm	724	1625
☐	Vehicle Speed	5	km/h	0	21
☐	Intake Air Quantity	5.51	gm/s	3.71	22.09
☐	Throttle No.1 Sensor Opening	17.6	%	16.5	25.1
☐	A/F Target Air Fuel Ratio B1S1	1.007		0.938	1.022
☐	A/F Sensor Voltage B1S1	3.329	V	2.895	3.394

DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210609_141135

Select [PRINT] to proceed to the next step and you can choose printing option as shown below.

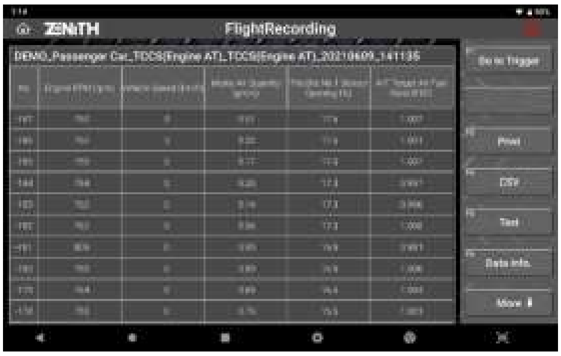

FlightRecording
DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210609_141135
Go to Trigger
Print
CSV
Text
Data Info.
More
print
Specify sample print
All sample print

Select [ALL Sample Print] to print all the pages or select [SPECIFY SAMPLE PRINT] to enter the range of sample to be printed.


Brother HL-L2385DW series
192.168.24.101
Copies: 1 Paper size: ISO A4

Then slide down the top bar or select pointing down arrow button, you can edit print setting such as paper size, color, and orientation. Selecting print icon as shown below will print the image with desired setting.

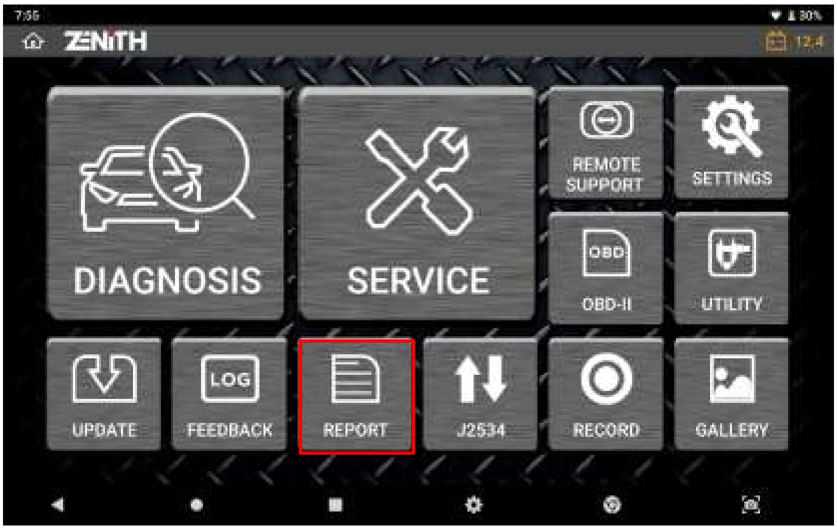
Selecting [ALL SAMPLE PRINT] will print the recorded samples in order.


FlightRecording
DEMO_Passenger Car_TCCS(Engine AT)_TCCS(Engine AT)_20210609_141135
Go to Trigger
Print
CSV
Text
Data Info.
More

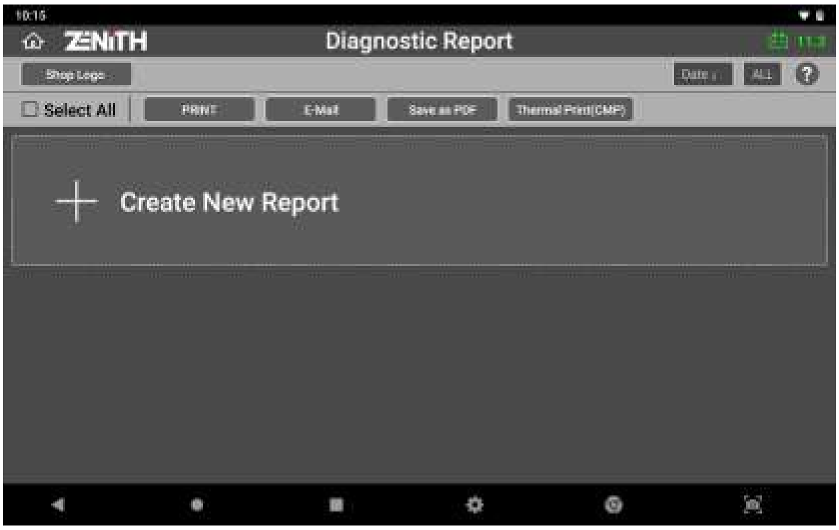
Chapter 11. Report

11.1 Diagnostic Report Function

Not only can you save the reports as a PDF file in Z5's memory, also, with the help of Bluetooth and Wi-Fi technology, you can print or send them to desired E-mail address.


7:55
ZENITH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD-II
UTILITY
UPDATE
FEEDBACK
REPORT
J2534
RECORD
GALLERY

Selecting [Diagnostic Report] in main screen, as shown above, allows you to view the list of previously saved reports.


10:15
ZENITH
Diagnostic Report
Shop Logo
Date ↓
ALL
?
☐ Select All
PRINT
E-Mail
Save as PDF
Thermal Print(CMP)
Create New Report

11.2 Creating a report

A new report is created in the following sequence:

Pre-repair Scan
•System Search
•DTC Analysis
•Save Pre-scan Result

➡

Repair Service

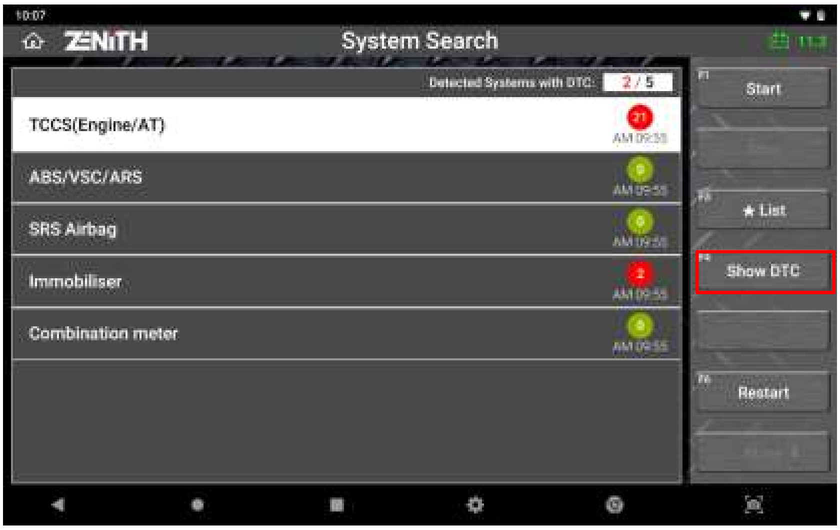
➡

Post-repair Scan
•System Search
•Save Post-scan Result

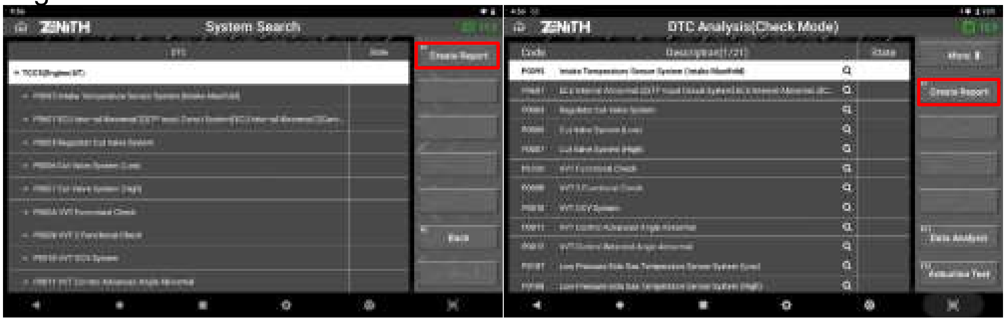
● Pre-repair Scan

In order to create a diagnostic report, you must start from selecting [DIAGNOSIS] from Z5 main menu to perform [System Search] on the vehicle.
Please refer to [5.2 System Search & 5.3 DTC Analysis] of [Chapter 5. Diagnosis - General] in this manual for more details.

[System Search] scans all available control systems equipped in the vehicle and displays the number of DTCs logged in each control system.

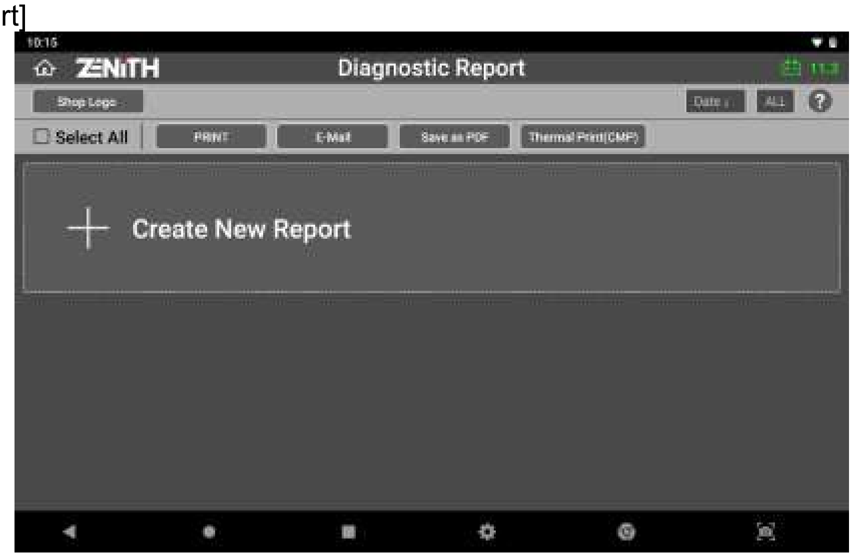

10:07
ZENiTH
System Search
Detected Systems with DTC: 2 / 5
TCCS(Engine/AT) 21 AM 09:55
ABS/VSC/ARS 0 AM 09:55
SRS Airbag 0 AM 09:55
Immobiliser 2 AM 09:55
Combination meter 0 AM 09:55
F1 Start
F3 ★ List
F4 Show DTC
F6 Restart

After [System Search] or [DTC Analysis] is completed, selecting [Show DTC] will show the detailed list of detected system and DTCs, and activate the [REPORT] button at the top of right.


ZENiTH
System Search
Create Report
Back
ZENiTH
DTC Analysis(Check Mode)
Code
Description(1/21)
Create Report
Data Analysis
Actuation Test

Once [REPORT] button is selected, previously saved reports are displayed if available.

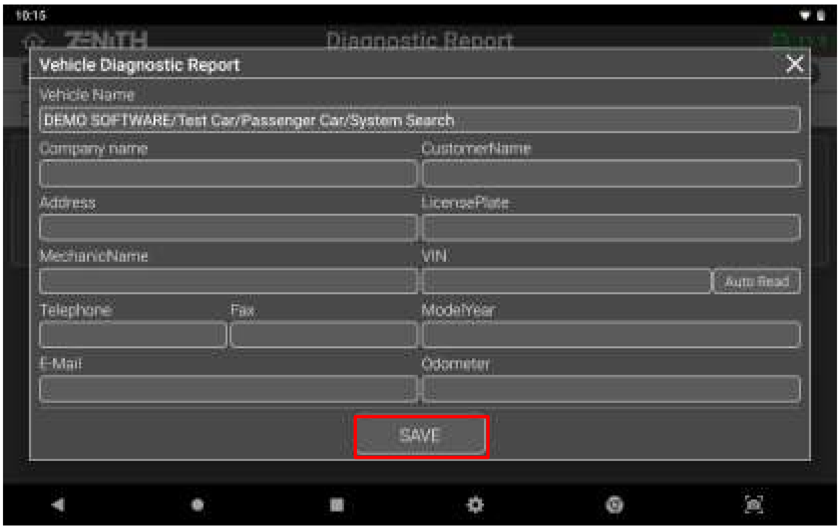
And at the same time, you can create a new diagnostic report by selecting [+ Create New Report]


10:15
ZENITH
Diagnostic Report
Shop Logo
Date
ALL
?
☐ Select All
PRINT
E-Mail
Save as PDF
Thermal Print(CMP)
+ Create New Report

You are required to enter the vehicle, workshop and customer information that are going to be used in the header of the report.

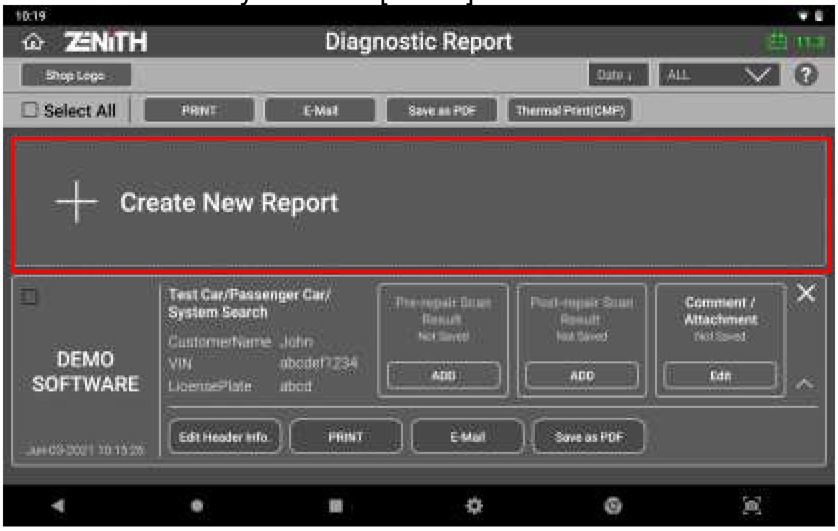
- **Vehicle Name**
  Automaker and vehicle model are automatically inputted according to the menu that you have selected before performing System Search. You can edit the vehicle name if necessary.
- **Workshop information**
  Shop name, Address, Mechanic Name, Telephone number, Fax number and Email address are automatically loaded from user information saved in Configuration.
  You can edit each entry if necessary.
- **Date**
  Automatically loaded from the system clock
- **Customer information**
  You need to enter manually if necessary.

- **VIN Auto Read**
  Select Auto Read button if you want to let Z5 read the VIN from the vehicle automatically.


10:15
ZENITH
Diagnostic Report
Vehicle Diagnostic Report
Company name
CustomerName
Address
LicensePlate
MechanicName
VIN
Auto Read
Telephone
Fax
ModelYear
E-Mail
Odometer
SAVE

Vehicle Name: DEMO SOFTWARE/Test Car/Passenger Car/System Search

A new report is created when you select [SAVE] button on the left.


10:19
ZENITH
Diagnostic Report
Shop Logo
Date ↓
ALL
?
☐ Select All
PRINT
E-Mail
Save as PDF
Thermal Print(CMP)
Create New Report
☐
DEMO SOFTWARE
Jun-03-2021 10:15:26
Pre-repair Scan Result
Not Saved
ADD
Post-repair Scan Result
Not Saved
ADD
Comment / Attachment
Not Saved
Edit
Edit Header Info.
PRINT
E-Mail
Save as PDF

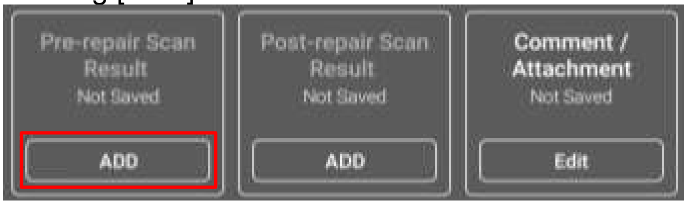
Test Car/Passenger Car/System Search

CustomerName John

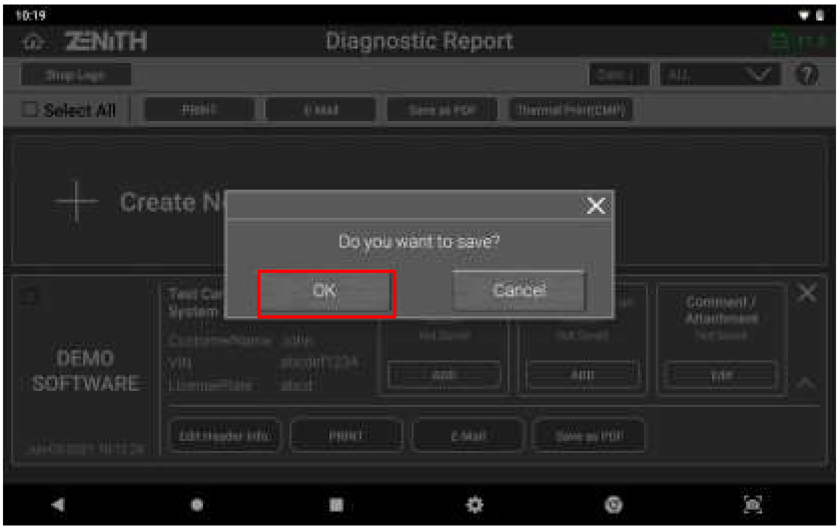
VIN abcdef1234

LicensePlate abcd

You can add the result of the current diagnostic session to the report as [Pre-repair Scan Result] by selecting [ADD] button.

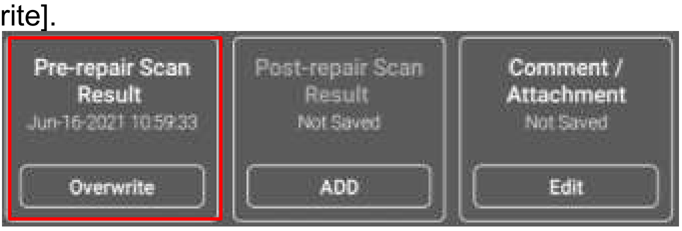

Pre-repair Scan Result
Not Saved
ADD
Post-repair Scan Result
Not Saved
ADD
Comment / Attachment
Not Saved
Edit

Once [Add] button is selected, Z5 will ask for confirmation.


10:19
ZENiTH
Diagnostic Report
Select All
Create N
OK
Cancel
DEMO SOFTWARE

Do you want to save?

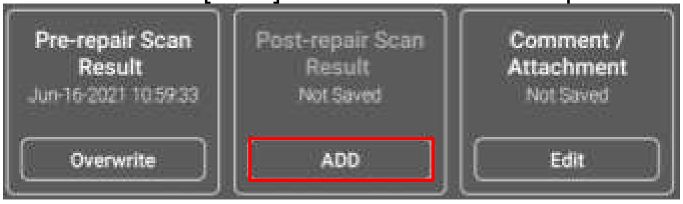
It will be noticeable that the status of the Pre-repair Scan Result is changed from “Not Saved” to data and time when the Result was saved. Also [ADD] button has been changed to [Overwrite].


Pre-repair Scan Result
Jun-16-2021 10:59:33
Overwrite
Post-repair Scan Result
Not Saved
ADD
Comment / Attachment
Not Saved
Edit

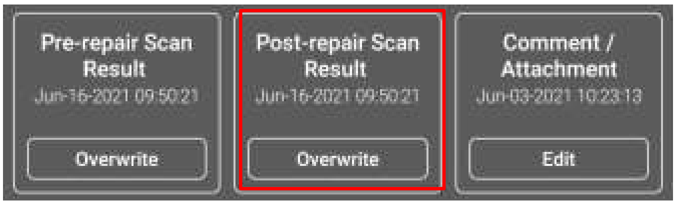
If you want to delete the previously saved Pre-repair Scan Result and replace it with a new result, you can do so by repeating the System Search as explained above and selecting [Overwrite] button.

- ## Post-repair Scan

Repair the vehicle as necessary and repeat System Search or DTC Analysis procedure as explained above when repair and service are completed.
Select the report to which you want to add the Post-scan result among the list of the diagnostic reports. Then select [ADD] button in the Post-Repair Result slot.

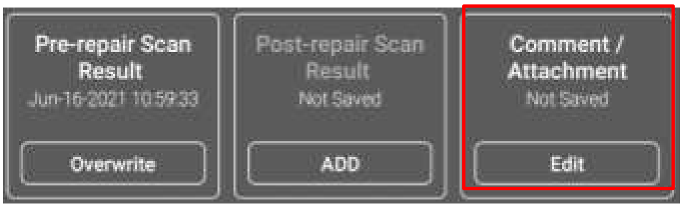

Pre-repair Scan Result
Jun-16-2021 10:59:33
Overwrite
Post-repair Scan Result
Not Saved
ADD
Comment / Attachment
Not Saved
Edit

The status of the Pre-repair Scan Result changes from “Not Saved” to data and time when the Result was saved. Also [ADD] button changes to [Overwrite].
You can delete the previously saved Post-repair Scan Result and replace it with a new result by selecting [Overwrite] button.


Pre-repair Scan Result
Jun-16-2021 09:50:21
Overwrite
Post-repair Scan Result
Jun-16-2021 09:50:21
Overwrite
Comment / Attachment
Jun-03-2021 10:23:13
Edit

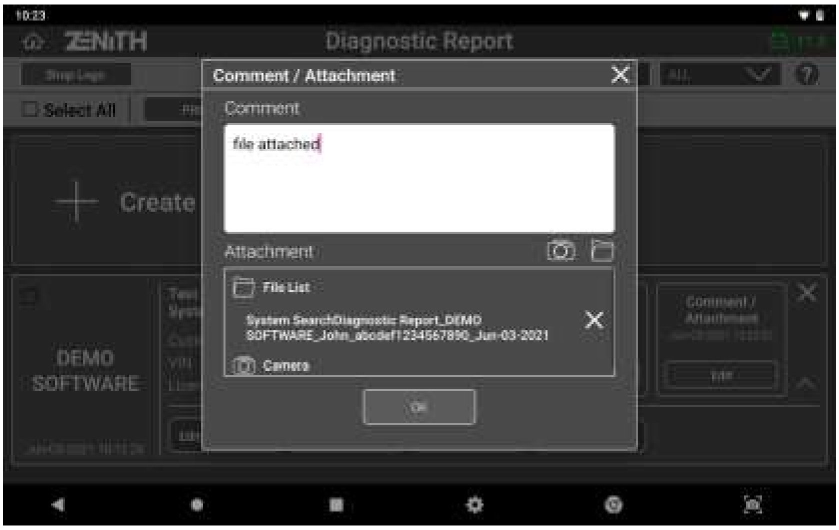
- **Comment / Attachment**

Leave a note or comment in the report by selecting [Edit] button in [Comment / Attachment] box.


Pre-repair Scan Result
Jun-16-2021 10:59:33
Overwrite
Post-repair Scan Result
Not Saved
ADD
Comment / Attachment
Not Saved
Edit

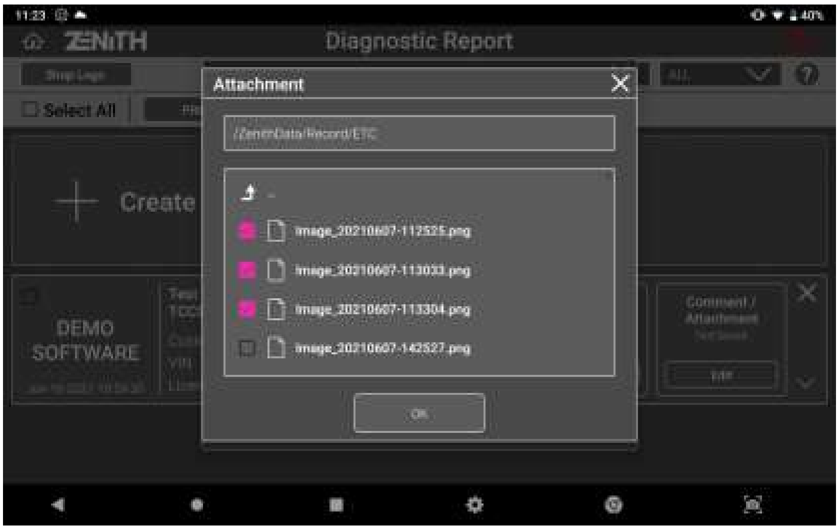
Once [Edit] button is selected, you can freely enter a note in the comment box. On the same screen, you can search for an image file saved in Z5 memory.

Navigate the folders in the Z5 memory to find the image file, and selecting checkbox next to the image and pressing [OK] button will attach image to the report.


10:23
ZENITH
Diagnostic Report
Select All
Create
DEMO SOFTWARE
Comment / Attachment
Comment
Attachment
File List
Camera
OK

file attached

System SearchDiagnostic Report_DEMO SOFTWARE_John_abcdef1234567890_Jun-03-2021


11:23
ZENITH
Diagnostic Report
Attachment
Select All
Create
DEMO SOFTWARE
Comment / Attachment
OK

/ZenithData/Record/ETC

..

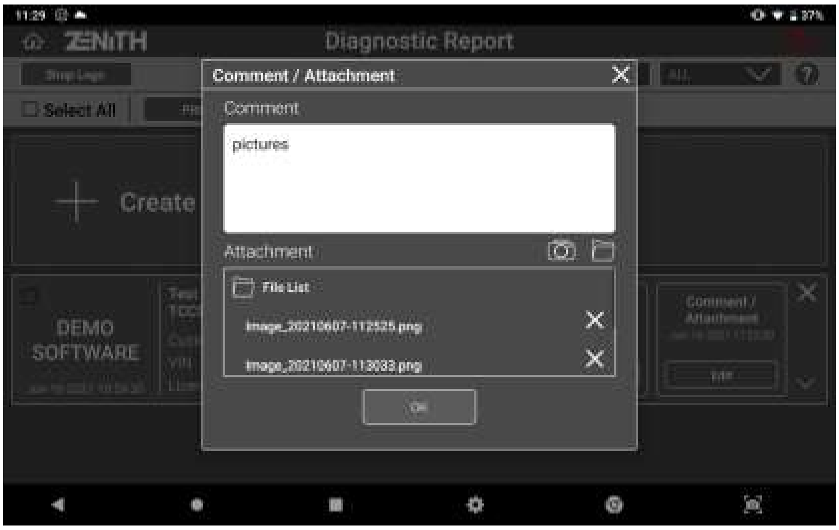
☑ image_20210607-112525.png

☑ image_20210607-113033.png

☑ image_20210607-113304.png

☐ image_20210607-142527.png

When comment and attachment are ready, pressing [OK] button will complete the task.


11:29
ZENITH
Diagnostic Report
Comment / Attachment
Select All
Create
DEMO SOFTWARE
OK

Comment

pictures

Attachment

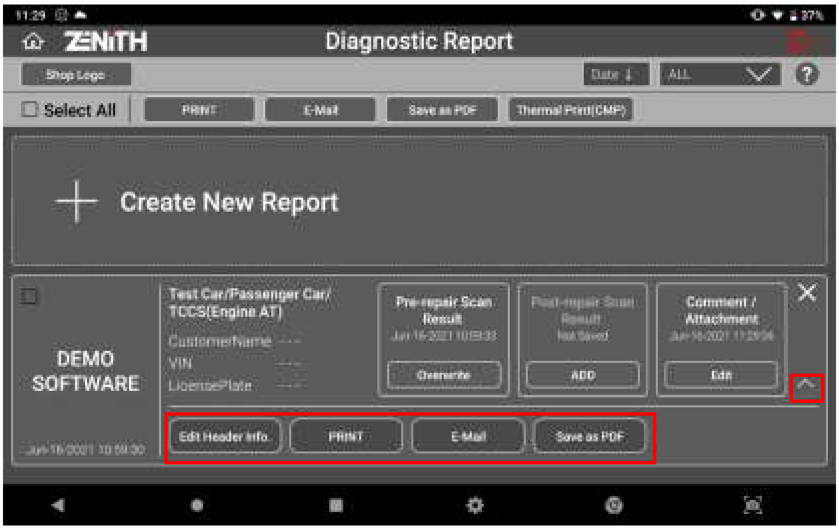
File List

image_20210607-112525.png

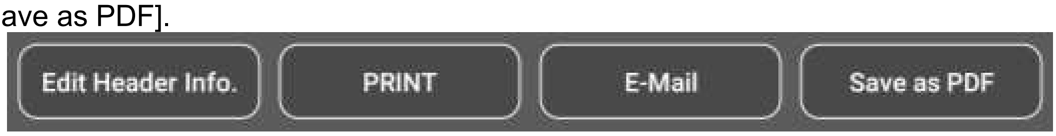
image_20210607-113033.png

Added date and time will be displayed below Comment/Attachment title as shown below.

11.3 Additional Functions


11:29
Diagnostic Report
Shop Logo
Date ↓
ALL
?
☐ Select All
PRINT
E-Mail
Save as PDF
Thermal Print(CMP)
Create New Report
DEMO SOFTWARE
Jun-16-2021 10:59:30
Test Car/Passenger Car/ TCCS(Engine AT)
CustomerName ---
VIN ---
LicensePlate ---
Pre-repair Scan Result
Jun-16-2021 10:59:33
Overwrite
Post-repair Scan Result
Not Saved
ADD
Comment / Attachment
Edit
Edit Header Info.
PRINT
E-Mail
Save as PDF

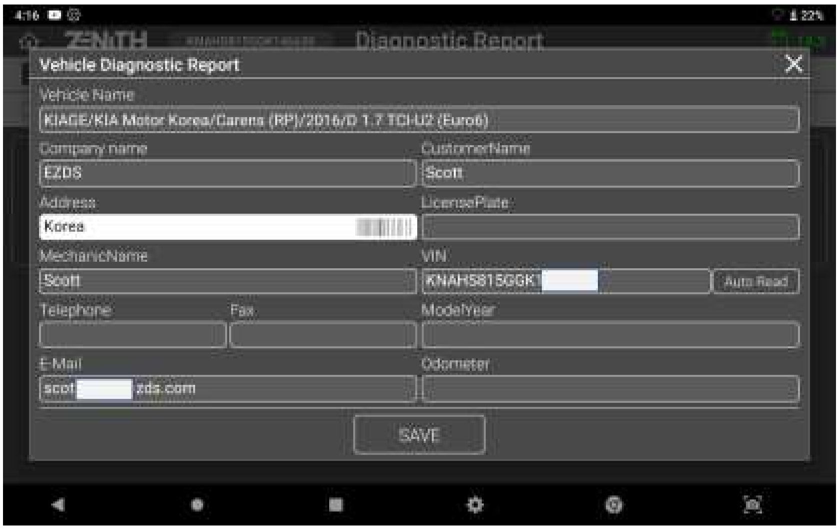
Selecting upper arrow, as shown above in the red box, or touching any space in the slot will display additional functions such as [Edit Header info], [Print], [E-Mail], and [Save as PDF].


Edit Header Info.
PRINT
E-Mail
Save as PDF

You can freely edit header information in the report, print, send as an email or save the report as PDF format.

- **Edit Header Information**

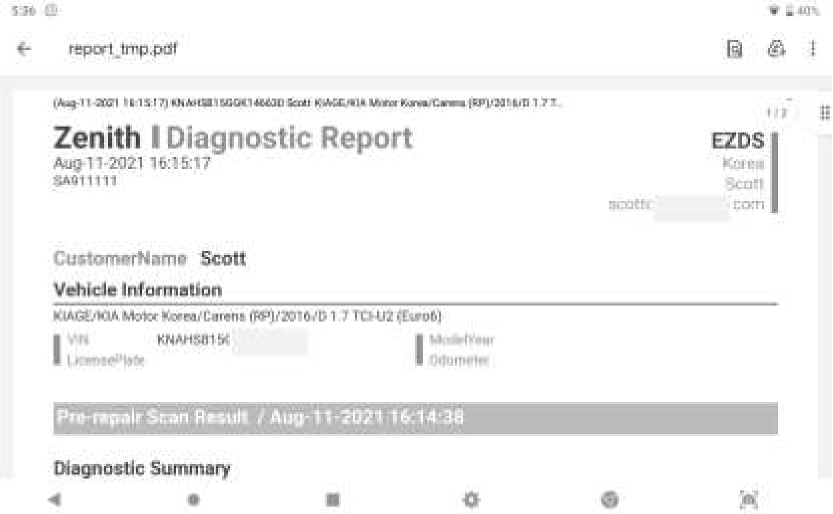
You can edit or enter header information that will be displayed at the top of the report. Unless entered by the user, workshop information including Company name, Address, Mechanic Name, Telephone number and E-Mail address will be retrieved from [User info] saved in configuration menu.


4:16
Diagnostic Report
Vehicle Diagnostic Report
Auto Read
SAVE

Vehicle Name
KIAGE/KIA Motor Korea/Carens (RP)/2016/D 1.7 TCI-U2 (Euro6)

Company name: EZDS
CustomerName: Scott
Address: Korea
LicensePlate:
MechanicName: Scott
VIN: KNAH5815GGK[redacted]
Telephone:
Fax:
ModelYear:
E-Mail: scot[redacted]zds.com
Odometer:

Header information will appear at the top of the report when printed.



report_tmp.pdf

(Aug-11-2021 16:15:17) KNAHS815GGK146630 Scott KIAGE/KIA Motor Korea/Carens (RP)/2016/D 1.7 T...

Zenith | Diagnostic Report
Aug-11-2021 16:15:17
SA911111

EZDS
Korea
Scott
scott[redacted]com

CustomerName **Scott**

Vehicle Information

KIAGE/KIA Motor Korea/Carens (RP)/2016/D 1.7 TCI-U2 (Euro6)

VIN KNAHS815[redacted]
LicensePlate
ModelYear
Odometer

Pre-repair Scan Result / Aug-11-2021 16:14:38

Diagnostic Summary

● Print

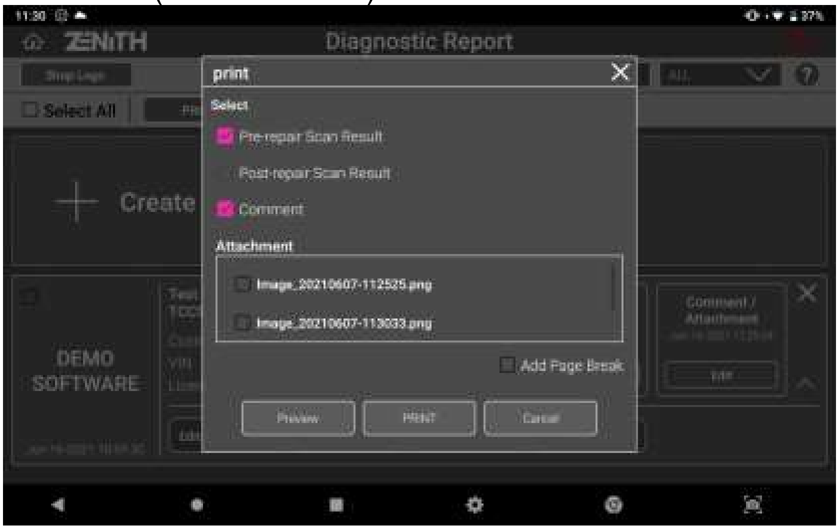
With connection to the printer, you can print the diagnostic report by selecting [PRINT] among the additional functions. Please refer to [7.4. Data Printing] for more information about printer set up and installation of printer drivers to Z5 .

Once [PRINT] button is selected, a pop-up menu where you can select desirable items that will be included in the printed report.

➢ Items for Printing

Checked box items will be included in the report.

- Pre-repair Scan Result
- Post-repair Scan Result
- Comment (and attachment)



print

Select

☑ Pre-repair Scan Result
☐ Post-repair Scan Result
☑ Comment

Attachment

☐ Image_20210607-112525.png
☐ Image_20210607-113033.png

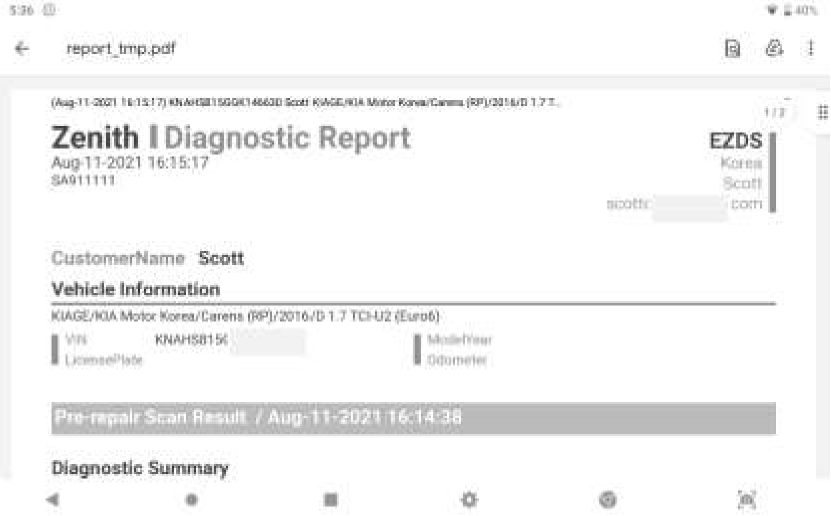
☐ Add Page Break

➢ Add Page Break

If checked, Z5 will print the separate report for each of the selected item and put the header information at the head of each report. If not checked, all the selected items will be printed without break as a single report and the header information is printed in the first page only.

➢ Preview

Allows you to view the end result before printing.



report_tmp.pdf

Zenith | Diagnostic Report
Aug-11-2021 16:15:17
SA911111

EZDS
Korea
Scott
scott[redacted]com

CustomerName **Scott**

Vehicle Information

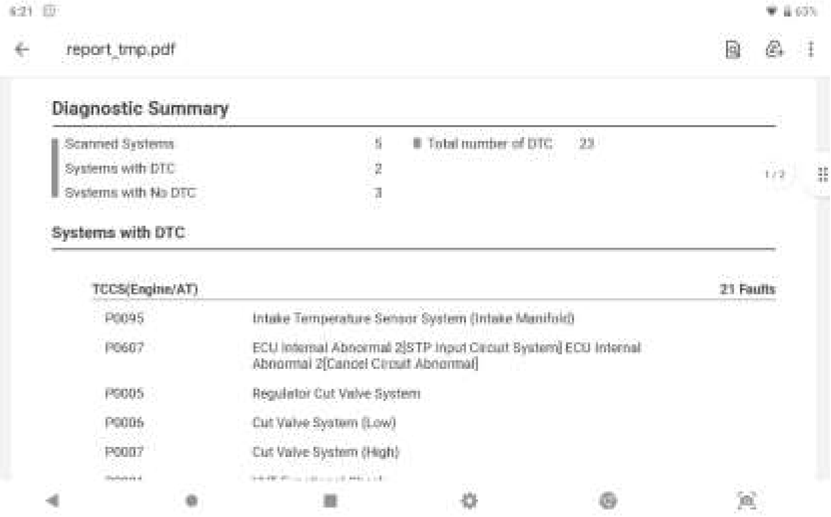
KIAGE/KIA Motor Korea/Carens (RP)/2016/D 1.7 TCI-U2 (Euro6)

VIN	KNAHS815[redacted]	ModelYear	
LicensePlate		Odometer	

Pre-repair Scan Result / Aug-11-2021 16:14:38

Diagnostic Summary

Preview: Header Information



report_tmp.pdf

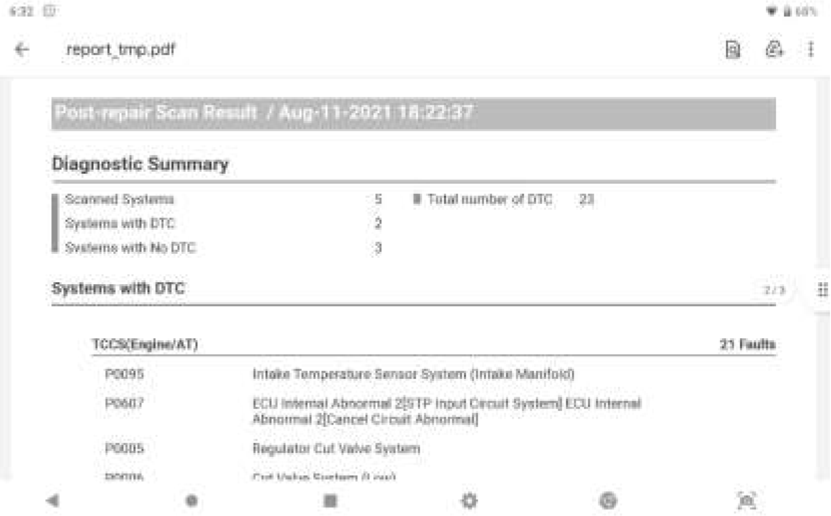
Diagnostic Summary

Scanned Systems	5	Total number of DTC	23
Systems with DTC	2		
Systems with No DTC	3		

Systems with DTC

TCCS(Engine/AT)	21 Faults
P0095	Intake Temperature Sensor System (Intake Manifold)
P0607	ECU Internal Abnormal 2[STP Input Circuit System] ECU Internal Abnormal 2[Cancel Circuit Abnormal]
P0005	Regulator Cut Valve System
P0006	Cut Valve System (Low)
P0007	Cut Valve System (High)

Preview: Pre-repair scan result


6:32
report_tmp.pdf
2 / 3

Post-repair Scan Result / Aug-11-2021 18:22:37

Diagnostic Summary

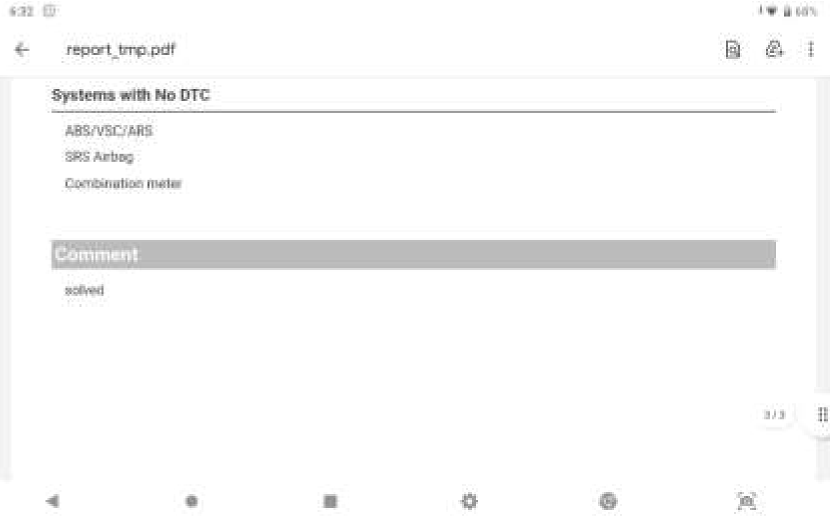
Scanned Systems	5	Total number of DTC	23
Systems with DTC	2		
Systems with No DTC	3		

Systems with DTC

TCCS(Engine/AT) **21 Faults**

P0095	Intake Temperature Sensor System (Intake Manifold)
P0607	ECU Internal Abnormal 2[STP Input Circuit System] ECU Internal Abnormal 2[Cancel Circuit Abnormal]
P0005	Regulator Cut Valve System

Preview: Post-repair Scan Report


6:32
report_tmp.pdf
3 / 3

Systems with No DTC

ABS/VSC/ARS

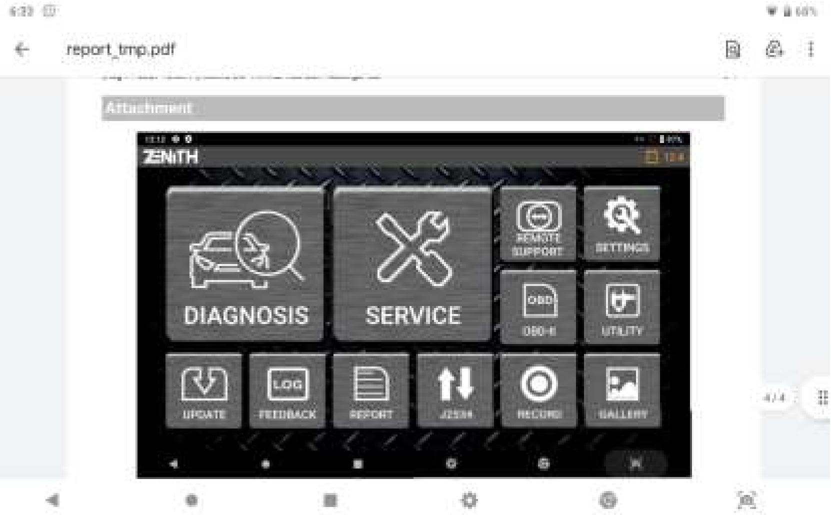
SRS Airbag

Combination meter

Comment

solved

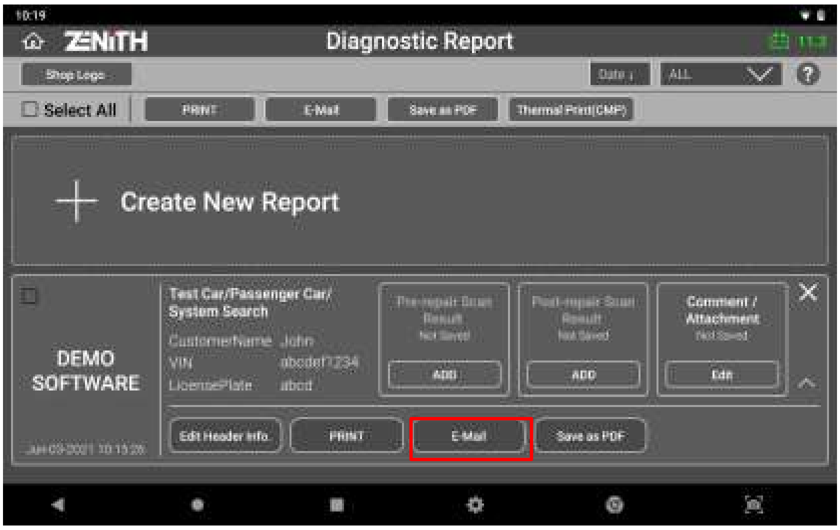
Preview: comment


6:33
report_tmp.pdf
Attachment
ZENITH
DIAGNOSIS
SERVICE
REMOTE SUPPORT
SETTINGS
OBD
OBD-II
UTILITY
UPDATE
LOG
FEEDBACK
REPORT
J2534
RECORD
GALLERY
4 / 4

Preview: Attachment

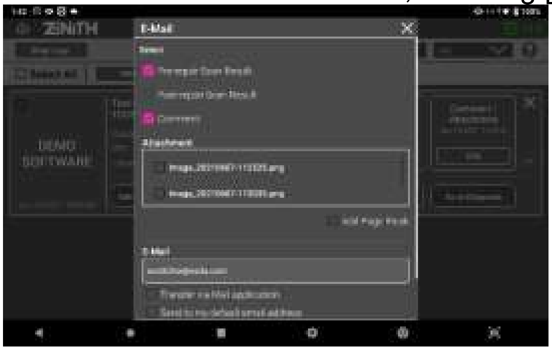
Email

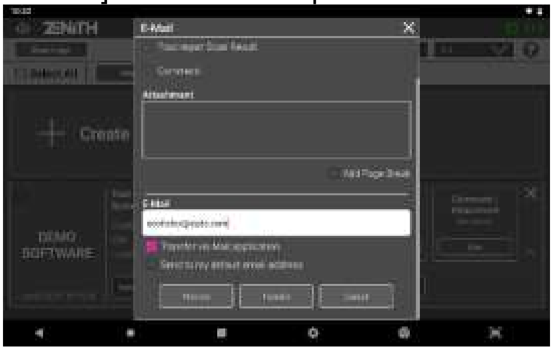
With connection to the internet, you can send the report as an E-mail to the entered address.


10:19
ZENITH
Diagnostic Report
Shop Logo
Date ↓
ALL
?
Select All
PRINT
E-Mail
Save as PDF
Thermal Print(CMP)
Create New Report
DEMO SOFTWARE
Jun-09-2021 10:15:26
Pre-repair Scan Result
Not Saved
ADD
Post-repair Scan Result
Not Saved
ADD
Comment / Attachment
Not Saved
Edit
Edit Header Info.
PRINT
E-Mail
Save as PDF

Test Car/Passenger Car/ System Search
CustomerName John
VIN abcdef1234
LicensePlate abcd

Once [E-Mail] button is selected, you can select desirable items in the report by selecting the checkbox next to the items. If [Add Page Break] is checked, the report will be saved separately for each item with identical header information on top of the report. After E-mail address is entered, selecting [Transfer] button will complete the task.


E-Mail
Select
Pre-repair Scan Result
Post-repair Scan Result
Comment
Attachment
Add Page Break
E-Mail
Transfer via Mail application
Send to my default email address
DEMO SOFTWARE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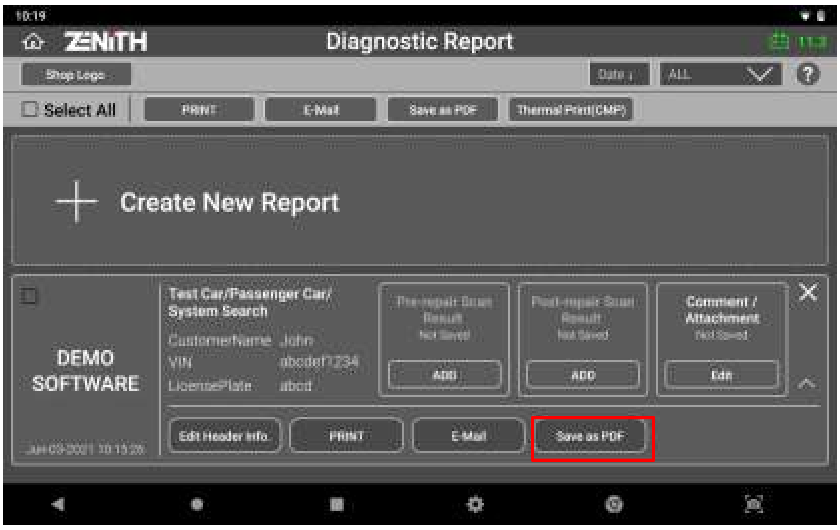
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Test Car/Passenger Car/ System Search
Pre-repair Scan Result
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VIN abcdef1234
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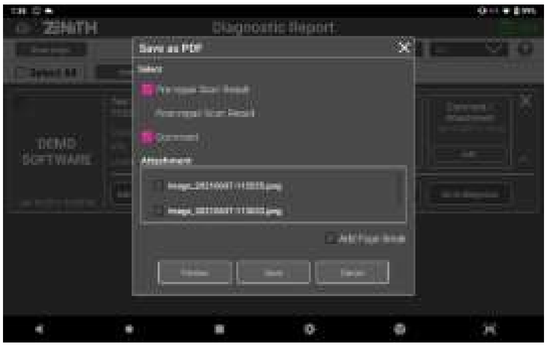
Diagnostic Report
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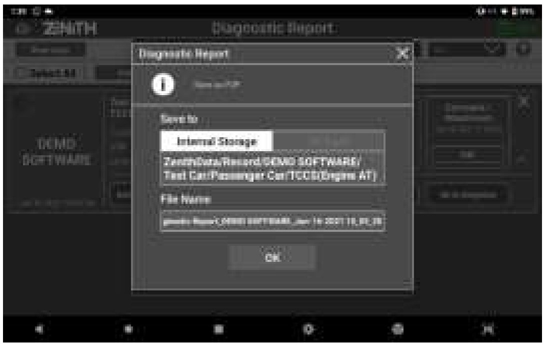
Diagnostic Report
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ZenithData/Record/DEMO SOFTWARE/Test Car/Passenger Car/TCCS(Engine AT)

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Chapter 12. Appendix

A.1. Z5 Limited Warranty

Please note that warranty period for Z5 (base unit only) varies depending on your purchased kit.

Warranty Period for Basic and Standard Kit

Provided that this product has been installed and used as instructed in this operating manual without violating the End User License Agreement, as the manufacturer, EZDS will repair Z5 (base unit only) in Basic and Standard kit with new or reconditioned parts, free of charge for one (1) year from the date of registration.

Warranty service is provided by the local distributor in the country where the product was originally shipped to. In a situation when the Z5 base unit needs to be returned to Korea for warranty service, EZDS will cover the freight cost for return trip of the Z5 base unit for repair service.

Warranty Period for Deluxe and CTB Kit

Provided that this product has been installed and used as instructed in this operating manual without violating the End User License Agreement, as the manufacturer, EZDS will repair Z5 (base unit only) in Deluxe and CTB kit with new or reconditioned parts, free of charge for two (2) year from the date of registration.

Warranty service is provided by the local distributor in the country where the product was originally shipped to, however, in a situation that the Z5 base unit needs to be returned to Korea for warranty service, during the first 1 year of this 2-year warranty period, EZDS will cover the freight cost for return trip of the Z5 base unit for repair service, and for the remaining second 1 year period, the customer shall pay the return trip freight cost while the labor and part costs are still covered by EZDS.

Scope of Warranty

Functioning accessories including cables and connectors are warranted for 1 year from the date of product registration.
Non-functioning parts and consumable accessories including but not limited to base unit plastic case, cartons, paper box, carry case and parts thereof, plastic bags, and printed material.
Lithium-ion battery module is warranted by the manufacturer for 6 months only as the standard policy of the industry.

The warranty is extended solely to the original purchaser. A purchase receipt or other proof of evidencing the date of original purchase may be required to be presented before providing necessary warranty service.

Warranty Void

This warranty only covers failures caused by defects in materials or workmanship, which may occur during normal use. It does not cover damage occurs during shipment or failures which may be caused by products, non-genuine parts or accessories not supplied by EZDS, or failures resulting from acts of God, alteration, accident, misuse, introduction of liquid material or any other foreign matter into the product, abuse, neglect, improper installation, maladjustment of consumer controls, improper maintenance, modification or service conducted by anyone unauthorized by EZDS.

YOU ARE REQUIRED TO REGISTER Z5 AND USER INFORMATION TO ZENITH WEBSITE WHEN THE PRODUCT IS DELIEVERED TO YOU WITHOUT DELAY. EZDS HOLDS THE RIGHT TO REFUSE PROVISION OF ANY SERVICE FOR THE PRODUCT THAT HAS NOT BEEN REGISTERED.

Limited Liability and Disclaimer

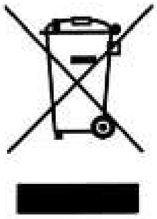
EZDS SHALL NOT BE LIABLE FOR LOSS OF DATA OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGE RESULTING FROM THE USE OF THIS PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE.

EZDS’s entire liability and your exclusive remedy under this warranty shall be limited to the replacement, or any defective parts or functions in the products, which is returned to EZDS or its authorized local distributor, together with a copy of the purchasing receipt, during the aforementioned warranty period. Anything in the foregoing to the contrary notwithstanding, EZDS shall have no obligation for any defects in the product resulting from your storage thereof, or for defects that have been caused by operation of the product other than on the operation manual or in environmental conditions other than those specified by EZDS or by alteration, accident, misuse, abuse, neglect, mishandling, misapplication, installation, maladjustment of consumer controls, improper maintenance, modification or damage that is attributed to acts of Good.

This limited warranty gives you specified legal rights, and you may also have other rights, which vary from country to country. The laws of Republic of Korea, without regard to its conflict-of-laws rules, will govern this Limited Warranty.

A.2. Discard of used equipment

According to the European Union’s WEEE directive, this symbol means that products sold into EU countries must dispose electrical device and/ or its battery separately from household waste. Disposing of the device separately will help conserve resources and energy and contribute to human health and environment protection.
Customers or end-users in EU countries should contact their local equipment supplier representative or service center for information about the waste collection system in their country.



(Fig. 1 WEEE)

A.3. Safety Regulatory

Hereby, EZDS Co. Ltd. declares that the radio equipment type EF501 is in compliance with Directive 2014/53/EU. This device can be operated in at least one Member state without infringing applicable requirements on the use of radio spectrum. To comply with CE RF exposure requirements, the handset must be kept 0.20 inches (0.5cm) from the body without any reference to a particular side or edge. Any belt clips, holsters, and similar accessories containing metallic components may not be used. Body-worn accessories that cannot maintain 0.20 inches (0.5cm) separation distance between the user’s body and the handset, and have not been tested for typical body-worn operations may not comply with CE
RF exposure limits and should be avoided.

CE

Regulatory Articles

- **Article 10(2):** Manufacturers shall ensure that radio equipment shall be so constructed that it can be operated in at least one Member State without infringing applicable requirements on the use of radio spectrum.

- **Article 10(10):** In cases of restrictions on putting into service or of requirements for authorization of use, information available on the packaging shall allow the identification of the Member States or the geographical area within a Member State where restrictions on putting into service or requirements for authorization of use exist. Such information shall be completed in the instructions accompanying the radio equipment. The Commission may adopt implementing acts specifying how to present that information. Those implementing acts shall be adopted in accordance with the advisory procedure referred to in Article 45(2).

FCC compliance information

This device complies with Part 15 of the FCC's Rules. Operation is subject to the following two Conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesirable operation.

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference. The antenna must be installed such that 20 cm is maintained between the antenna and users, and the transmitter module may not be co-located with any other transmitter or antenna. End users cannot modify this transmitter device. Any Unauthorized modification could void the user's authority to operate this device.

Part 15.105 (B)

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.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the
equipment under FCC rules.

FCC 15.407 (g) states

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.
Since this is an Indoor Only device (required for this band) you do not need to worry about the extreme frequency Stability over wide temperatures, but you can show that the frequency Generation portion of this device (from the schematic) has its own stated stability that would never allow the device to generate emissions or part of the spectrum outside of the authorized band (can be determined by looking at the Occupied BW plots to see how much margin to the band edge is available).
If the devices in the future use the other higher frequency UNII bands, and the devices can be used outdoors, you may need to provide details of stability over a much wider temperature range (depending on the use conditions stated in the manual).

Most compliance for this requirement is stated from the specification of the frequency generation portion of the device and not necessarily through additional testing.

Manufacturer

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Trade name : EZDS Co., Ltd
Trademark :

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