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Any product faults caused by installation of an application not recommended by GIT or any modification of the operating system made arbitrarily by a user may invalidate the product warranty.

The applications and services included in this product are subject to change or be discontinued without prior notice because of inevitable circumstances.

Precautions regarding environment of product use

Overheating may occur because of ambient environmental aspects if the following precautions are not made. Make the following precautions when using this product, because failure to do so may lead to reduced battery life, product damages, or fire accidents.

- Do not keep this product at a place that is too high or with a too low temperature.
- Do not expose this product to direct sunlight for an extended time.
- Do not keep or use this product at a hot place, such as the inside of a car parked in direct sunlight during summer.
- Do not put this product near or inside an electric heater, heat-generating cooking device, or high-pressure container.
- Do not put this product in a microwave oven.
- Do not keep or use this product at a place of high temperature and high humidity.
- Do not keep this product inside a closed space for an extended time while its power is on.
- Do not use a faulty charging adapter or battery.
- Do not connect the charging adapter into a power outlet with a wet hand.

Precautions during product use

- Use this product at a safe place so that it may not be damaged by impact or falling.
- Use the dedicated pen when touching the screen. The use of a sharp tool, such as a screwdriver or a gimlet, may damage the screen.

Safety when charging and using the battery

- When connecting the AC/DC adapter, make sure to connect it firmly.
- Make sure to use the AC/DC adapter that is provided with this product.
- A swelling of the battery part of this product may lead to fire or explosion. Therefore, if swelling is found, contact the seller or the manufacturer immediately.
- When replacing the battery, make sure to use a battery provided by the product manufacturer.

User safety

- When using this product near a driving part of a vehicle, ensure that any cable or instrument part of this product will not be in contact with the driving part.x`

Actions to be taken against overheating during product use

A function or an application that consumes a large amount of battery power may lead to overheating. Although it is not because of a product defect, turn off the power of this product for a short time to ensure user safety.

Actions to be taken against continuous overheating

- Disconnect the charger, and completely turn off the power of the G-scan3.
- Remove all the cables connected to this product.



Product Composition



G3180203

The product composition varies depending on the specifications of the package you purchase.
For purchase of additional components, contact the seller.

Basic Composition

Item Code	Item Name	Specification
G1CDDPA008	Adapter	Self Test
G1NDDMN002	G-scan3 Main Module	G-scan3 for AM (Black)
G1NZDCA001	Cable	DLC_G-scan3 (AM for general)
G1CDDPA013	Adapter	For AC/DC (KPL-040F)_GDS
G1PDDCA002	Cable	For CIGAR_G-scan
G1NDDHA002	Hard-carrying Case	For G-scan3
-	G-scan3 Quick Manual	G-scan3 AM (English Common)
G2SDDCA003	Cable	For Battery_HG

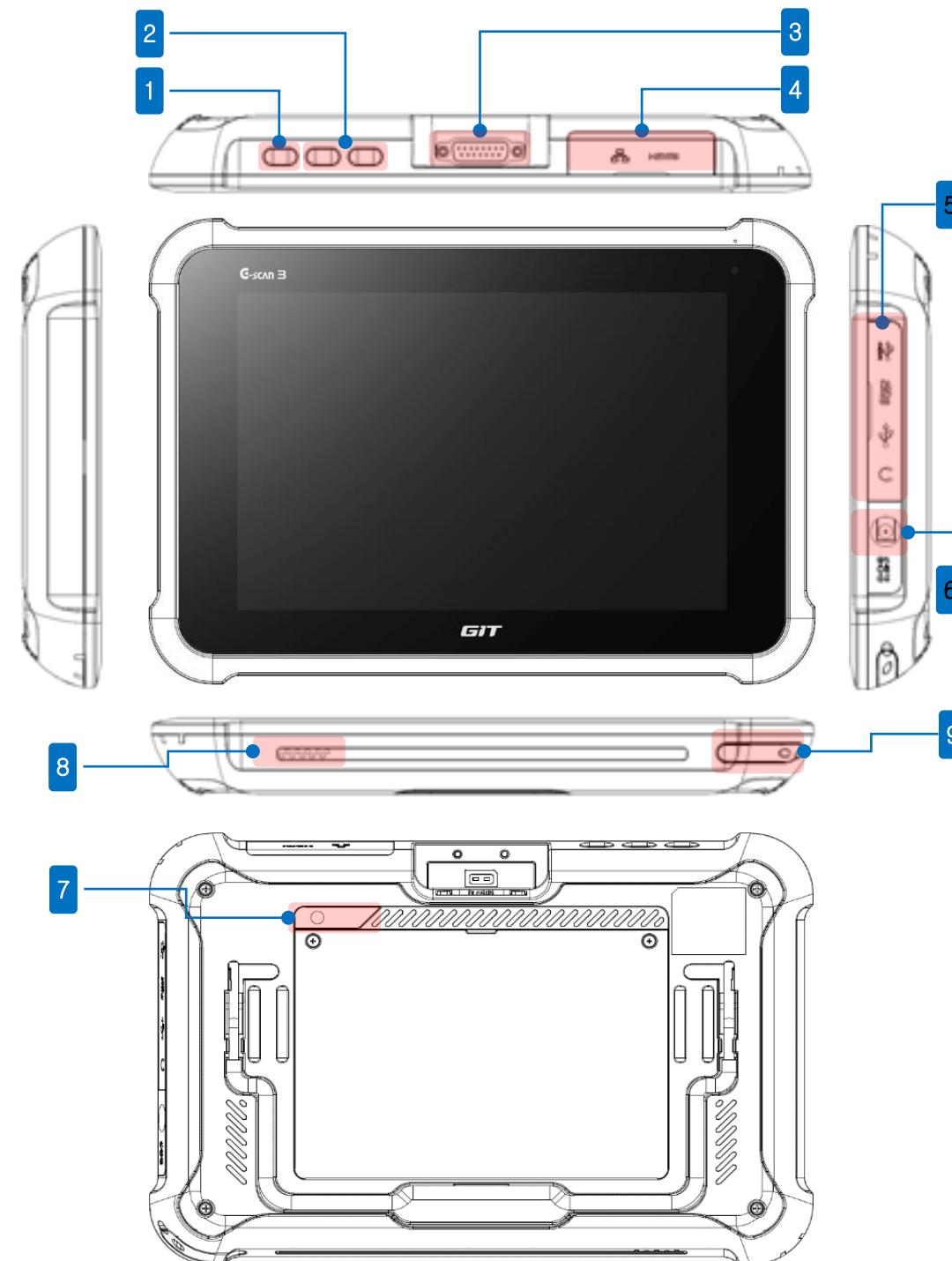
Components of Packages

Item Code	Item Name	Specification
G0PDDCN001	Cable	Power (P-06061D)_For Australia
G1CDECA001	Cable	Power (2961)_For Europe
G1CDNCA001	Cable	Power(P04117A)_For North America
G0PDDCN001	Cable	Power (P-06061D)_For Australia
G1FDDPA001	Adapter	For 16-20A_G-scan2
G1FDDPA002	Adapter	For 16-20B_G-scan2
G1PZDPA001	Adapter	Toyota 17P S+1
G1PZDPA002	Adapter	Mitsubishi/Hyundai 12P+16P
G1PZDPA005	Adapter	J1939-9P
G1PZDPA006	Adapter	Isuzu 20P-10P-3P
G1PZEPA001	Adapter	BMW 20P
G1PZEPA002	Adapter	Audi/VW 4P
G1PZFPA002	Adapter	Toyota 17P R
G1PZFPA003	Adapter	Honda/Accura 3P
G1PZFPA004	Adapter	Mazda 17P
G1PZFPA005	Adapter	Subaru 9P
G1PZFPA007	Adapter	Nissan 14P
G2WDDCN006	Adapter	Ssangyong 14P

G1CDDPA007	Adapter	10-3-3
G1PZDPA007	Adapter	Hino 12P-5P

This section describes the part names and functions of G-scan3.

Part Functions of the Terminal



No.		Description	Quantity
1	Power button	Power on/off, and restarting of G-scan3 terminal	
2	Volume control button	F1: Speaker volume up F2: Speaker volume down	
3	DLC connection terminal	Terminal for connection of the DLC cable for communications with a vehicle	
4	External device connection terminal 1	<p>① LAN cable port for Internet connection</p> <p>② HDMI cable connection port Monitor/TV set connection</p>	
5	External device connection terminal 2	<p>① USB device connection</p> <p>② Micro-SD card</p> <p>③ USB device connection port</p> <p>④ Headphone connection jack</p>	1
6	Power connection terminal	Power connection with a car battery or an AC/DC adapter	1
7	Rear camera		
8	Speaker		
9	Dedicated fan		

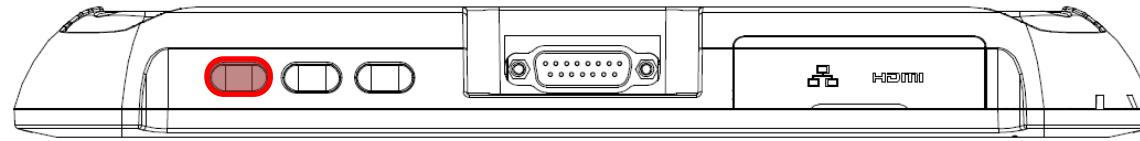


Some memory cards may not be fully compatible with this product, and use of an incompatible memory card may lead to damages of this product, SD cards, or SD card data.

■ Use of Outer Buttons

Power button

You can turn on/off the power of G-scan3 by using the power button placed at the top of the main module.



Power on

When G-scan3 is turned off, a long press of the power button will turn on its power.

Power off/restarting

When G-scan3 is turned on, and the window is on, a long press of the power button will display the popup window for selecting "Shutoff" or "Restart." Clicking of the "Shutoff" or the "Restart" button will change to the selected status of the power.

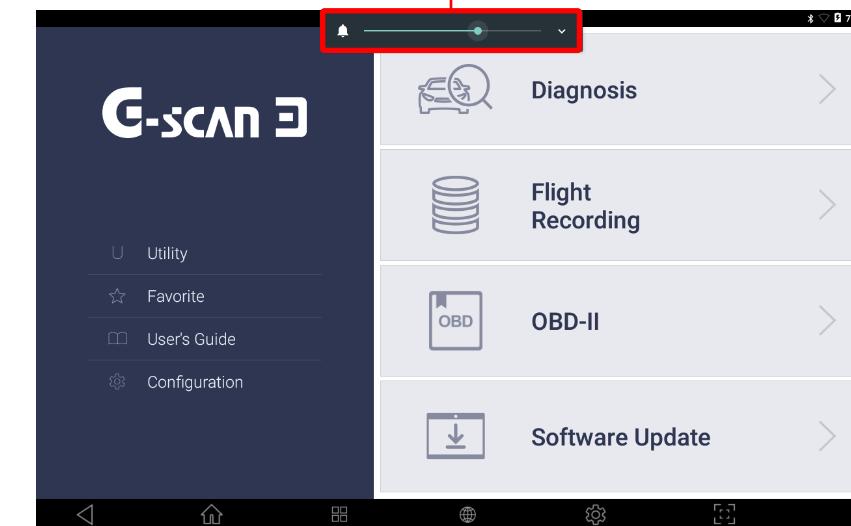
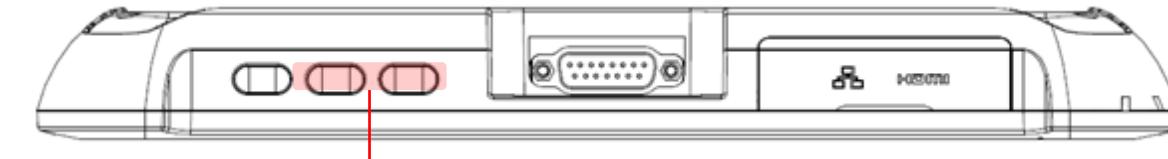


Power-saving mode

While G-scan3 is turned on and the window is off, a short press of the power button will change the power mode to power-saving mode, and will shut off the window. To resume the use of G-scan3, a short press of the power button is needed to release the product from the power-saving mode.

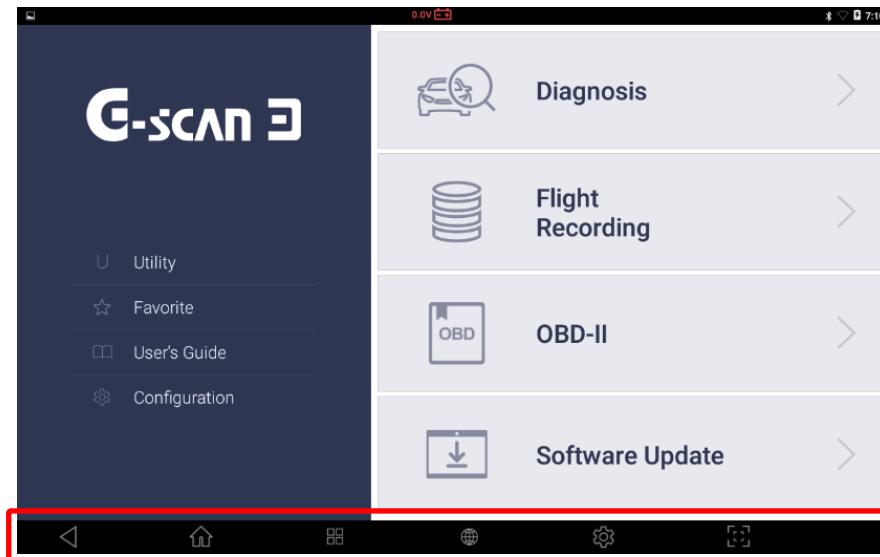
Volume control buttons

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



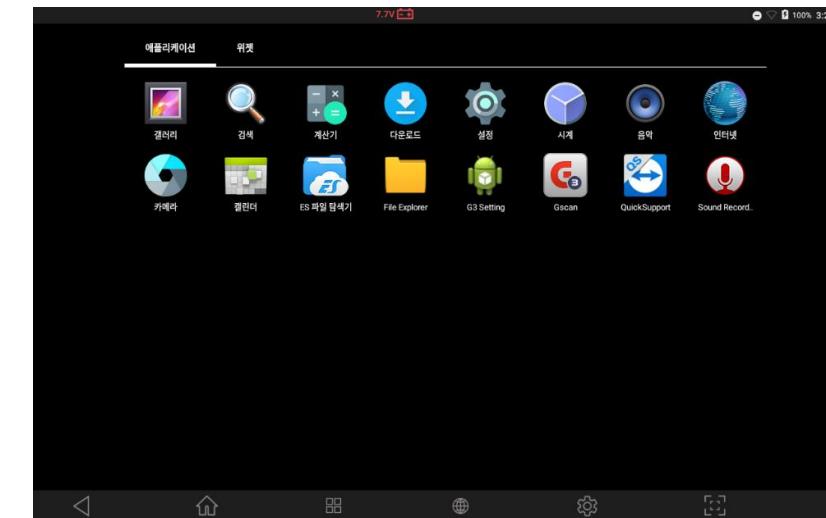
■ Functional Buttons of G-scan3

The functional buttons placed at the bottom of the first window of G-scan3 provide various convenience functions for the user.



"Home" button

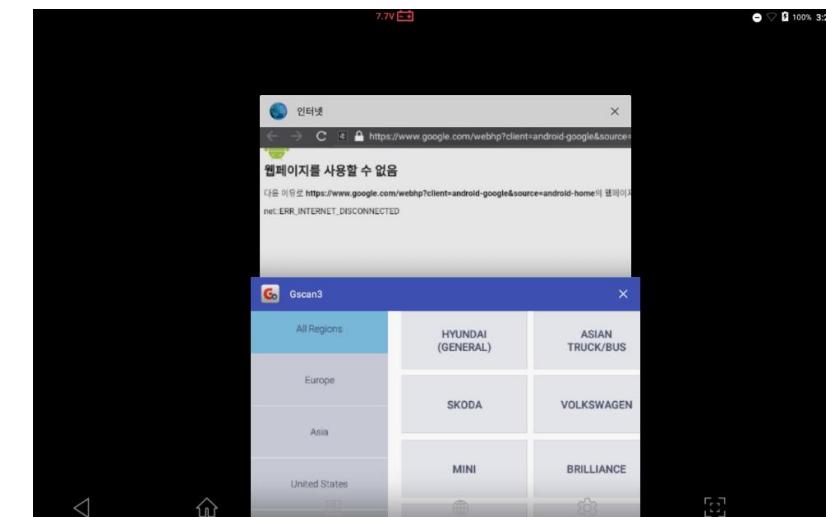
This returns the current window to the desktop window of the Android OS of G-scan3.



No.	Icon	Button Name	Description
1	<	Cancel	This returns the current window to the previous window.
2	⌂	Home	This returns the current window to the desktop window.
3	grid	App Running	This displays the applications that are running.
4	🌐	Web Browser	This runs the Internet browser.
5	⚙️	Setting	This enables setting of the body and configuration of G-scan3.
6	📷	Screen Capture	This enables screen capture and image editing.

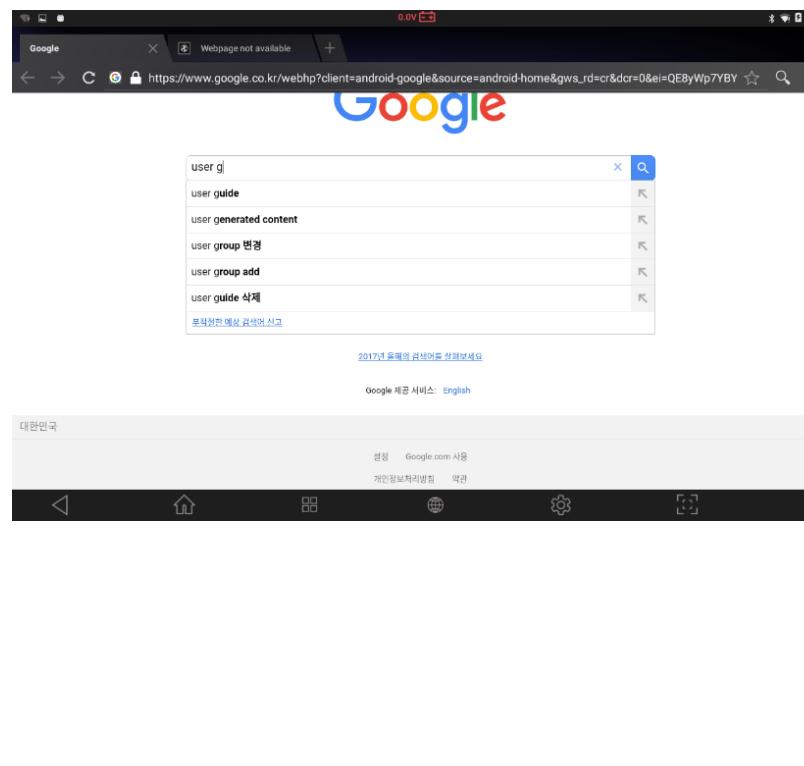
"App Running" button

This displays the applications that are running on G-scan3.



"Web Browser" button

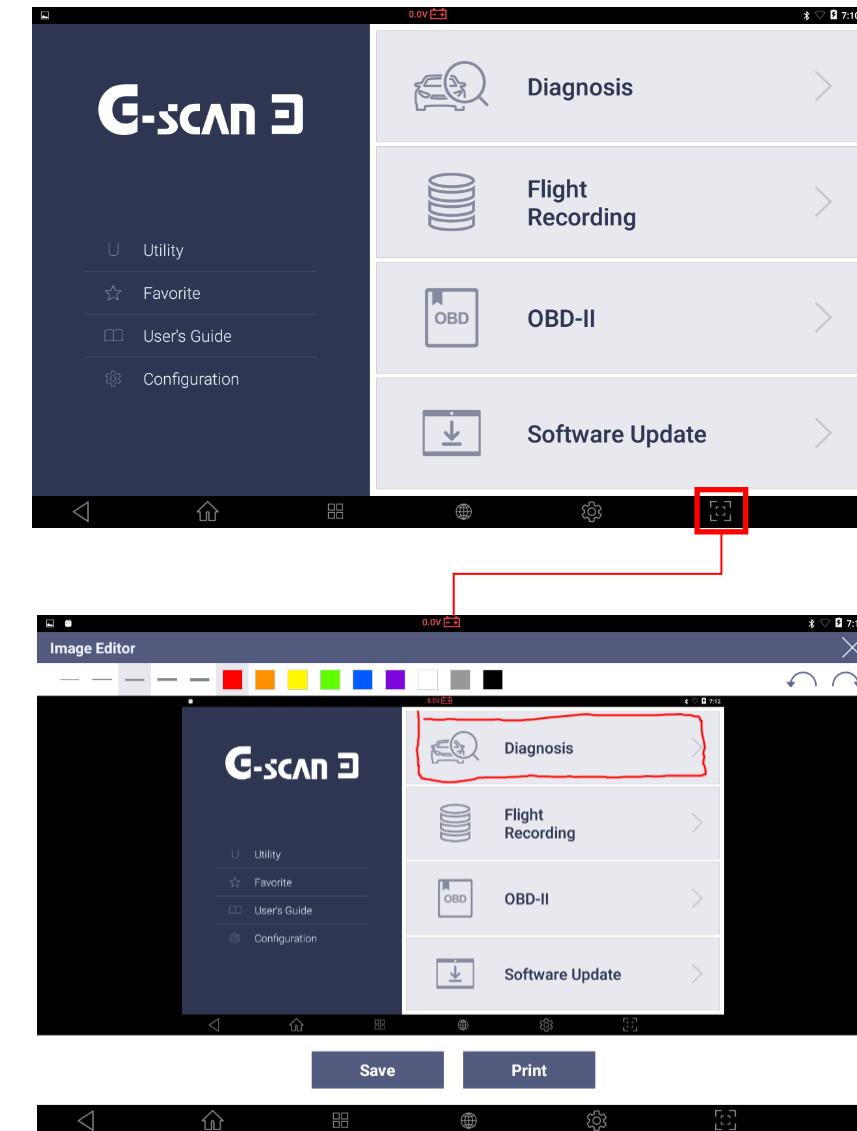
This runs the Internet browser to connect G-scan3 to the Internet with wired/wireless network.



"Screen Capture" button

This enables an instant screen capture during G-scan3 use, and a simple memo or drawing on captured images with a dedicated pen.

Captured images can be saved in files, or printed out.

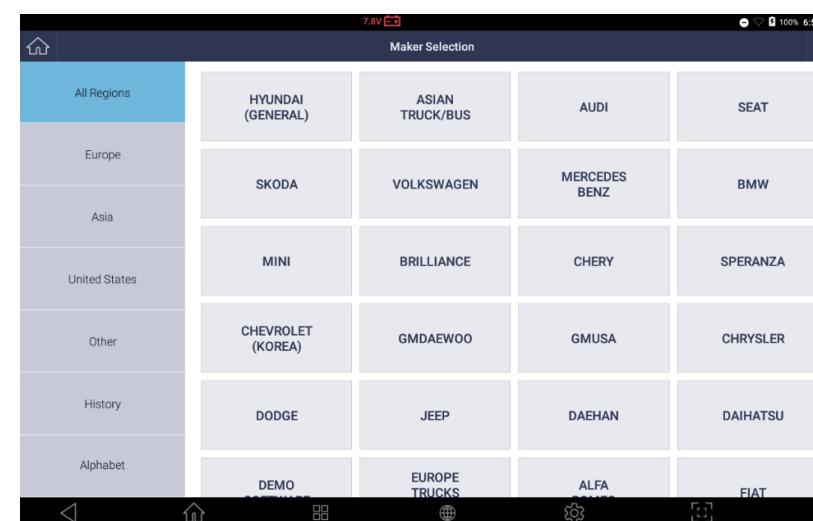
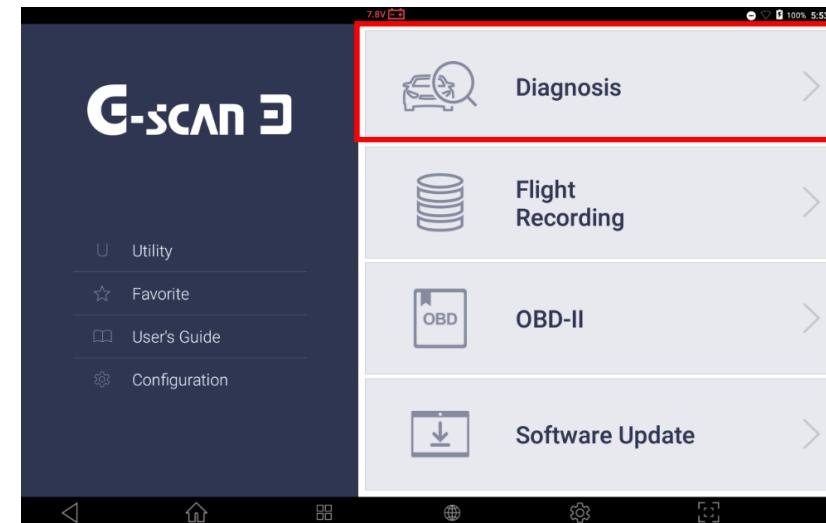


G-scan 3 Start of Vehicle Diagnostic Functions



G3180203

When using the vehicle diagnostic functions of G-scan3, select [Diagnosis] on the initial window. Then a window will be displayed for selecting an automaker. Select the maker that matches the vehicle to be diagnosed.



The structure of the diagnostic functions available on the main window of G-scan3 is as follows. Read the descriptions of the functions before using them.



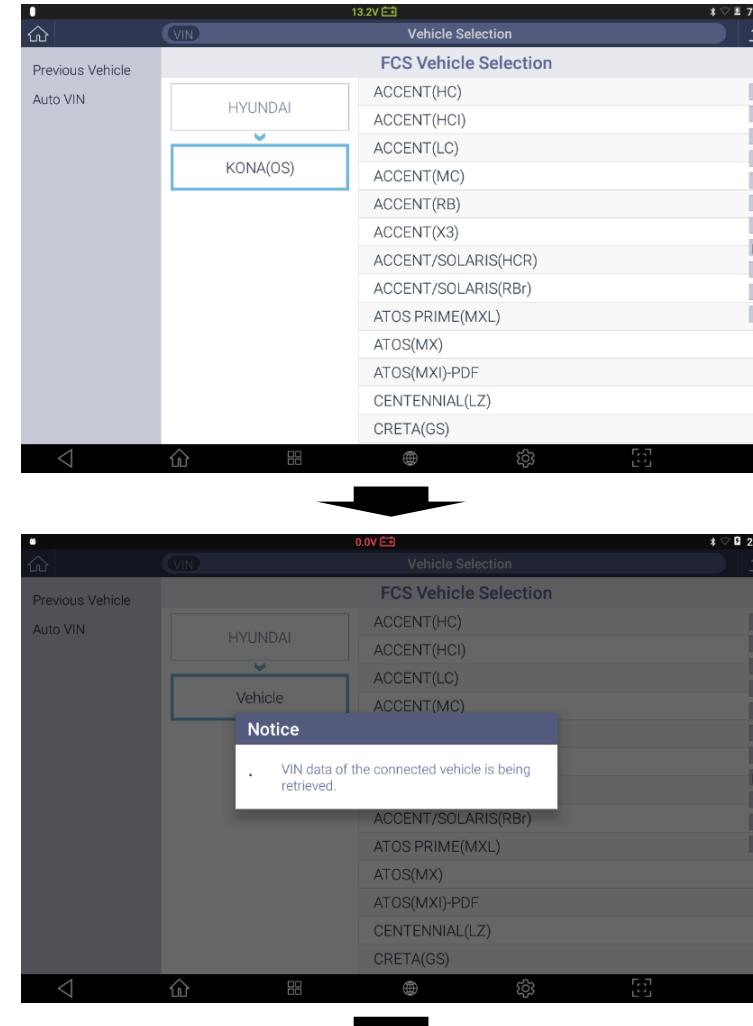
No.	Icon	Function Name	Description
1		FCS	This enables scanning of the diagnostic trouble codes (DTCs) that are saved for all the systems of a vehicle that support diagnostic communications.
2		DTC Analysis	This enables scanning of the DTCs that are saved for a single selected system, and displays the trouble information of a vehicle.
3		Data Analysis	This enables communication with a single selected system, and displays the status value of sensor items.
4		Multi Data Analysis	This applies only to CAN communications systems. It establishes communications with multiple systems, and displays the status value of sensor items.
5		Actuation Test	This enables checking of normal operation by forcibly driving or stopping the actuators mounted on a vehicle.
6		System Identification	This displays the identification of the systems mounted on a vehicle.
7		S/W Management	This enables additional setting, inspection, initialization, etc., after maintenance of a vehicle.

This is the stage where a vehicle model to be diagnosed is selected. A vehicle model can be selected by the "Auto VIN" or the manual selection method.

- Auto VIN: This method reads the vehicle identification number (VIN) from the ECU of the vehicle, and selects the VIN automatically.
- Manual selection: In this method, vehicle identification should be selected manually in the following sequence: manufacturer, vehicle model, manufacture year, engine type, and system.

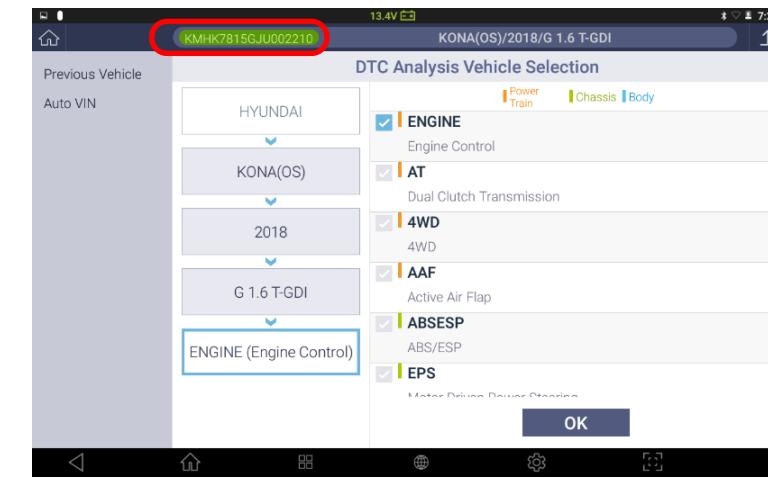
Auto VIN

This method reads the vehicle identification number (VIN) from the ECU of the vehicle, and selects the VIN automatically.



1 Click [Auto VIN] in the left button tab.

2 Communication with the vehicle will be established, and the VIN will be read.



3 The model, manufacture year, and engine specifications will be selected automatically, and the VIN will be displayed at the top of the diagnostic program.

Note:

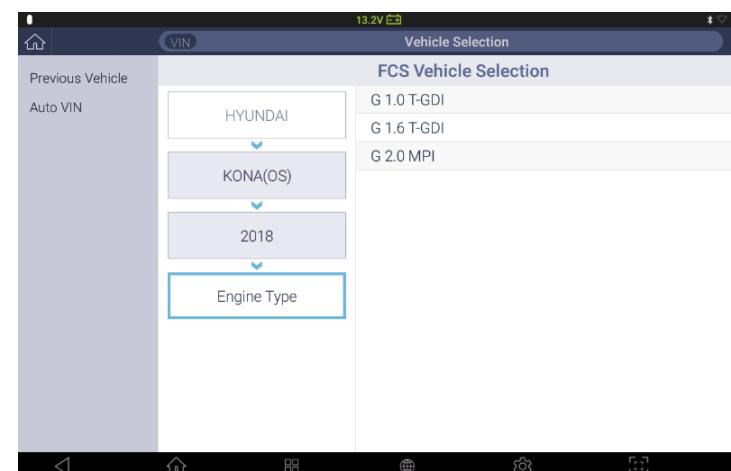
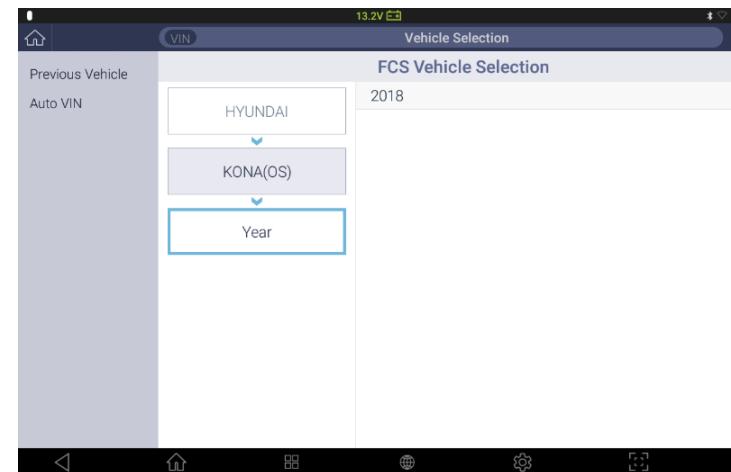
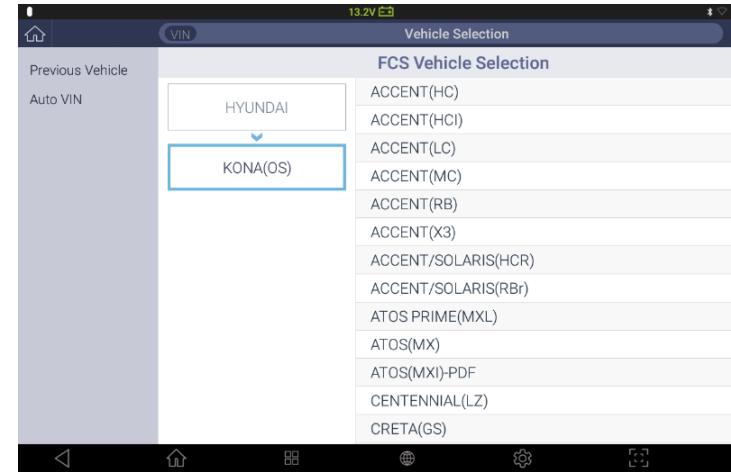
When no VIN can be read in the "Auto VIN" mode, the following VIN input popup window will be displayed:

Enter the 17-digit (numbers + alphabets) code of the vehicle and click the [OK] button, and the vehicle selection will be completed automatically.

Manual selection

In this method, identification of the vehicle to be diagnosed should be selected manually for the diagnostic communications.

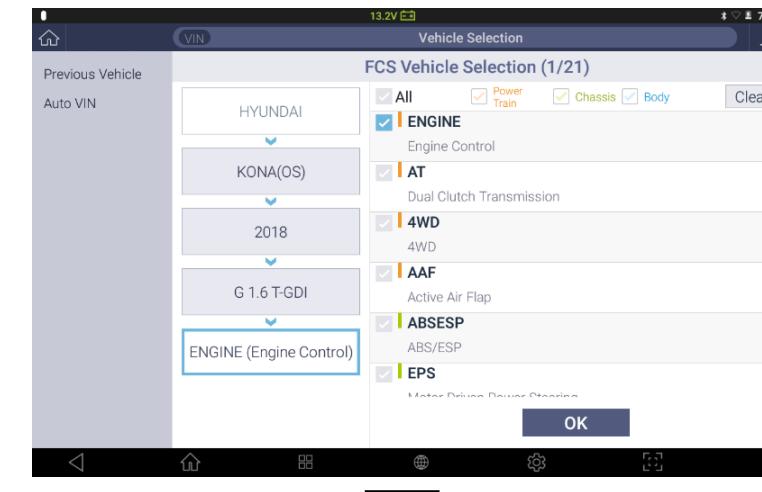
Vehicle identification should be selected manually in the following sequence: manufacturer, vehicle model, manufacture year, engine type, and system. In the case of some diagnostic functions for multiple systems, you can add systems to be diagnosed.



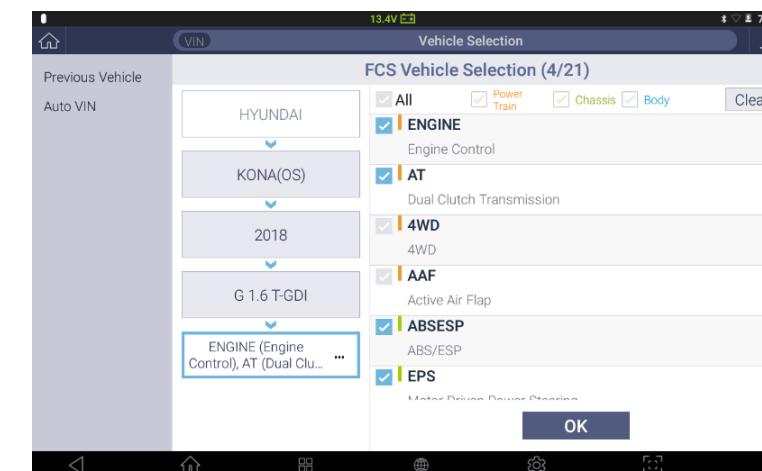
- 1 Select the model of the vehicle to be diagnosed.

- 2 Select the manufacture year of the vehicle to be diagnosed.

- 3 Select the engine type of the vehicle to be diagnosed.



- 4 Select the system to be diagnosed.



- 5 For the following diagnostic functions selected on the main window, you can select multiple systems:

- FCS
- Multidata Analysis
- System Identification
- S/W Management



This function displays the overall diagnostic results of the vehicle by making diagnostic communications with multiple control systems mounted on a vehicle, and shows the DTCs saved in the systems.

■ Window Structure and Description of All DTC Scanning

The result of the “All DTC” scanning will display the number and the status of the scanned DTCs on the right of the window after making diagnostic communications with the systems.

Result display of DTC scanning

No.	Description of Result Display
1	This indicates the number of systems in which DTCs have been found.
2	If any DTCs are found, they will be indicated in red, and the number of DTCs found in the system will be displayed.
3	This will be indicated when the system does not respond.
4	If no DTC is found, it will be indicated in green.

■ All DTC Scanning Functions

Rescan

This rescans DTCs of all the selected systems, and updates the information on DTC occurrence.

Erase all DTC

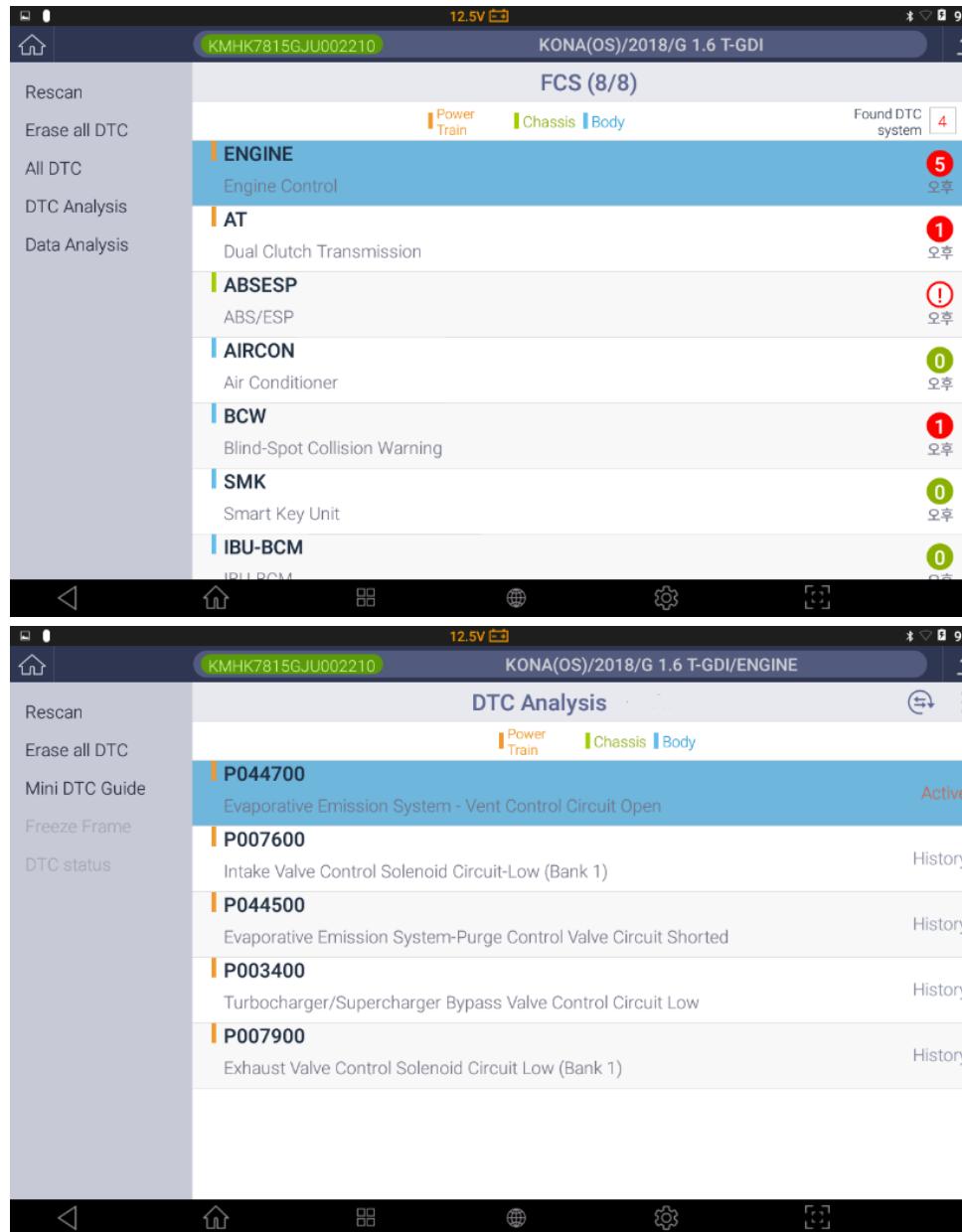
This erases all DTCs found in the “All DTC” scanning.

All DTC

This displays all DTCs found in the “All DTC” scanning.

DTC Analysis

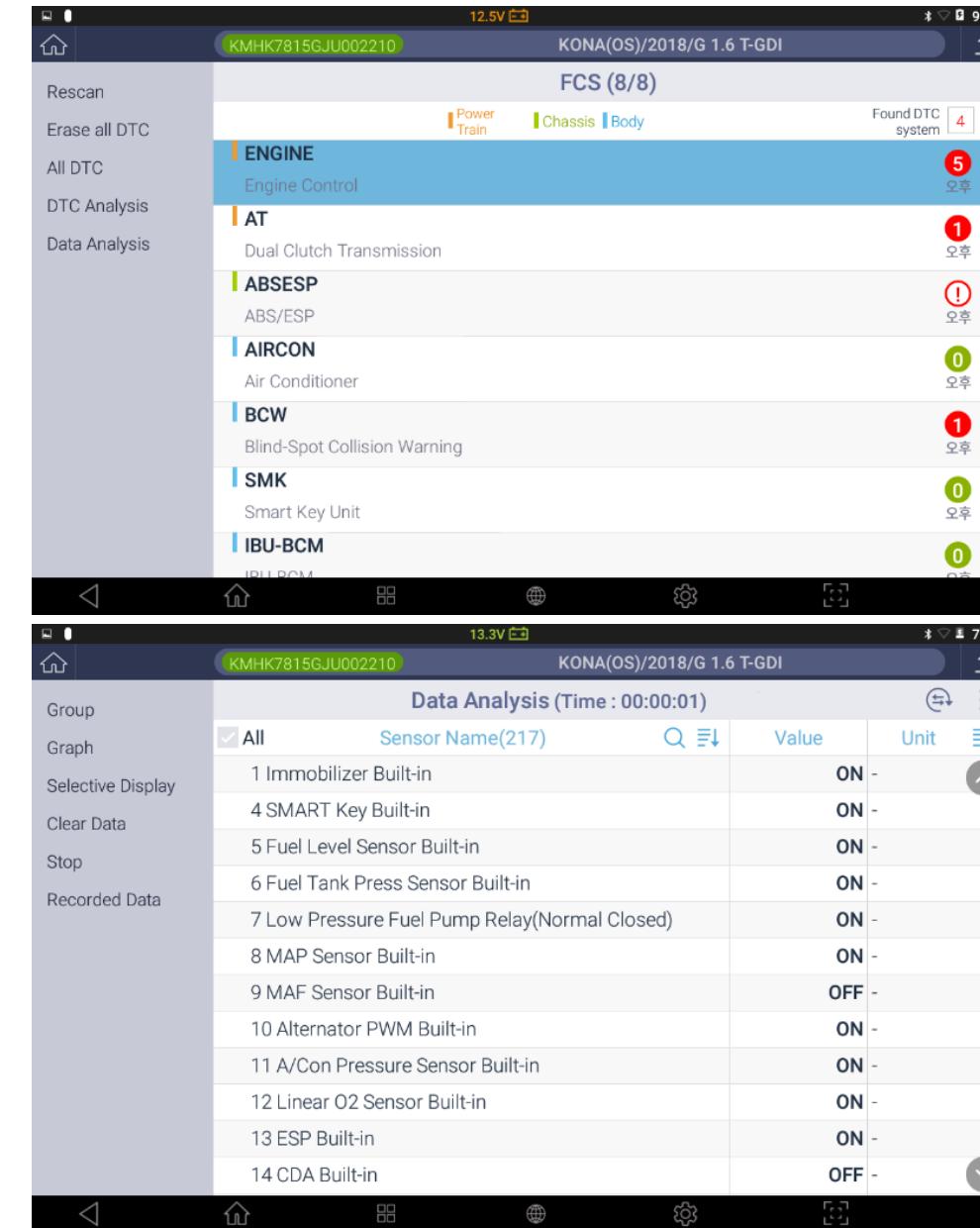
On the "All DTC" scanning window, after a system is selected, clicking of the [DTC Analysis] button will change the window to the one for the DTC analysis functions.



* For the method that uses the DTC analysis functions, see [DTC Analysis].

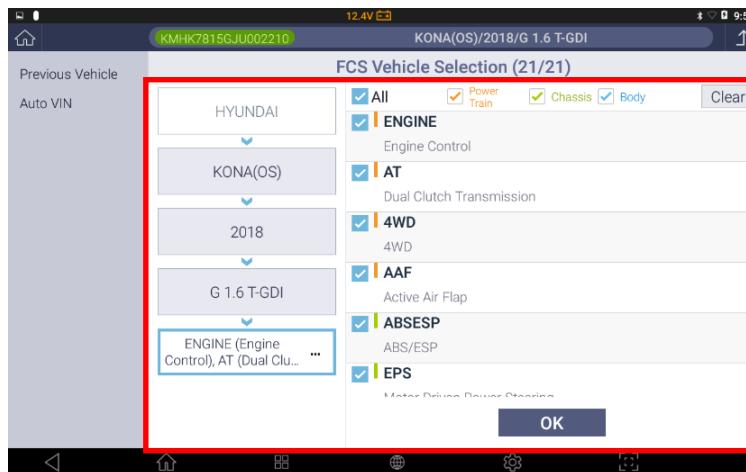
Sensor data Analysis

On the "All DTC" scanning window, after a system is selected, clicking the [Sensor data Analysis] button will change the window to the one for the sensor data analysis functions.

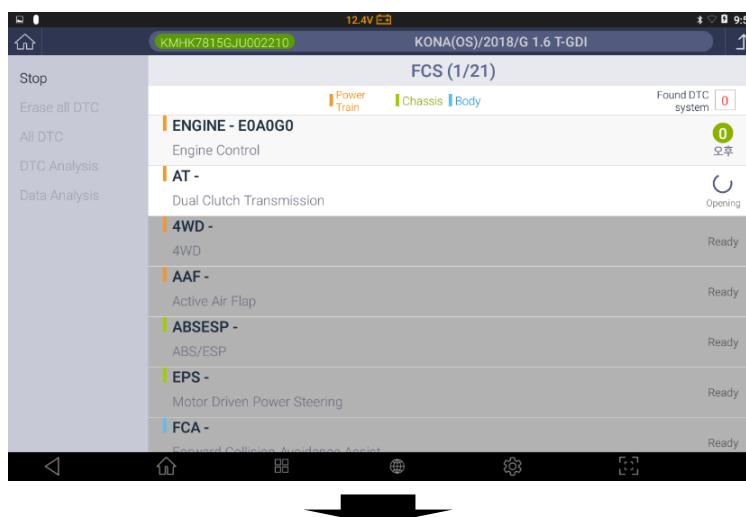


* For the method that uses the sensor data analysis functions, see [Sensor data Analysis].

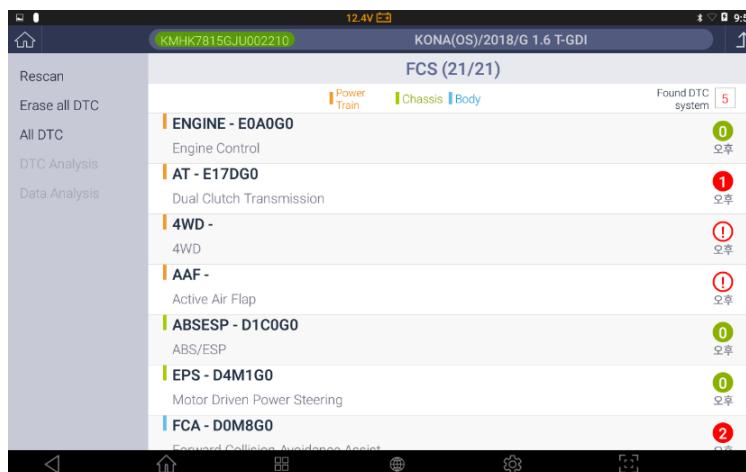
All DTC Scanning



- 1 Select the manufacturer, vehicle model, manufacture year, engine type, and system. Then click the [OK] button to start "All DTC" scanning.
* FCS is one of the functions for which multiple systems can be selected.



- 2 It will scan the control systems sequentially.

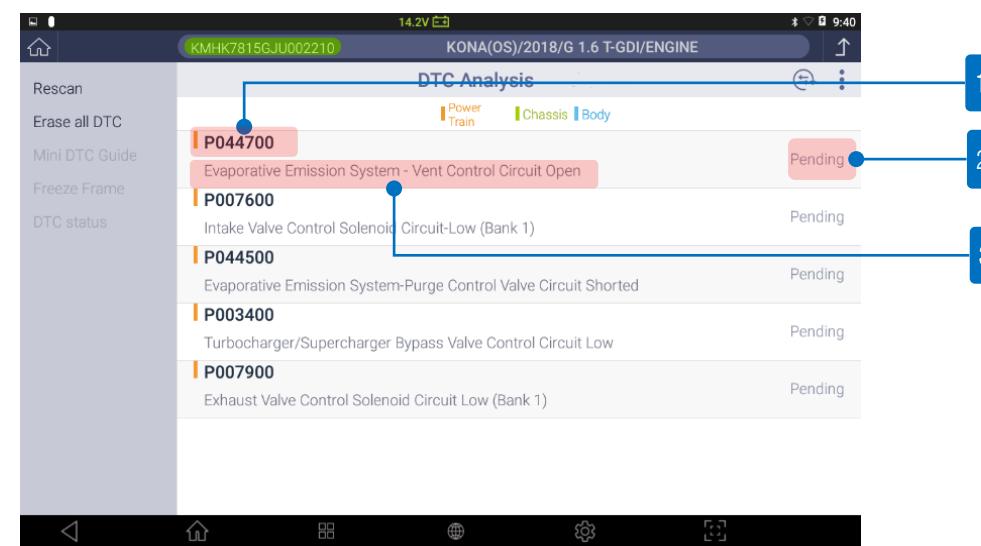


- 3 It will display the DTC occurrence status of the control systems.



It will scan the DTCs saved in the control systems of the vehicle, and display the detailed information on the DTCs.

■ Checking on System DTC Information



1

2

3

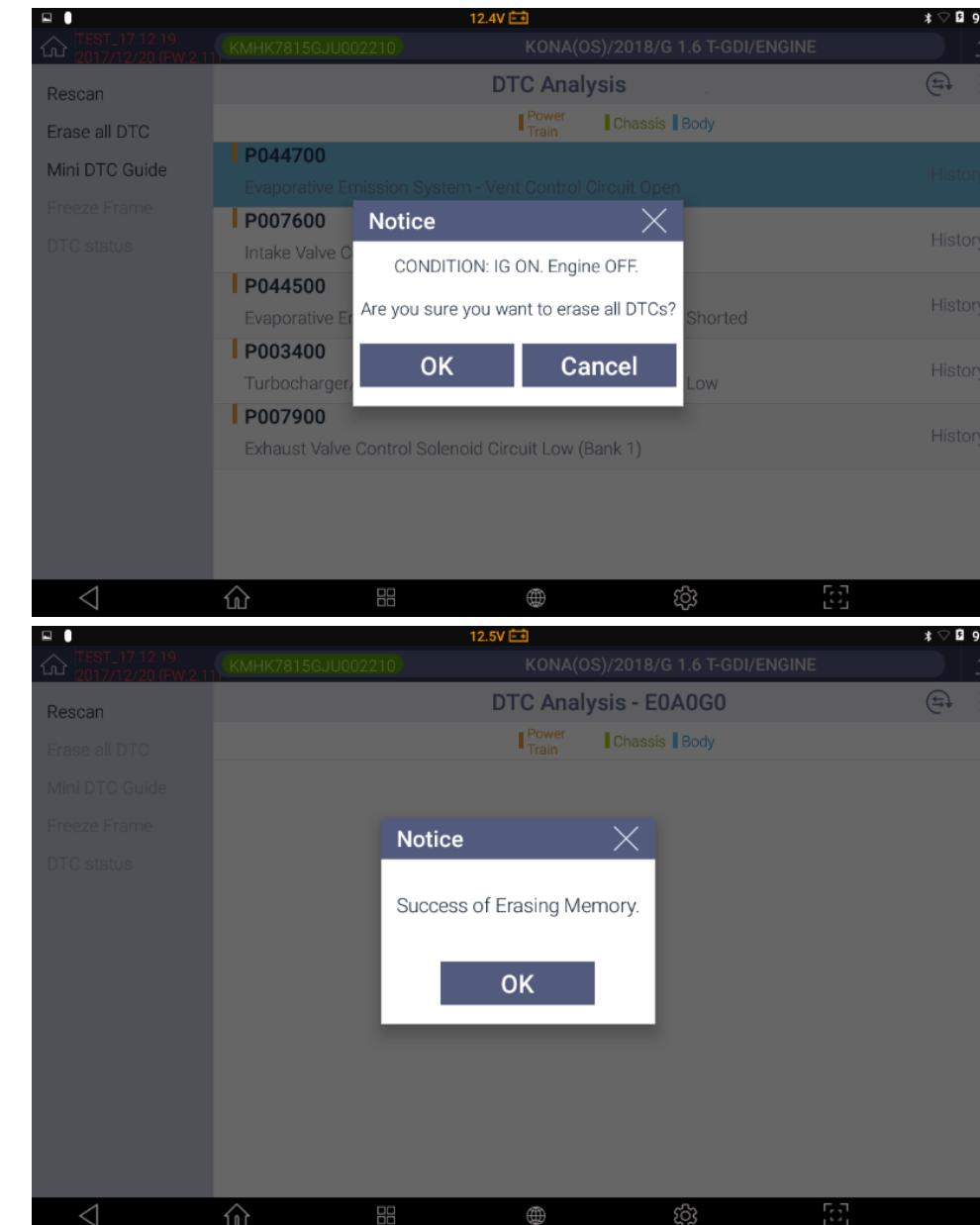
■ Description of the DTC Analysis Functions

Rescan

This rescans the DTCs of the selected system. This button has the same function as the "Insert Button Icon" at the top of the window.

Erase all DTC

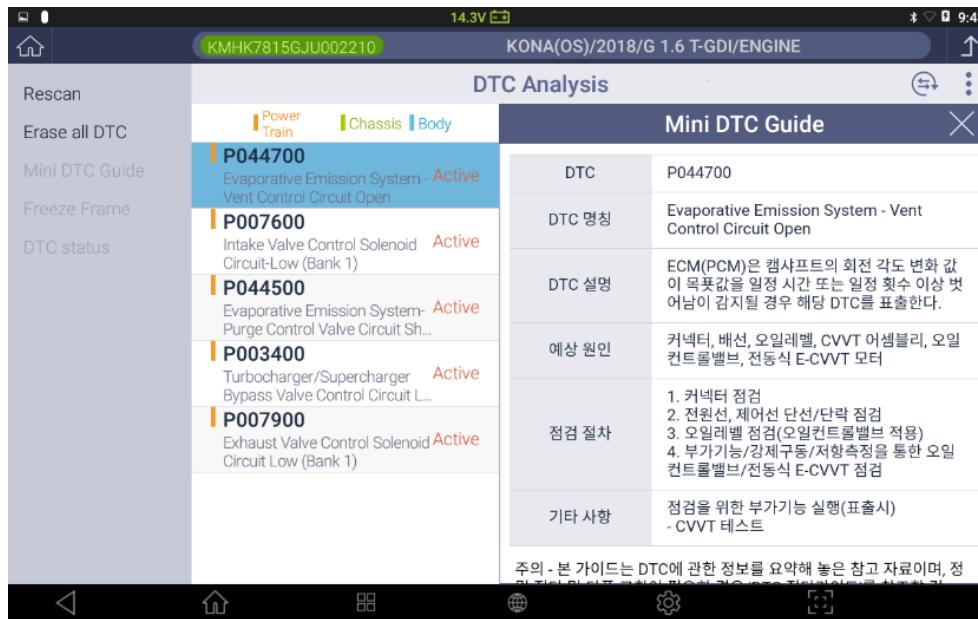
This erases all the DTCs saved in the control system. The status of the vehicle should be such that the start key is in the "ON" position and the engine is off.



No	Function Icon	Description
1	DTC	This displays the DTC of the control system.
2	DTC status	This displays the status of the DTC of the control system (ACTIVE, HISTORY, or PENDING).
3	DTC description	This describes the DTC of the control system.

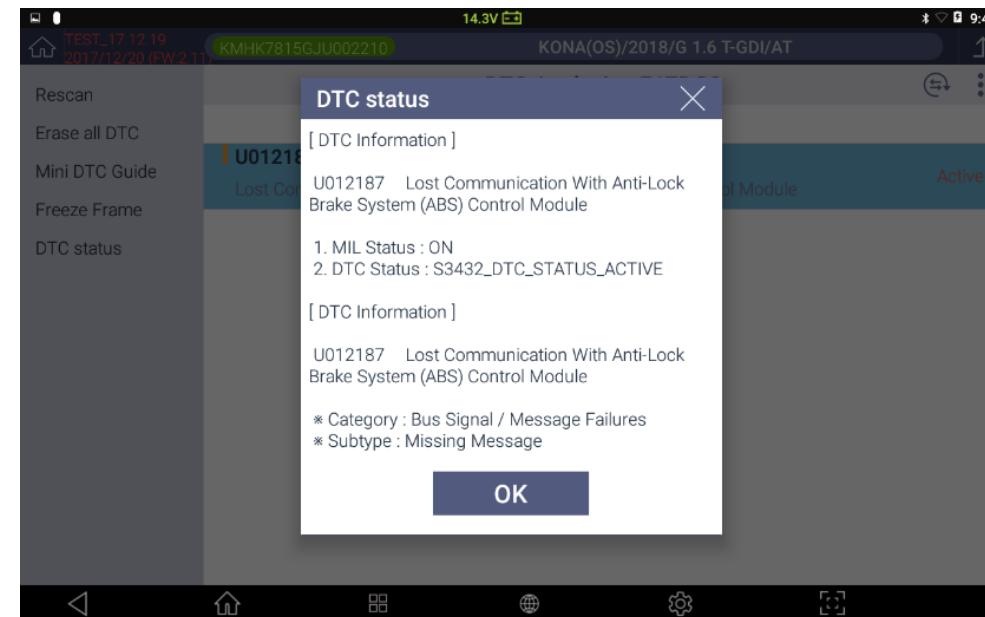
Mini DTC Guide

This provides a simple guide to the DTCs scanned in the DTC Analysis.



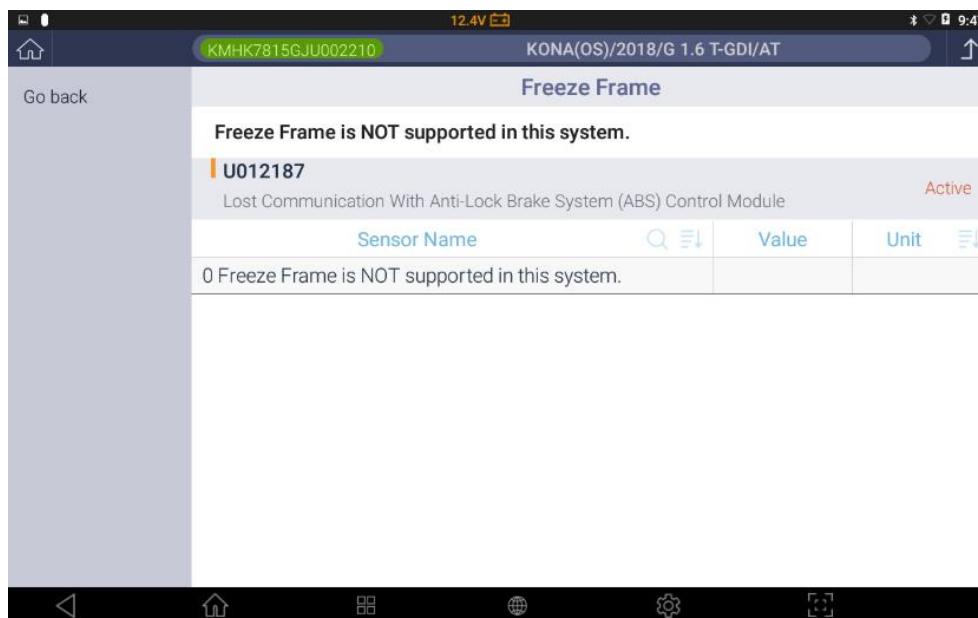
DTC status

This shows a short description of the DTC, and its current status.



Trouble status data

This enables a query to the status value of the related sensor data items saved during DTC occurrence.

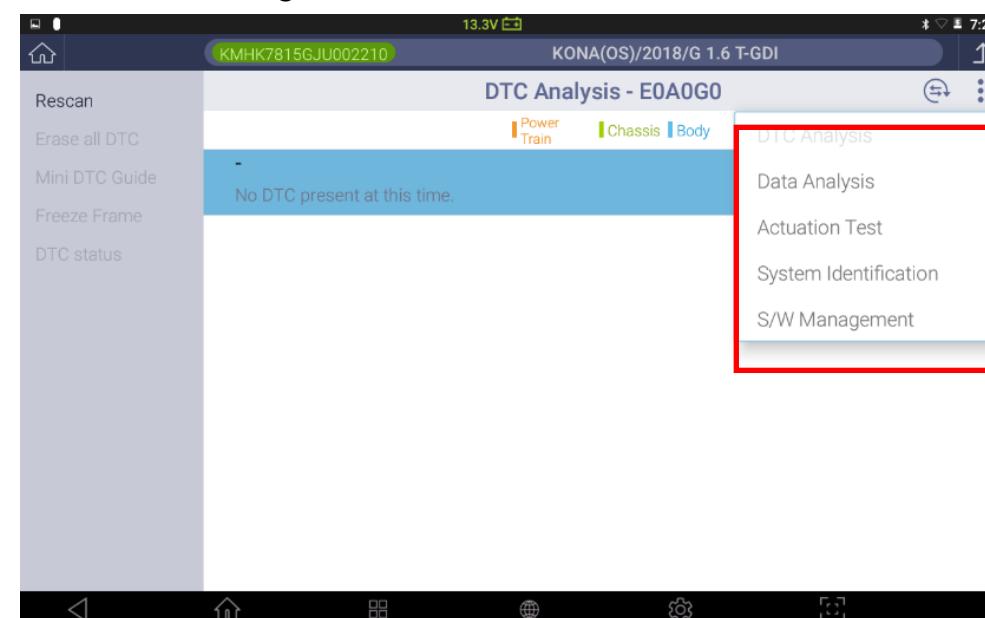


* Clicking of the [Go back] button will change the window back to the DTC Analysis window.

Switching of Diagnostic Functions

While diagnostic communications between G-scan3 and the vehicles are established, you may switch to different diagnostic functions:

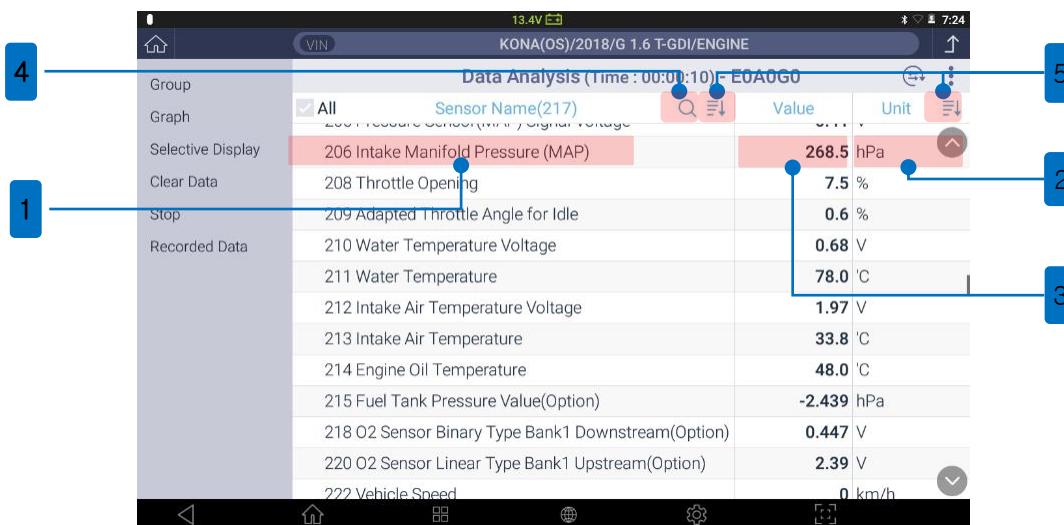
- Data Analysis
- Actuation Test
- System Identification
- S/W Management





This function displays the operating status of the sensors and the actuators of the control systems mounted on the current vehicle through communications with the control systems.

Description of the Sensor Data Analysis Window – Text Mode



No.	Description
1	Sensor data group name
2	Sensor data value
3	Sensor data unit
4	Scan
5	Sort

Description of function buttons

No.	Function Icon	Description
1	Group	This displays the sensor data items that belong to the selected type of the group list on the window.
2	Graph	This displays the selected items of the group in graph.
3	Selective Display	This displays only the sensor data items selected at the top. The smaller the number of the selected items, the more precise the displayed data.
4	Clear Data	This clears the sensor data being recorded.
5	Recorded Data	This displays the data viewer for analyzing the data recorded in the past.

Scan sensor data

This scans sensor data items, and displays them at the top.

Sort sensor data

This carries out user-defined sorting of sensor data. The sorting criteria available are item name and unit.

Placement of sensor data

You can place the necessary items selected among the ECM data under communication at the top. Fixation of sensor data items is a prerequisite when converting to the graphic mode.

Method for fixating/clearing items

Clicking of the sensor data items on the window will place them at the top, which are indicated in blue. Similarly, clicking of the sensor data items placed at the top will clear its placement from the said position.

Data Analysis (Time : 00:00:10)			
	Sensor Name(217)	Value	Unit
	206 Intake Manifold Pressure (MAP)	268.5	hPa
	208 Throttle Opening	7.5	%
	209 Adapted Throttle Angle for Idle	0.6	%
	210 Water Temperature Voltage	0.68	V
	211 Water Temperature	78.0	°C
	212 Intake Air Temperature Voltage	1.97	V
	213 Intake Air Temperature	33.8	°C
	214 Engine Oil Temperature	48.0	°C
	215 Fuel Tank Pressure Value(Option)	-2.439	hPa
	218 O2 Sensor Binary Type Bank1 Downstream(Option)	0.447	V
	220 O2 Sensor Linear Type Bank1 Upstream(Option)	2.39	V
	222 Vehicle Speed	0	km/h

Data Analysis (Time : 00:00:02)			
	Sensor Name(217)	Value	Unit
	✓ 209 Adapted Throttle Angle for Idle	0.6	%
	✓ 211 Water Temperature	81.8	°C
	✓ 212 Intake Air Temperature Voltage	1.94	V
	✓ 213 Intake Air Temperature	34.5	°C
	✓ 215 Fuel Tank Pressure Value(Option)	0.813	hPa
	92 Turbo dump(Recirculation) Valve (RCV) (OFF=Open)	ON	-
	93 ISG System Built-in(ISG)	OFF	-
	112 Invalid State of Battery Charge(AMS)	ON	-
	113 Invalid Status of Quiescent current(AMS)	OFF	-
	114 Invalid Condition of Battery Sensor(AMS)	ON	-
	115 Response Error Flag from Battery Sensor(AMS)	OFF	-
	121 LPI System Built in	OFF	-

Use of Groups

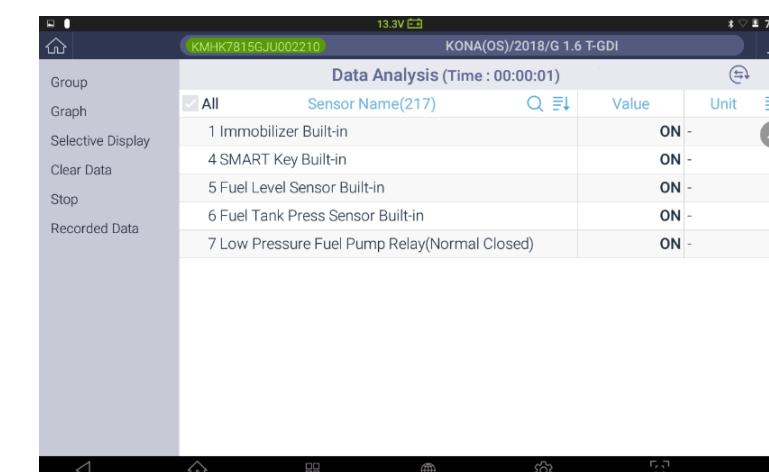
Sensor data items are categorized according to group attributes, and it is possible to analyze data by categorizing sensor data into groups.



Data Analysis (Time : 00:00:01)			
	Sensor Name(217)	Value	Unit
	1 Immobilizer Built-in	ON	-
	4 SMART Key Built-in	ON	-
	5 Fuel Level Sensor Built-in	ON	-
	6 Fuel Tank Press Sensor Built-in	ON	-
	7 Low Pressure Fuel Pump Relay(Normal Closed)	ON	-
	8 MAP Sensor Built-in	ON	-
	9 MAF Sensor Built-in	OFF	-
	10 Alternator PWM Built-in	ON	-
	11 A/Con Pressure Sensor Built-in	ON	-
	12 Linear O2 Sensor Built-in	ON	-
	13 ESP Built-in	ON	-
	14 CDA Built-in	OFF	-



Data Analysis (Time : 00:00:09)			
	Sensor Name(16)	Value	Unit
	Air Conditioning System	OFF	-
	Air Temp	OFF	-
	Alternator Management System	OFF	-
	Auto-Cruise Control (ACC)	OFF	-
	Barometric Pressure	ON	-
	Battery / Supply	OFF	-
	Battery Voltage	676	RPM
	Brake System	14.5	%
	Camshaft Position (CMP)	6.667	%
	Coolant Load Value	337.4	Nm
	Request from TCU	3276.8	Nm
	Catalyst Aging		



Data Analysis (Time : 00:00:01)			
	Sensor Name(217)	Value	Unit
	1 Immobilizer Built-in	ON	-
	4 SMART Key Built-in	ON	-
	5 Fuel Level Sensor Built-in	ON	-
	6 Fuel Tank Press Sensor Built-in	ON	-
	7 Low Pressure Fuel Pump Relay(Normal Closed)	ON	-

1 Click the [Group] button in the left list.

2 Click a group to be diagnosed among the list of the groups supported by the control systems.

3 Only the sensor data items defined for the selected group will be displayed on the window.



To view all the groups in the list of the groups of sensor data items, click [All] for the group list.

■ Use of Graph Mode

The graph mode displays the values of sensor data items in a graph so that the user may visually identify the changes in sensor data values.

Viewing in graph mode



- Select and place the sensor data items at the top.



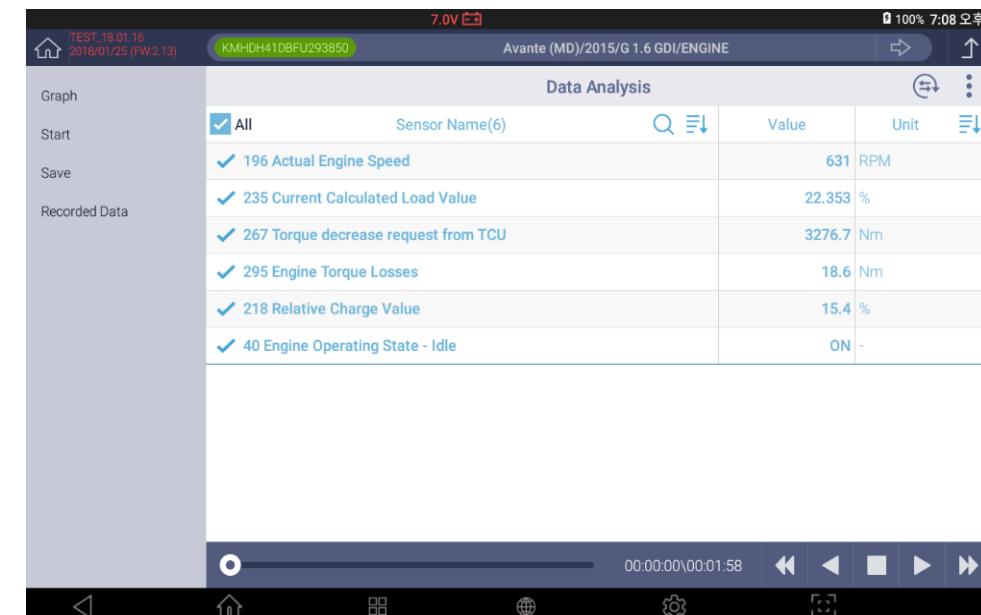
- After the sensor data items are selected, click the [Graph] button.



- Then the sensor data items placed at the top will be displayed in a graph.

■ Selective Display

This function displays only the sensor data items selected by the user to increase the accuracy of the sensor data display.



Description of the Sensor Data Analysis Window – Graph Mode



Text

This switches the window display from the graph mode to the text mode.

Clear Data

This clears the data collected through communications with the control systems of the vehicle, and restarts data collection.

Stop

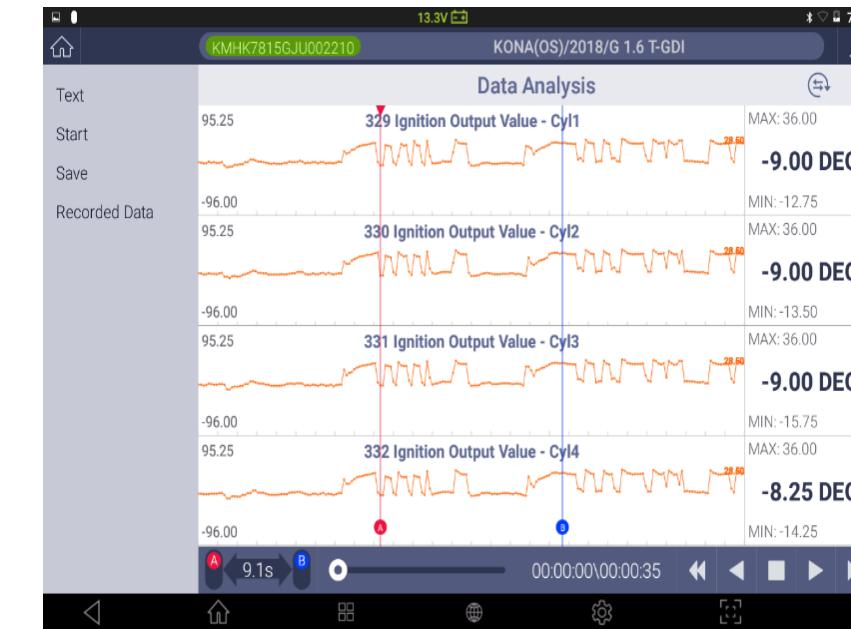
This stops the process of collecting sensor data from the control systems of the vehicle.

Recorded Data

No.	Function Icon	Description
1	Text	This switches the graph mode to the text mode.
2	Clear Data	This clears the collected sensor data values, and restarts data recording.
3	Stop	This stops sensor data recording.
4	Recorded Data	This displays the recorded data.

Description of the graph analysis function

While sensor data are collected in the graph mode, clicking of the [Stop] button will switch the window to the data analysis mode.



No.	Function Icon	Description
1		This enables activation of cursors A and B, and displays the time gap between Cursor A and Cursor B.
2		This indicates the playback position of the sensor data recording on a bar.
3		This indicates the playback position of the sensor data recording in the time unit.
4		This plays/stops sensor data records in the regular/reverse direction.



To the left of the sensor data:

	No.	Icon	Description
최대: 2550 0 RPM 최소: 0	1	⊖	This excludes the item from the list of graph display.
	2	Maximum	This indicates the maximum value on the current graph display window.
	3	Minimum	This indicates the minimum value on the current graph display window.
	4	⊕	This enlarges the graph of the pertaining item to the maximum. However, it will not exceed the graph display area.

Save data

This saves the sensor data acquired in this the sensor data function in a file. The data can be retrieved with the "Stored Data Analysis" function.

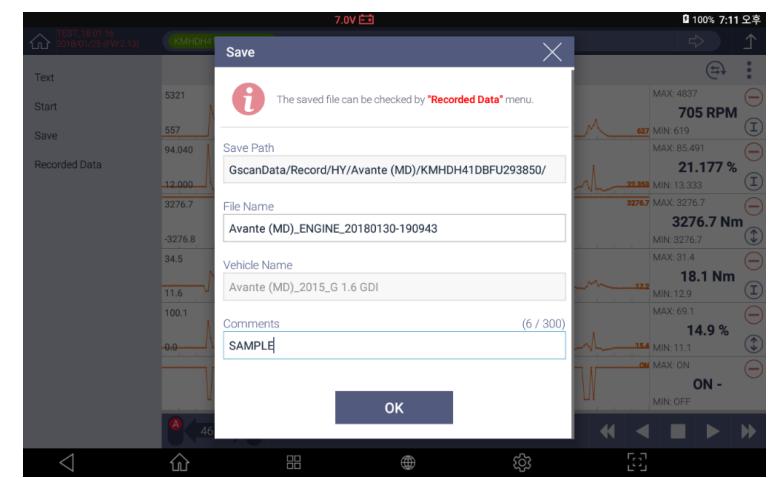
Save data



- 1 Click the [Stop] button to stop data reception.



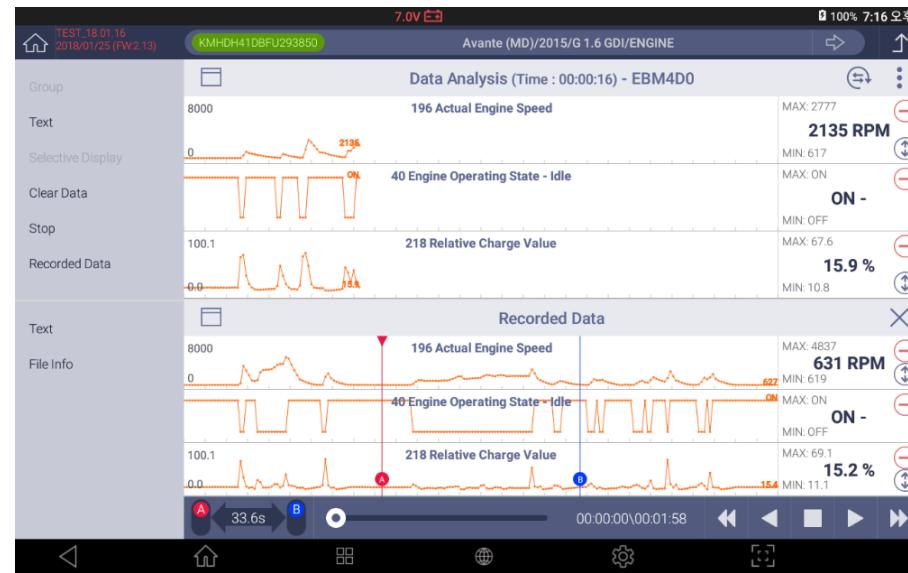
- 2 When data reception is stopped, the "Data Analysis" window will appear as shown in the left figure.



- 3 Clicking of the [Save] button will prompt a window for designating the file saving path and inputting remarks. After inputting remarks, click the [OK] button.

Retrieving of stored data

In the graph mode, you can call the existing sensor data records, and compare them.
At this time, the top part of the window will display sensor data values and the bottom part will display the saved data playback bar.



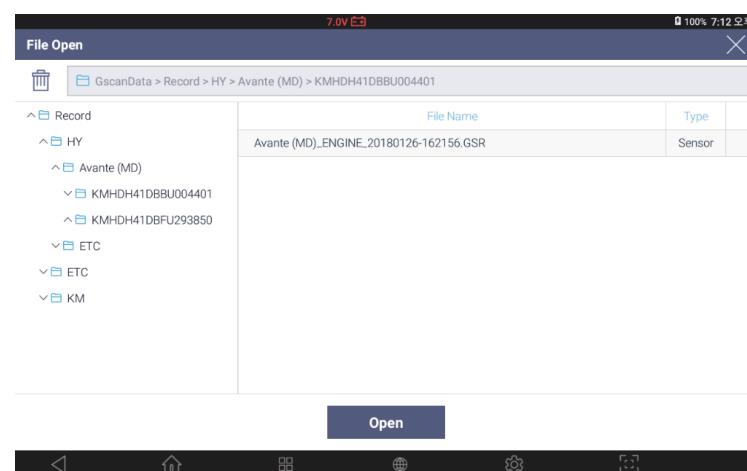
- 3** Clicking of the [Save] button will prompt a window for designating the file saving path and inputting remarks.
After inputting remarks, click the [OK] button.



The sensor data will be stored in a file with *.GSR format, which can be rechecked at the [Data] function of the initial window, or [Recorded Data] in the "Sensor Data Analysis" function.



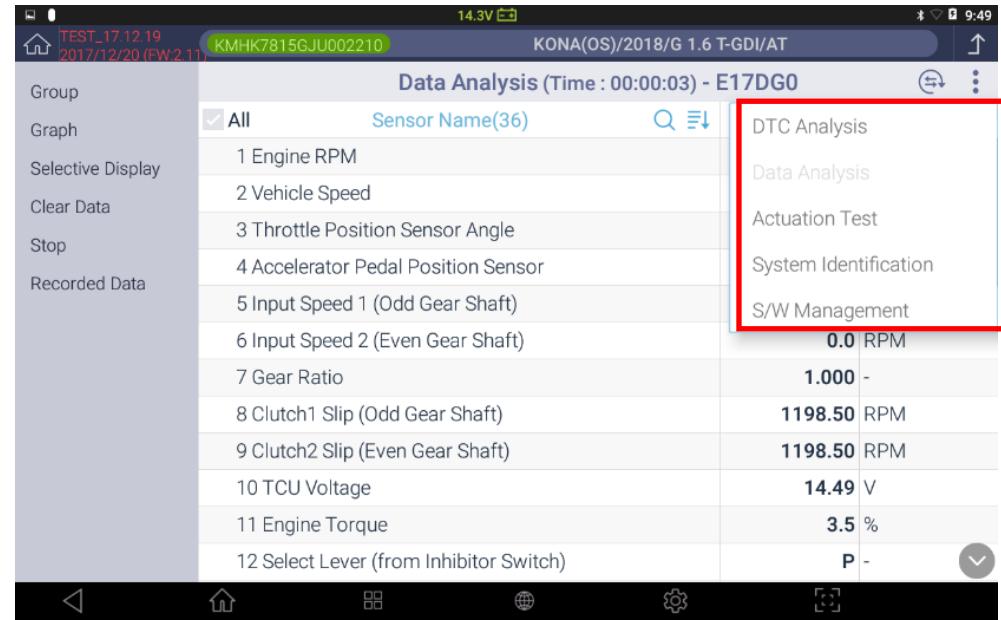
- 1** Click the [Recorded Data] button.



- 2** Go to the data saving path, find a file, and click the [Open] button.

■ Switching of Diagnostic Functions

From the DTC diagnostic function, it is possible to short-switch to the following diagnostic functions:



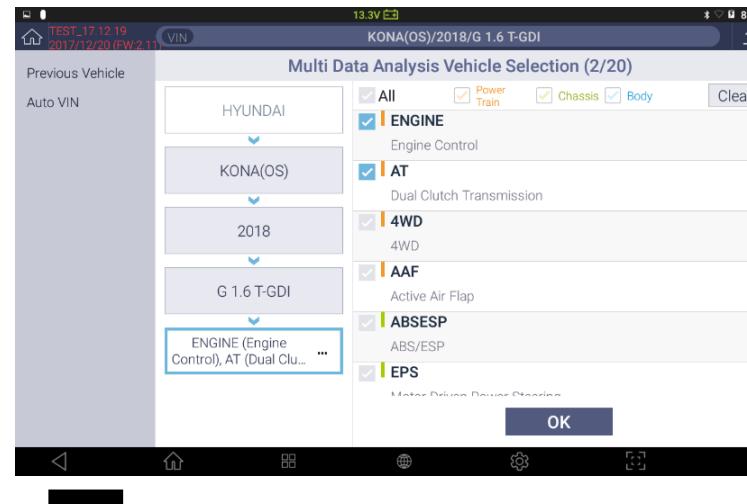
- Data Analysis
- Actuation Test
- System Identification
- S/W Management



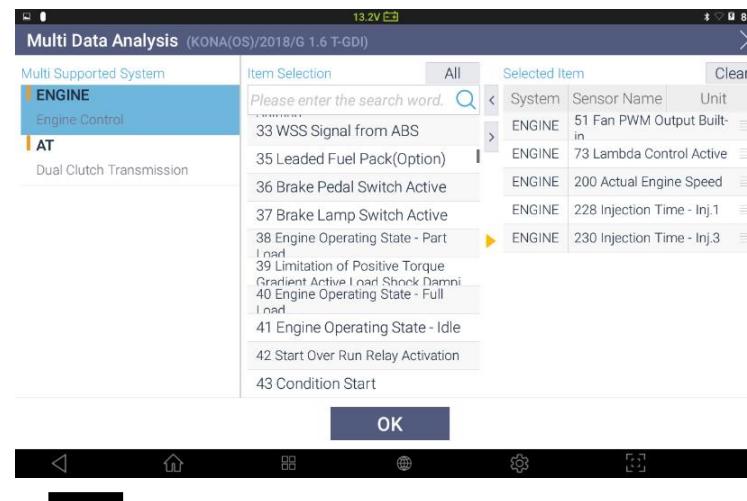
This function enables concurrent communications with multiple ECUs, and displays sensor data items designated for multiple systems on the window. The [Multi Data Analysis] function supports only the ECM systems under diagnosis that use the CAN protocol.

■ Selection of Multiple Systems

In Step 2 of the multisystem selection, sensor data items will be listed for the "Multi Supported System" in blue shade in the left column. Select a system, and then select sensor data items.



1 Select a control system to be subjected to diagnostic communications, and click the [OK] button.



2 When sensor data items of the control system are selected, they will be registered in the left list.



3 After selecting sensor data items of the control system to be registered as **selected items**, click the [OK] button to complete the sensor data item selection.

■ Multi Data Analysis

In the "Multi Data Analysis" function, the listing of sensor items and sensor values is the same as that of the "Sensor Data Analysis" function. The system information of the sensor data items is listed on the left.

Multi Data Analysis (Time : 00:00:02)				
System	Sensor Name(10)	Q	Value	Unit
ENGINE	51 Fan PWM Output Built-in		ON	-
ENGINE	73 Lambda Control Active		ON	-
ENGINE	200 Actual Engine Speed		677	RPM
ENGINE	228 Injection Time - Inj.1		0.82	mS
ENGINE	230 Injection Time - Inj.3		0.82	mS
AT	11 Engine Torque		4.3	%
AT	7 Gear Ratio		1.000	-
AT	9 Clutch2 Slip (Even Gear Shaft)		678.00	RPM
AT	6 Input Speed 2 (Even Gear Shaft)		0.0	RPM
AT	5 Input Speed 1 (Odd Gear Shaft)		0.0	RPM



The structure of the window and the method for using this function are the same as those of the "Sensor Data Analysis" function.



This function drives the actuators of the systems of a vehicle by controlling the ECU of the vehicle with G-scan3, and enables checking the faults on the actuators.

* The supported actuation test items may vary depending on the control systems of vehicles.

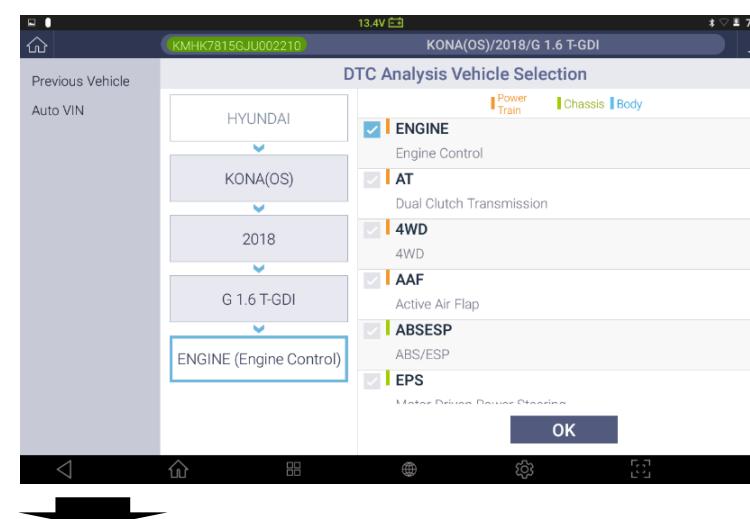
The actuation test window comprises "Actuation test" at the top and "Data Analysis" at the bottom.

Its purpose is to identify changes in the related sensor items by forcibly operating actuators.

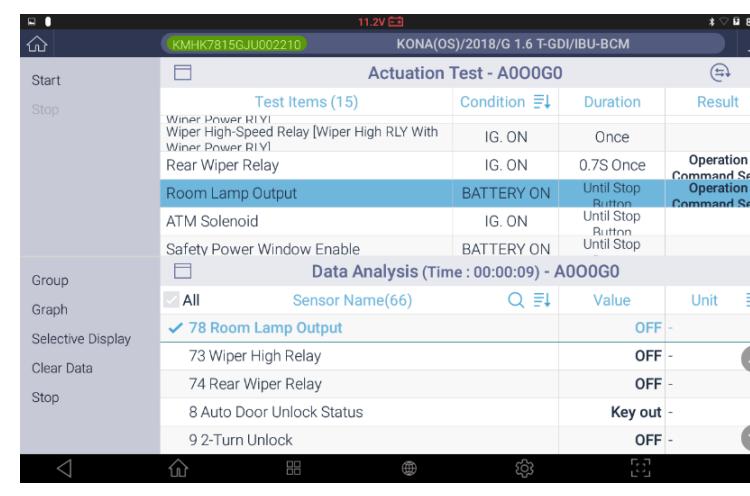
Test Items (15)				Condition	Duration	Result
Wiper Power RLY	IG. ON	Once		Operation Command Sent		
Wiper High-Speed Relay [Wiper High RLY With Wiper Power RLY]				Operation Command Sent		
Rear Wiper Relay	IG. ON	0.7S Once				
Room Lamp Output	BATTERY ON	Until Stop Button		Operation Command Sent		
ATM Solenoid	IG. ON	Until Stop Button		Operation Command Sent		
Safety Power Window Enable	BATTERY ON	Until Stop				
Data Analysis (Time : 00:00:27) - A000GO						
<input checked="" type="checkbox"/> All	Sensor Name(66)	Q	Value	Unit	E	
78 Room Lamp Output						
73 Wiper High Relay		OFF	-		E	
74 Rear Wiper Relay		OFF	-		E	
8 Auto Door Unlock Status		Key out	-		E	
9 2-Turn Unlock		OFF	-		E	

	Item	Description
A	Actuation test	Along with the actuation test items supported by the control systems of the vehicle, actuation "condition," "duration," and "result" are displayed.
B	Sensor data analysis	The sensor data items supported by the control systems of the vehicle and their status values are displayed.

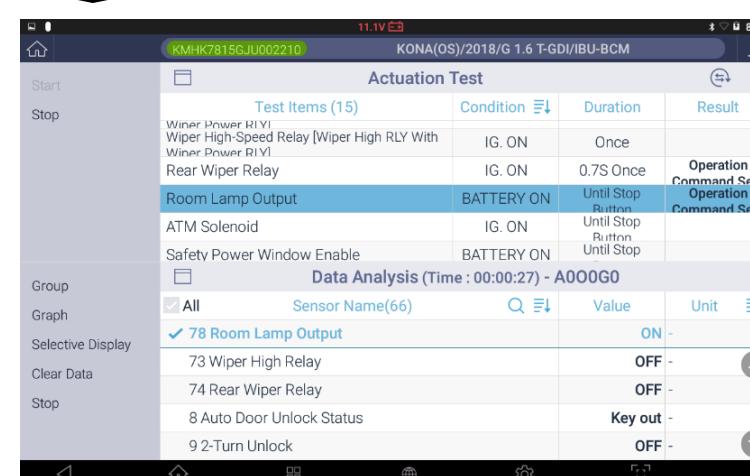
■ Use of Actuation Test



- Select a control system to be subjected to diagnostic communications, and click the [OK] button.



- Select the sensor data items related with the actuation test. To facilitate the reading, you may set the window in graphic mode.

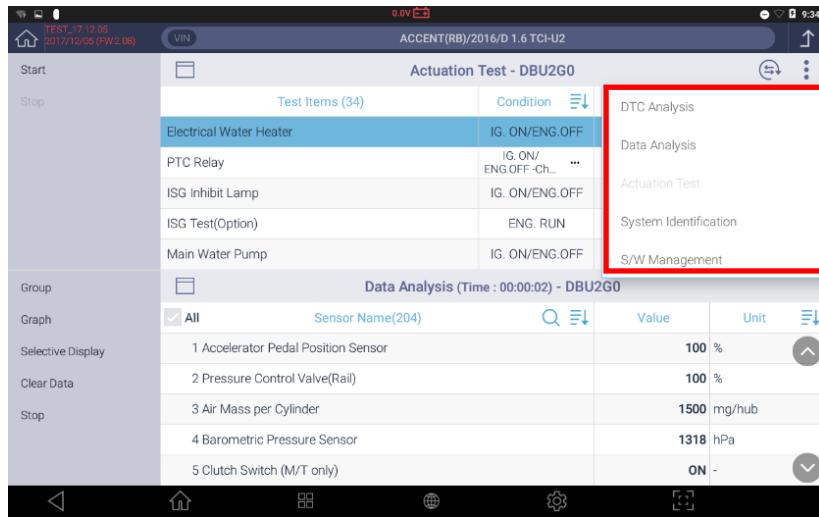


- After selecting an actuation test item, click the [Start] button at the upper-left part.

* Depending on the actuation test items, you may stop the actuation by clicking the [Stop] button.

■ Switching of Diagnostic Functions

From the actuation test function, it is possible to short-switch to the following diagnostic functions:

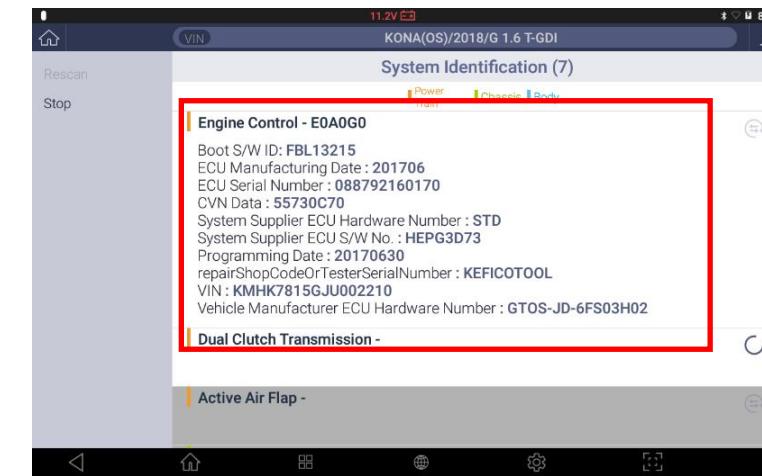
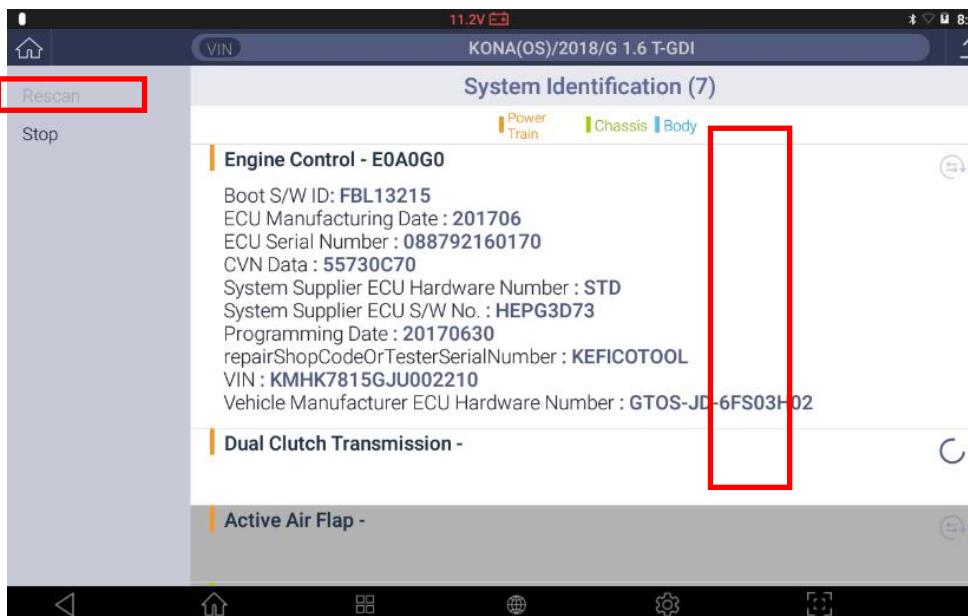


- Data Analysis
- DTC Analysis
- System Identification
- S/W Management



This function reads and displays the identification of the control systems mounted on a vehicle.

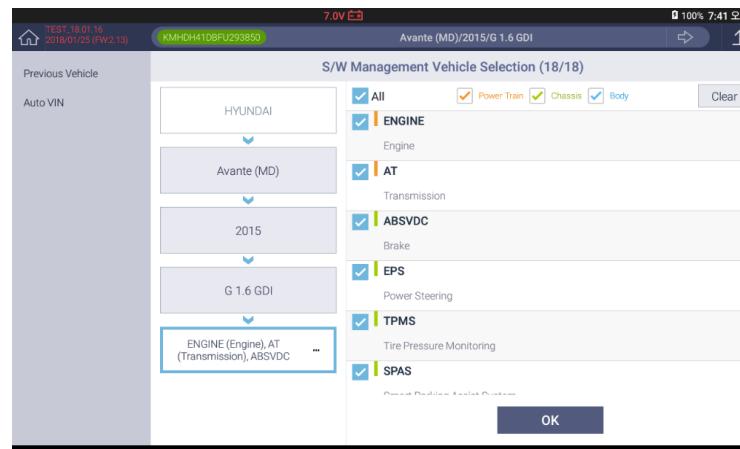
The system identification function on the initial window enables selection and identification of multiple systems.



2 The identification information on the control systems selected during the vehicle selection will be displayed on the window.

Item	Description
Rescan	This rescans identification of all the control systems selected during the vehicle selection.
	The rescanning will be done only for the control systems on which the "rescan" button is indicated.

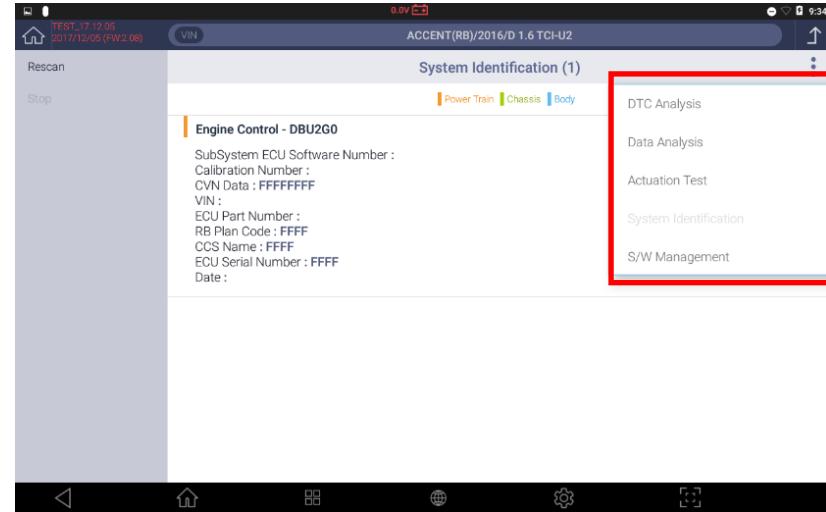
■ Use of System Identification



1 Select all the control systems to be scanned in terms of system identification, and click the [OK] button.

■ Switching of Diagnostic Functions

From the system identification function, it is possible to short-switch to the following diagnostic functions:

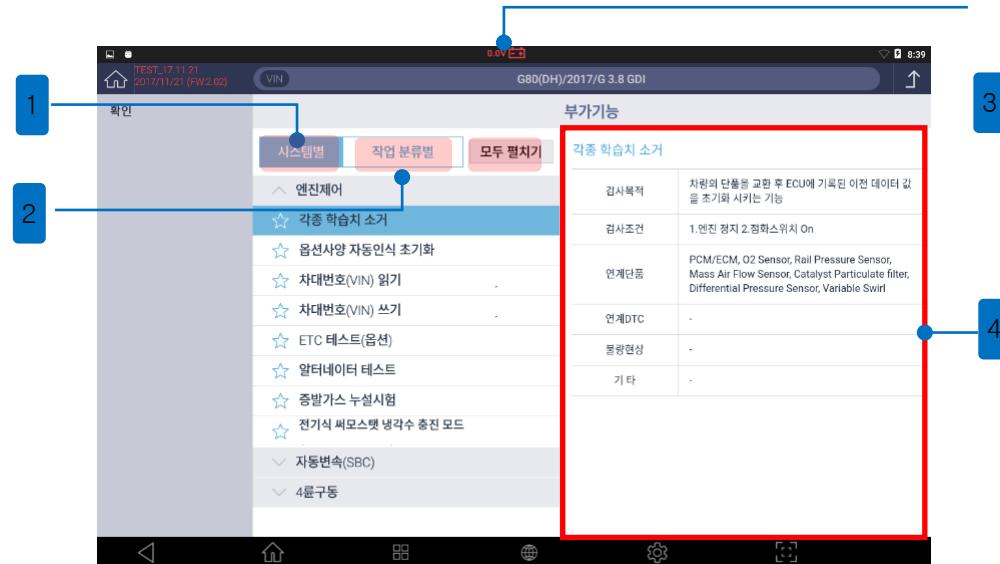


- Data Analysis
- DTC Analysis
- Actuation Test
- S/W Management

Note: Switching among the diagnostic functions is possible only when a single system is selected during the model selection. If multiple systems are selected, the function switching buttons will not appear.

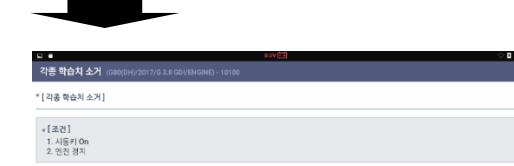


In addition to vehicular diagnostics, additional setting/testing functions are supported, including "learning value initialization," "immobilizer registration," and "injector data input" for the control systems of vehicles, as well as "tire pressure monitoring" and "evaporative gas leakage test."



Item	Description
By system	This displays the list of additional functions that support the control systems of the vehicle.
By work category	This displays the list of additional functions that support vehicle maintenance works.
Open all	This displays the full list of additional functions by system.
Additional function execution window	This enables execution of a selected additional function.

■ Use of Additional Functions



- 1 Select all the control systems to be scanned in terms of system identification, and click the [OK] button.

- 2 After selecting an additional work item at the lower part of the "By system" or "By work" tab, click the [OK] button at the upper-left part.

* For the sake of safe work, make sure to read, before selecting a work item, the details relating to the additional function that is displayed on the left of the window such as test purposes, test conditions, and related components.

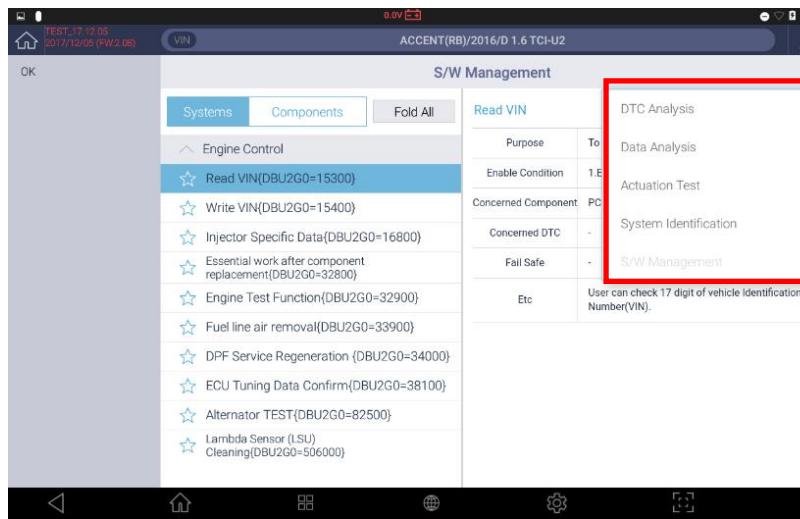
- 3 After making the conditions of the vehicle match the conditions for the execution of the additional function, click the [Run] button at the lower part.

* The button structure may vary depending on items of additional functions.

- 4 On the popup window, click the [OK] button for automatic execution of the additional function.

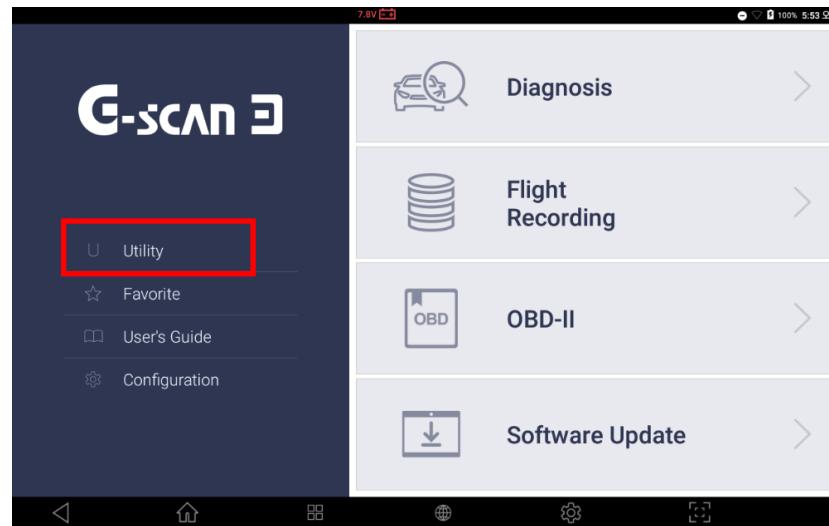
■ Switching of Diagnostic Functions

From the SW management function, it is possible to short-switch to the following diagnostic functions:



- Data Analysis
- DTC Analysis
- Actuation Test
- System Identification

On the initial window of G-scan3, clicking "Utility" will open the utility functions.



Item	Description
High line	These enable changes in the setting of a selected communication line.
Low line	
Reset	This resets the communication line setting.
Save	This saves changed communication line setting.
Cancel	This cancels changed communication line setting.

■ Communication Line Inspection

This measures the voltage changes in the communications line of the DLC cable, and displays whether signals are received by on-off lighting. The on-off lights only indicate signal reception, and do not indicate signal accuracy.

Driving condition

The start key of the vehicle should be in the "ON" position.

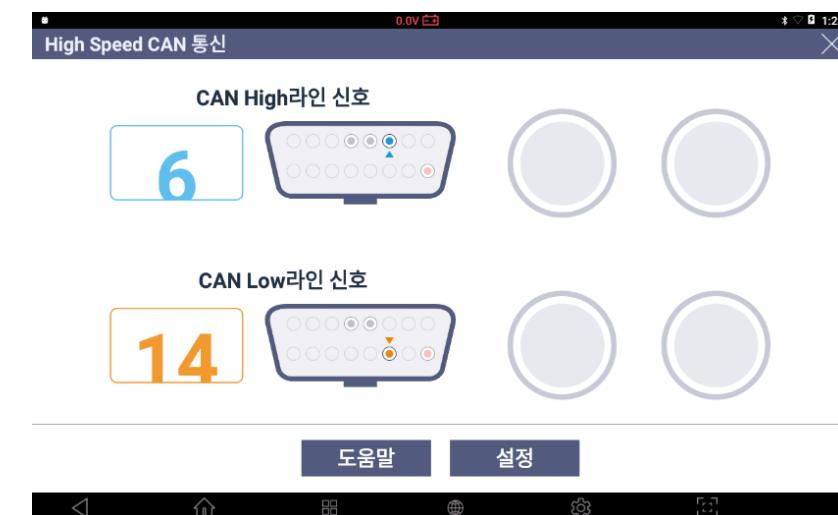


Setting of the communication line inspection function

The communication lines set for the OBD-II connector may vary depending on vehicles. Therefore, refer to the maintenance guide of the vehicle, and set the communication line according to the following guide before using the communication line inspection function.

High Speed CAN Communication

This enables an inspection of the high-speed CAN communication line. If the on-off display does not run, check the driving condition (start key in the "ON" position) and the connector pin number of the OBD terminal on the circuit diagram, and conduct a close check of the circuit.



Low-speed CAN Communication

This enables an inspection of the low-speed CAN communication line. If the on-off display does not run, check the driving condition (start key in the "ON" position) and the connector pin number of the OBD terminal on the circuit diagram, and conduct a close check of the circuit.



Single CAN

This enables an inspection of the single CAN communication line. If the on-off display does not run, check the driving condition (start key in the "ON" position) and the connector pin number of the OBD terminal on the circuit diagram, and conduct a close check of the circuit.



J1939

This enables an inspection of the J1939 communication line. If the on-off display does not run, check the driving condition (start key in the "ON" position) and the connector pin number of the OBD terminal on the circuit diagram, and conduct a close check of the circuit.



J1850 (PWM)

This enables an inspection of the J1850 (PWM) communication line. If the on-off display does not run, check the driving condition (start key in the "ON" position) and the connector pin number of the OBD terminal on the circuit diagram, and conduct a close check of the circuit.



Unit Converter

This allows easy conversion of units such as length, weight, volume, pressure, velocity, temperature, and fuel efficiency.

The screenshot shows a unit converter interface with a header "단위 환산". Below it is a table for length conversion:

m	kg	m ³	pa	m/s	°C	km/L
10		mm	0.3937	inch		
1.0000		cm	0.0328	ft		
0.0100		m	0.0109	yd		
0.0000		km	0.0000	mile		

At the bottom are buttons for "초기화" (Clear) and navigation icons.

Calculator

This functions as a simple calculator.

The screenshot shows a calculator interface with a numeric keypad and function keys:

7	8	9	÷	DEL	INV	DEG	%
4	5	6	×		sin	cos	tan
1	2	3	-		ln	log	!
.	0		+	=	π	e	^
					()	√

At the bottom are buttons for "도움말" (Help), "초기화" (Clear), and navigation icons.

Special Functions Calculator

This provides the special calculation functions including Ohm's law, parallel resistance, frequency and period, tire distance per rotation, and percentage based on defined calculation formulae.

Ohm's Law

This calculates the necessary value when you enter two values from voltage, resistance, wattage, and ampere identified for a circuit.

The necessary value is the item that is selected on the top categories.

The screenshot shows the "옴의 법칙" section of the calculator. It displays a circuit diagram with a battery (v), a resistor (Ω), and a light bulb (w). Below the diagram are input fields for "전류" (current A), "저항" (resistance Ω), and "전력" (power W). A note at the bottom says "두 개의 항목을 입력하십시오." (Enter two items).

Parallel Resistances

This calculates the overall resistance value when you enter the values of parallel-connected resistors.

The screenshot shows the "병렬 저항" section of the calculator. It displays a circuit diagram with four resistors (R1, R2, R3, R4) connected in parallel. Below the diagram are input fields for "저항이 서로 다른 경우" (different resistors) and "저항이 동일한 경우" (equal resistors). There is also a field for "수량" (quantity). At the bottom are buttons for "도움말" (Help), "초기화" (Clear), and navigation icons.

Frequency and Period

This calculates required frequency time and required duty (+) time when you enter the values of frequency and duty.

Tire Distance per Rotation

This calculates the moving distance per rotation of a tire when you enter the tire data.

Percentage

Abbreviation Dictionary

This enables the search of the full definition of the abbreviations used by automakers.

Abbreviation	Official Name
OTP	Throttle Position Sensor
2WD	Two Wheel Drive
3 G Sensor	Contains Yaw, Lateral G and Longitudinal G sensors
4WD	Four Wheel Drive
A	Amperes
A/C	Air Conditioning
A/D	Analog to Digital

■ OBD-II DTC Description Search

This enables a description search of OBD-II DTCs.



■ Video

This enables saving of videos in video (MP4) files through the camera and the microphone embedded in the G-scan3 terminal.

Button Shape	Description
	This takes a video with the camera.
	This stops video recording.
	This saves a video in a file.
	This plays a recorded video.
	This changes to the camera standby mode.

■ Voice Recorder

This enables recording of voice data through the microphone embedded in the G-scan3 terminal.

Button shape	Description
	This starts recording in a voice recording standby mode.
	This stops recording while voice recording is in progress.
	This plays recorded data.
	This changes to the voice recording standby mode.
SAVE	This saves recorded voice data in a file.

■ Camera

This enables saving of images in files through the camera embedded in the G-scan3 terminal.

Button shape	Description
	This takes an image with the camera.
	This saves an image in a file.
	This changes to the camera standby mode.

G-scan3 & Tablet PC specification information. For additional optional components, please refer to the separate specification sheet or GIT homepage.

Category	Specifications
OS	Android 6.0
CPU	Exynos 7420 Octa core @2.1GHz
Memory	Internal Flash 64GB / RAM 3GB
LCD	10.1" TFT / 1280 x 800 pixel
Touch Screen	Capacitive Touch Screen
Camera	Rear : 13M Pixel / AF / Flash Light
Wireless Connection	802.11 a/b/g/n , Bluetooth 4.1, Wi-Fi direct.
External Memory	Micro-SD card slot (max. 128GB)
Vehicle Interface	CAN (High speed, Low speed, Single), ISO-9141, ISO-9141-CARB, KWP-2000, SAE-J1708, SAE-J1587,
External Device	* TPMS : Internal mounting support / not support
External Key	3ea (Power/Function1/Function2 Key)
Audio	Speaker (mono), Mic, Earjack
Sensors	Gyro-sensor, Acceleration Sensor
DC Input	DC 9 ~ 30V
Battery Capacity	Li-ion Polymer / 6,300mAh(3.7V) / Hard Pack
Size (W x L x T), Wg	304 x 210 x 40mm, 1.6Kg

Appendix

Disposal of Old Electrical and Electronic Equipment

WEEE (Waste Electrical and Electronic Equipment) symbol shown in [Figure 1] is indicated on the back of the G-scan3 main module.

Please follow the regulation guide for disposal of Waste Electrical and Electronic Equipment. Use caution disposing of the Trigger module; it contains a lithium battery. Users must follow the regulations when replacing or discarding this battery.



Fig. 1. WEEE Symbol

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

Manufacturer Information

Manufacturer	Company	GIT Co., Ltd	TEL	82-2-1588-3665
	Address	05655, GIT Bldg, 87, Macheon-ro, Songpa-gu, Seoul, Korea		

RF SPEC

Frequency Band

WLAN

2 412 ~ 2 472 MHz

5 180 ~ 5 240 MHz / 5 190 ~ 5 230 MHz

Bluetooth

2 402 ~ 2 480 MHz

125 kHz

Output Power

WLAN

2.4 GHz

802.11b : 13.5 dBm ± 1 dB

802.11g : 11.5 dBm ± 1 dB

802.11n_HT20 : 11.0 dBm ± 1 dB

5 GHz

802.11a : 12.5 dBm ± 1 dB

802.11n_HT20 : 12.0 dBm ± 1 dB

802.11n_HT40 : 12.0 dBm ± 1 dB

Bluetooth

GFSK : 7.0 dBm ± 1 dB

π/4DQPSK : 2.5 dBm ± 1 dB

8DPSK : 2.5 dBm ± 1 dB

Bluetooth LE

1 dBm ± 1 dB

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

CAUTION : Any Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment. 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.

A minimum separation distance of 20 cm must be maintained between the antenna and the person for this appliance to satisfy the RF exposure requirements.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter unless authorized to do so by the FCC.