

# GDS User's Manual

## Before Use

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Read the instructions thoroughly for proper operation of your GDS M.  
This manual contains information needed for using GDS M.  
The manual is subject to change without prior notice.  
Git assumes no liability for the Application which GIT do not produce  
GDS M application includes the several functions for uploading and downloading data. GIT assumes no liability for the fee due to the use of data

## Safety Warning and Caution before Use

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This section contains WARNING and CAUTION for safe usage of GDS M. Before use, the user should read the following information.



### WARNING

This indicates incorrect handling may result in a major accident involving death or serious injury.

The VCI should be secured in a safe location when operating the vehicle to avoid interference with other vehicle equipment.

Only use the specified adapters and cables when connecting the VCI module. (7~35VDC)

Ensure all cables are properly connected during operation. Do not disconnect communication cable or power cables unless finished with the equipment.

When using the trigger module, ensure that the module is installed in a safe and secure location to avoid interference with other vehicle equipment.

Do not disassemble the VCI module.

Use only genuine accessory parts supplied by GIT.

Never connect the device to equipment rather than vehicles.

Products are to be stored within the right temperatures. (Refer to CAUTION)



## CAUTION

This indicates incorrect handling may lead to injury or damage to property. Under certain conditions more serious consequences may result.

Do not remove the rubber shield from the VCI. Keep liquids and other contaminants away from the VCI.

Do not drop the VCI.

Do not place any objects (tools, manuals, etc.) on the VCI.

Observe correct polarity when connecting the battery supply extension cable.

When connecting cables under the hood, secure the cables to avoid damage caused by hot or moving parts. Unplugging the DLC and USB cables from the VCI module must only be done after releasing the cable connector lock tap(s).

USB cable must be connected to VCI module in order to upgrade any vehicle ECU or VCI firmware.

Properly store all components when not in use.

Do not use cables as carrying handles.

Do not store products in places where;

Extremely high or low temperature (Refer to feature of products)

Extremely high or low humidity (Refer to feature of products)

Inside a vehicle during summer season for a long time

Exposed to direct rays

Avoid a shock or vibrations or under heavy weight.

Avoid a shock or vibrations during shifting.

Keep products away and store from moisture.

GIT is not responsible for those causes that are generated by PCs, which are not recommended by GIT.

Keep products away from flammable substances or places where fierce static electricity can occur.

Products and accessories are not to be coated or painted with chemical substances or acid that can corrode the equipment.

Do not expose the equipment to X-ray or Microwave. This might cause severe damage to the equipment.

## Introduction

Thank you for purchasing the Global Diagnostic System (GDS). Read the instructions thoroughly for proper operation of your Global Diagnostic System

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No patent liability is assumed with respect to the use of the information contained herein.

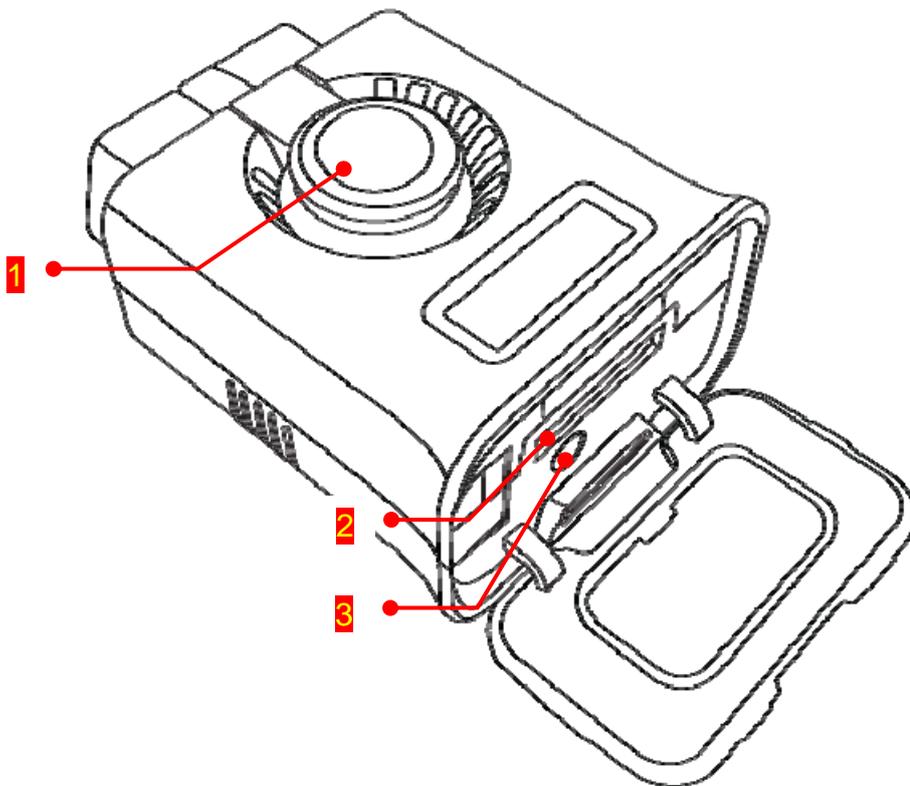
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## Disclaimer

Global Diagnostic System specifications and manual are subject to change without notice. Global Information technology Co., Ltd. assumes no liability for damage incurred directly or indirectly from error, omission or discrepancies between the Tablet PC, VCI, TPMS and the User Manual.

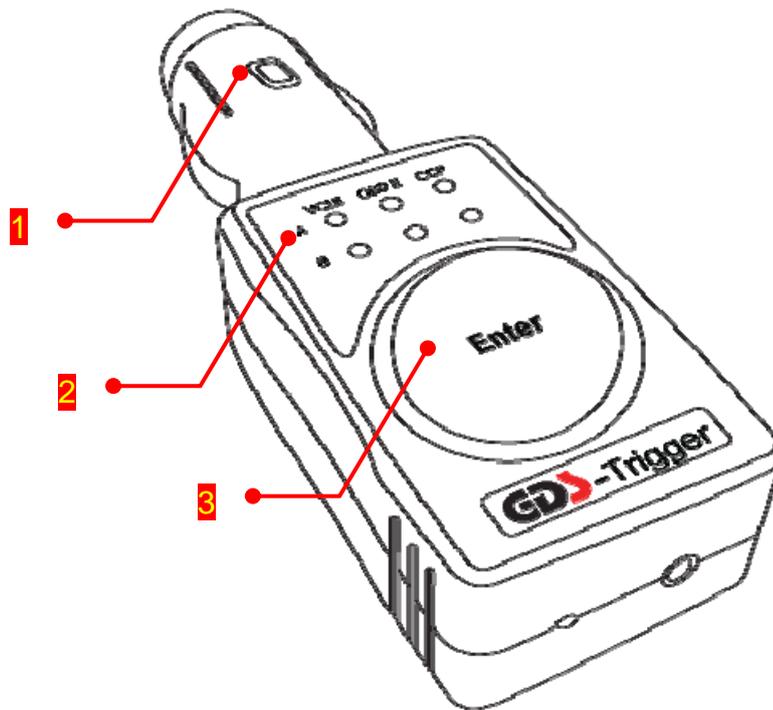
# Introduction

VCI-II Component Identification and Functions



1	<b>VCI II Unlock button</b>	Unlock button for the pairing. When disconnecting VCI II from OBD-II(16Pin) on the vehicle side, unlock the pairing between .
2	<b>External Connector for USB cable</b>	Communication port for Connecting between VCI II and GDS PC with wire USB cable
3	<b>Bluetooth Paring Reset Button</b>	Reset button for re-pairing with Bluetooth GDS Trigger

## GDS Trigger Component Identification and Functions



<b>1</b>	<b>Trigger Cigar Lighter connector</b>	Supplies the power to the GDS Trigger, should be connected to the Cigar Lighter on the vehicle
<b>2</b>	<b>Trigger Status LED</b>	Indicates VCI II communication status.
<b>3</b>	<b>Trigger Enter Button</b>	When using Trigger manually, the color of lights indicates the current status of trigger module.



### Notice

Bluetooth Trigger Module must be inserted to Cigar Lighter when it is used for flight record (saving ECU input/output data on the vehicle)

### VCI II Specifications Information

Item	Specifications
CPU	ARM 32-bit Cortex™-M3 (STM32F207VGT6) @ 120 MHz
Memory	Flash Memory 1MByte, SRAM 128KByte
Operating Voltage	7 VDC to 35 VDC
Operating Temperature	-20 °C to 60 °C
Storage Temperature	-40 °C to 85 °C
Operating humidity	20 %R.H. to 90 %R.H.
Current Consumption	Standby Mode 300 mA @ 12 V
Wire Protocol	USB 2.0 Full Speed(12Mbps)
Wireless LAN Protocol	Wireless LAN IEEE 802.11 a/b/g/n(20)
Bluetooth Protocol	Bluetooth 3.0, 2.1 (Class 1)
Dimension	57.9 × 73.6 × 35.9 mm
Weight	90 g
Case	PC+ABS

### GDS Trigger Specifications Information

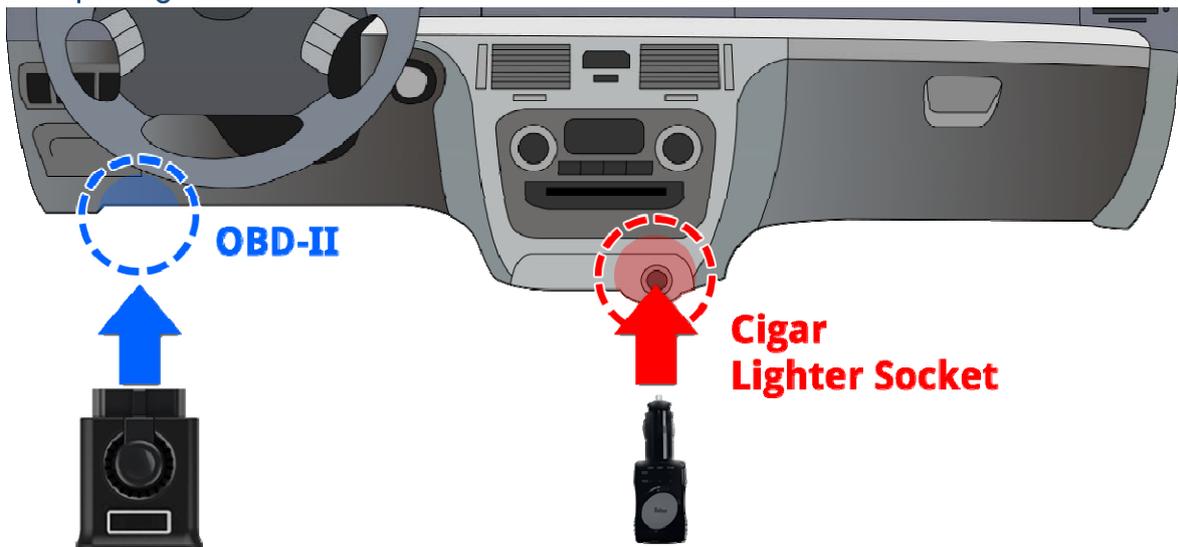
Item	Specifications
CPU	ARM 32-bit Cortex™-M3 (STM32F205RGT6) @ 120 MHz
Memory	Flash Memory 1MByte, SRAM 128KByte
Operating Voltage	7 VDC to 35 VDC
Operating Temperature	-30 °C to 70 °C
Storage Temperature	-40 °C to 85 °C
Operating humidity	20 %R.H. to 90 %R.H.
Current Consumption	Standby Mode 70 mA @ 12 V
Bluetooth Protocol	Bluetooth 2.1 (Class 2)
Dimension	38.3 × 111 × 25.3 mm
Weight	55 g
Case	PC+ABS

REMARK: the essential radio test suites for these products (model VCI II and GDS Trigger) were performed under the extreme temperatures from -20 °C to 55 °C as the purpose of outdoor and indoor usage.

## VCI II and GDS Trigger Connection

VCI II and GDS Trigger must be paired to transfer and save the data for Flight Record function from the vehicle to VCI II module. They are paired by Bluetooth communication system and must be set up as shown below.

### Preparing



### Notice

VCI II must be connected to OBD-II connector on the vehicle and VCI II should be turned on. When the trigger module is connected to the Cigar Lighter Socket, the VCI II power is turned on automatically and it searches VCI II and connects it.



### Caution

VCI II must be connected to the OBD-II connector on the vehicle.(Power on)  
When the trigger module is connected to the Cigar Lighter Socket, the VCI II power is turned on automatically and it searches VCI II and connects it.



## Pairing between VCI II and GDS Trigger Module

We, GIT, supply VCI II and GDS Trigger Module as a paired status. However, if they are not paired, follow the instruction below.



1. Turn VCI II and GDS Trigger on.
2. Press "Enter" button on GDS Trigger more than 2 seconds.
3. Press "Reset" button on VCI II more than 2 seconds, while orange light is flashing on "Enter" button.
4. Green light flashes on "Enter" button, after pairing between VCI II and GDS Trigger.



# Screen Layout and Basic Operation



## Screen Layout and Basic Operation



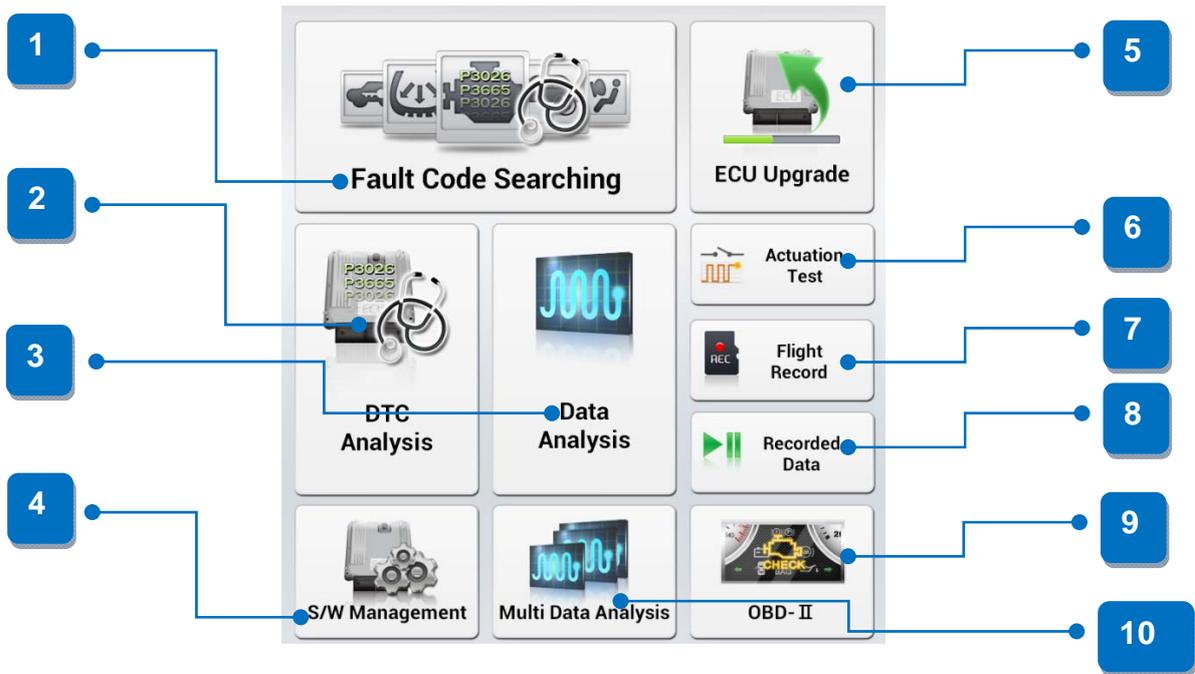
## Status Information



### Top menu of Screen

1		<b>Login-</b>	Log in (Not certified yet)
		Logout	Log out (Certified)
2	ONLINE		Internet on
	Off Line		Internet off
3		Lightening	VIC II connection via WiFi Direct
			VCI II connection via USB cable.
	VCI OFF	-	VCI II off
4		OFF	Internet Update
		Flashing	Downloading Internet Update Files
		Lighting	Complete downloading Internet Update file.
5		<b>Screenshots</b>	Capture the Screenshots and write a note on it.

## Function Icons



1	 <p>Fault Code Searching</p>	Function to read DTC data saved on the several systems of the vehicle and display them on the screen at once.
2	 <p>DTC Analysis</p>	Function to retrieve DTC data from a specific system and retrieve diagnostic procedures/ TSB data for any DTCs found.

3	 <p><b>Data Analysis</b></p>	Function to monitor ECU status and input/output information (Current Data) via communication with ECU.
4	 <p><b>S/W Management</b></p>	Function to register or set the information of the vehicle system via communication with ECU.
5	 <p><b>ECU Upgrade</b></p>	Function to upgrade ROM data on ECU to improve the vehicle performance.
6	 <p><b>Actuation Test</b></p>	Function to operate / stop the actuator on the vehicle by force to check its malfunction.
7	 <p><b>Flight Record</b></p>	Function to record the ECU input/output information in real time and to analyze the data in various ways.
8	 <p><b>Recorded Data</b></p>	Function to view for the data from Data Analysis and Flight Record.
9	 <p><b>OBD- II</b></p>	Function to check the vehicle status via OBD-II communication with vehicle.
10	 <p><b>Multi Data Analysis</b></p>	Function to check the input/output information of the several systems on the vehicle at the same time. *Only CAN Protocol systems are available.

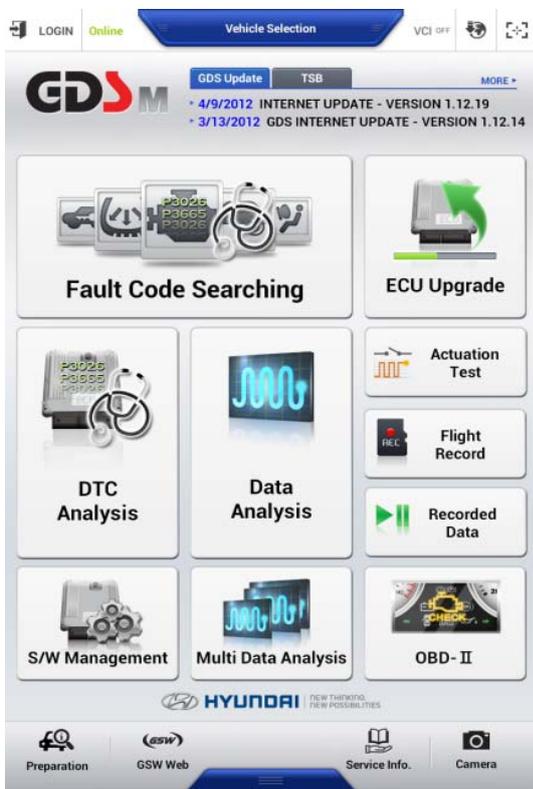
## Vehicle Selection



There are two ways to select vehicle for diagnosis: Manual Vehicle Selection and VIN searching.

To diagnose vehicle properly, follow the instruction for vehicle selection as shown below.

### VIN Searching for Vehicle Selection



Tap “Vehicle Selection” at the top of the middle on the main screen to go to “Vehicle Selection” screen.



2

Input the last 6 digits of VIN in the box

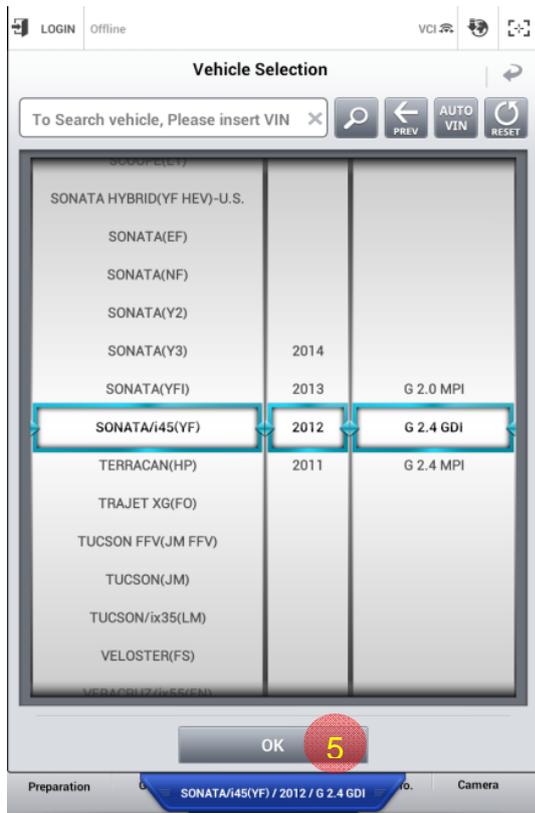


3

4

Tap VIN that requires to be diagnosed.

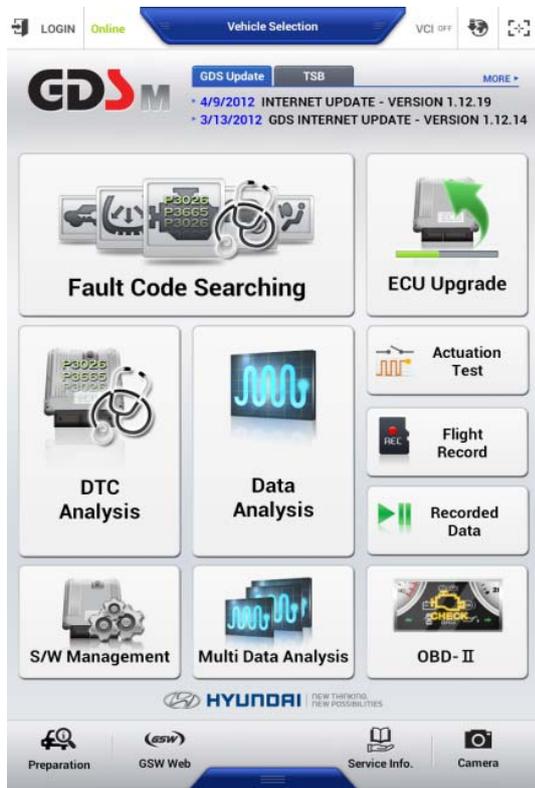
Tap "OK" button to save the model/year/engine information



5

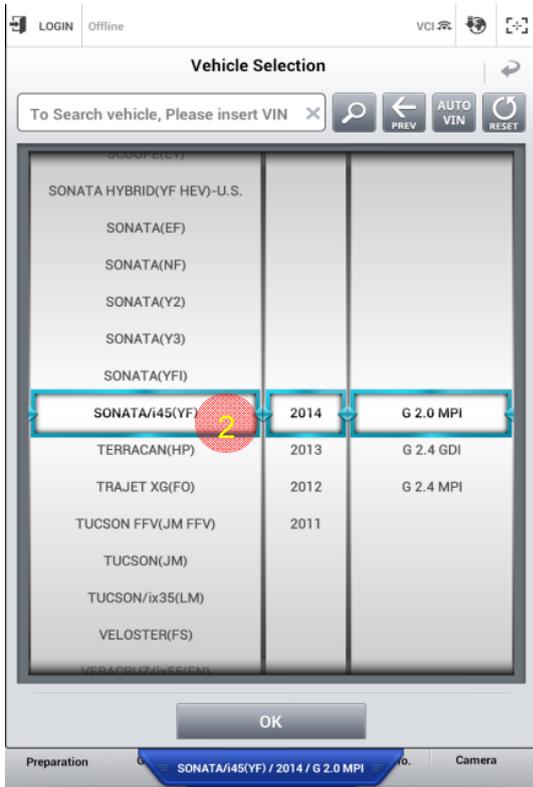
Tap "OK" button to complete vehicle selection.

## Manual Vehicle Selection



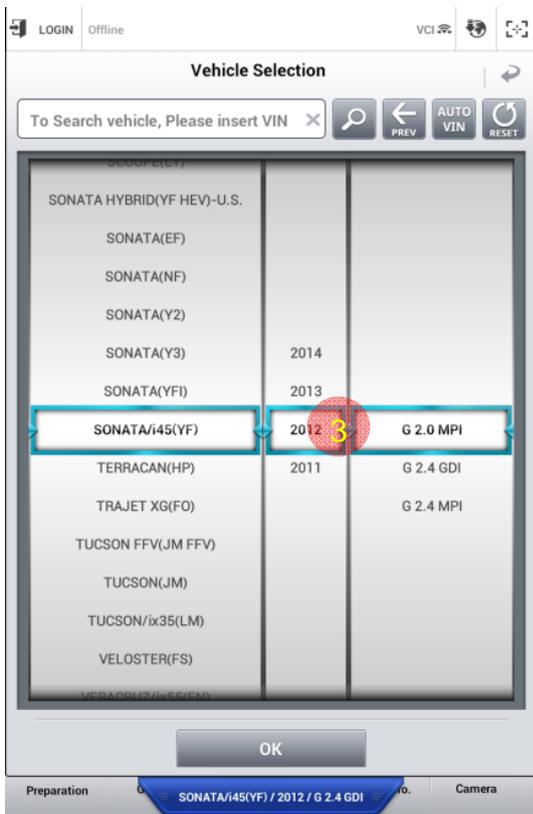
1

Tap "Vehicle Selection" at the top of the middle on the main screen to go to "Vehicle Selection" screen.



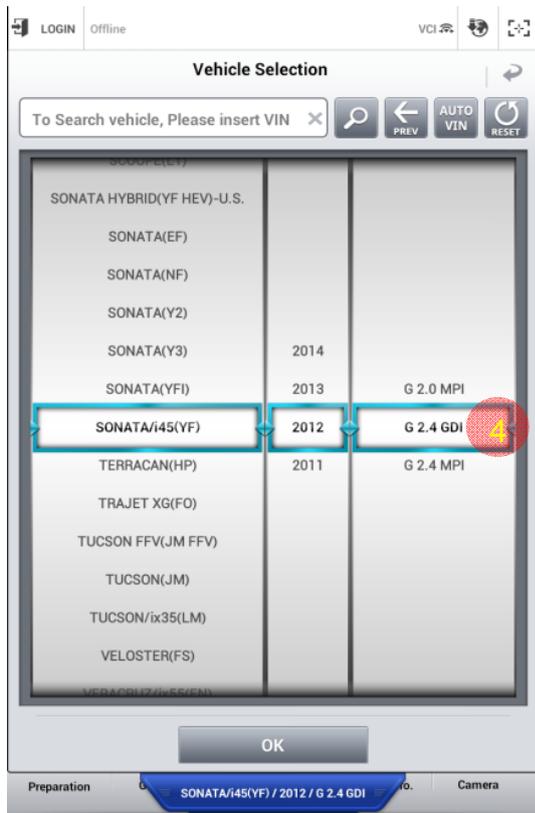
2

Select vehicle model.



3

Select Year of vehicle.



4

Select engine system.

|

# Appendix





## Notes regarding trademarks



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

### NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Indication of any restrictions of use: Data transmission via WLAN/Bluetooth technologies.

This equipment was restricted to indoor use, when operating at WLAN 5 GHz.

Indication of the countries where the equipment is intended to be used:

This equipment may be operated in AT, BE, CY, CZ, DK, EE, FI, FR, DE, GR, HU, IE, IT, LV, LT, LU, MT, NL, PL, PT, SK, SI, ES, SE, GB, IS, LI, NO, CH, BG, RO, TR

This product is CE marked according to the provision of the R&TTE Directive(1999/5/EC).

Here by G.I.T Co., Ltd.. declares that this product in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC

CE 0678

This device is sold for use as a Mobile Device, and the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons to comply with FCC RF exposure compliance requirements.



## 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 VCI main module, VMI main module, and Trigger 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.

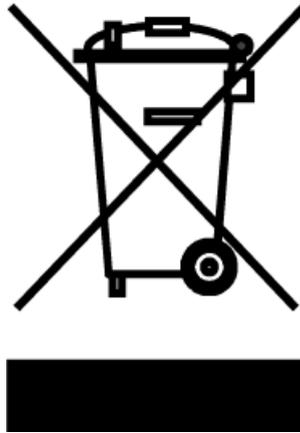


Fig. 1. WEEE Symbol

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.

## EC Declaration of Conformity

**Manufacturer** G.I.T Co., Ltd.  
**Address** GIT BLDG, 38-5 Garakbon-Dong, Songpa-Gu, Seoul, 138-801 Korea

Declares that the following product

**Product Name:** Scan Tool

**Model Number:** VCI II

**Brand Name:** 

conforms to the technical regulations applicable to the product within the scope of Directives 2006/95/EC (LVD), 2004/108/EC (EMC), and 1999/5/EC (R&TTE):

Article 3.1(a) **Health** EN 50385:2002  
Article 3.1(a) **Safety** EN 60950-1:2006+A11:2009+A1:2010+A12:2011  
Article 3.1(b) **EMC** EN 301 489-1 V1.9.2 (2011-09)  
EN 301 489-17 V2.2.1 (2012-09)  
EN 55022:2010  
EN 55024:2010  
Article 3.2 **Radio** EN 300 328 V1.7.1 (2006-10)  
EN 301 893 V1.7.1 (2012-06)

All essential radio test suites have been carried out. The relevant technical file is available for inspection.

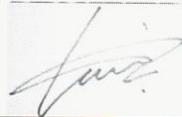
**Notified Body** EMCert Dr. Rasek GmbH  
Stoernhofer Berg 15  
91364 Unterleinleiter  
Germany  
EU Identification Number: 0678

This declaration is issued under the sole responsibility of the manufacture and, if applicable, his authorized representative.

**Point of contact** JOO HYOUNG LEE, TEL: +82-2-2189-5470, FAX: +82-2-2189-3344  
(Name, telephone and fax number)

South Korea, March 31, 2014

(Place, date of issue)



(Signature)

JOO HYOUNG LEE / Senior engineer

(Name and title in block letters)

## EC Declaration of Conformity

**Manufacturer** G.I.T Co., Ltd.  
**Address** GIT BLDG, 38-5 Garakbon-Dong, Songpa-Gu, Seoul, 138-801 Korea

Declares that the following product

Product Name: Scan Tool

Model Number: GDS Trigger

Brand Name: 

conforms to the technical regulations applicable to the product within the scope of Directives 2006/95/EC (LVD), 2004/108/EC (EMC), and 1999/5/EC (R&TTE):

Article 3.1(a) **Health** EN 62479:2010

Article 3.1(a) **Safety** EN 60950-1:2006+A11:2009+A1:2010+A12:2011

Article 3.1(b) **EMC** EN 301 489-1 V1.9.2 (2011-09)  
EN 301 489-17 V2.2.1 (2012-09)

Article 3.2 **Radio** EN 300 328 V1.7.1 (2006-10)

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South Korea, March 25, 2014  
(Place, date of issue)



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