



VCI User Manual



BOSCH

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1. Symbols used

1.1 In the documentation

1.1.1 Warning notices - Structure and meaning

Warning notices indicate hazards and their consequences for the user or surrounding persons. Warning notices also describe the measures for preventing these hazards. The signal word has a crucial importance. It indicates the probability of occurrence and the severity of the hazard in case of non-compliance:

Signal word	Probability of occurrence	Severity of danger if instructions not observed
DANGER	Immediate impending danger	Death or severe injury
WARNING	Possible impending danger	Death or severe injury
CAUTION	Possible dangerous situation	Minor injury

Below you will see an example of the “Live parts” warning notice by way of example, with the signal word **DANGER**:



DANGER – Exposure of live parts on opening the VCI!

Risk of (fatal) injury or heart failure from electric shocks on contact with live components.

- Work on electrical installations or equipment is only to be performed by qualified electricians or trained personnel under the guidance and supervision of an electrician.
- Disconnect VCI from the mains before opening.

1.1.2 Symbols in this documentation

Sym- bol	Designation	Explanation
!	Attention	Warns about possible property damage.
i	Information	Practical hints and other useful information.
1. 2.	Multi-step operation	Instruction consisting of several steps
➤	One-step operation	Instruction consisting of one step.
⇒	Intermediate result	An instruction produces a visible intermediate result.
→	Final result	There is a visible final result on completion of the instruction.

1.2 On the product



Observe all warning notices on products and ensure they remain legible!

2. Important notes



Before start up, connecting and operating Bosch Automotive Diagnostics Equipment (Shenzhen) Limited products it is absolutely essential that the operating instructions/owner's manual and, in particular, the safety instructions are studied carefully. By doing so you can eliminate any uncertainties in handling Bosch Automotive Diagnostics Equipment (Shenzhen) Limited products and thus associated safety risks upfront; something which is in the interests of your own safety and will ultimately help avoid damage to the device. When a Bosch Automotive Diagnostics Equipment (Shenzhen) Limited product is handed over to another person, not only the operating instructions but also the safety instructions and information on its designated use must be handed over to the person.

2.1 User group

The product may be used by skilled and instructed personnel only. Personnel scheduled to be trained, familiarized, instructed or to take part in a general training course may only work with the product under the supervision of an experienced person.

All work conducted on electrical and hydraulic devices may be performed by persons with sufficient knowledge and experience in the field of electrics and hydraulics.

Children have to be supervised to ensure that they do not play with the appliance.

2.2 Agreement

By using the product you agree to the following regulations:

Declare

- Refer to packing list for detailed product configuration;
- Refer to software for functions, pictures.

This product cannot use in:

Locations characterized by a separate power network, in most cases supplied from a high- or medium-voltage transformer, dedicated for the supply of installations feeding manufacturing or similar plants with one or more of the following conditions:

- frequent switching of heavy inductive or capacitive loads;
- high currents and associated magnetic fields;
- presence of Industrial, Scientific and Medical (ISM) apparatus (for example, welding machines).

The equipment complies according to the Radio Equipment and Telecommunications Terminal Equipment Directive 1999/5/EC.

CE0168

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Liability

All data in this program is based - where possible - on manufacturer and importer details. Bosch Automotive Diagnostics Equipment (Shenzhen) Limited does not accept liability for the correctness and completeness of software and data; liability for damage caused by faulty software and data is ruled out. Whatever the event, Bosch Automotive Diagnostics Equipment (Shenzhen) Limited liability is restricted to the amount for which the customer actually pays for this product. This disclaimer of liability does not apply to damages caused by intent or gross negligence on the part of Bosch Automotive Diagnostics Equipment (Shenzhen) Limited.

Warranty

Any use of non-approved hardware and software will result in a modification to our product and thus to exclusion of any liability and warranty, even if the hardware or software has in the meantime been removed or deleted.

No changes may be made to our products. Our products may only be used in combination with original accessories and original service parts. Failing to do so, will render null and void all warranty claims.

This product may only be operated using Bosch Automotive Diagnostics Equipment (Shenzhen) Limited approved operating systems. If the product is operated using an operating system other than the approved one, then our warranty obligation pursuant to our supply conditions will be rendered null and void. Furthermore, we will not be held liable for damage and consequential damage incurred through the use of a non-approved operating system.

2.3 Obligation of contractor

The contractor is obliged to ensure that all measures geared towards the prevention of accidents, industrial diseases, labor-related health risks are taken and measures towards making the workplace fit for people to work in are carried out.

Specifications for electrical systems (BGV A3)

Electrical engineering in Germany is subject to the accident prevention regulations of the trade association "Electrical Plant and Equipment as under BGV A3 (previously VBG 4)". In all other countries the applicable national regulations or acts or decrees are to be adhered to.

Basic rules

The contractor is bound to ensure that all electrical equipment and operating material is set up, modified and maintained by skilled electricians only or under the guidance and supervision of a skilled electrician in accordance with electrical engineering principles.

Furthermore, the contractor must ensure that all electrical equipment and operating material is operated in keeping with electrical engineering principles.

If a piece of electrical equipment or operating material is found to be defective, i.e. it does not or no longer complies with electrical engineering principles, the contractor must ensure that the fault is rectified immediately and, in the event that imminent danger exists, also ensure that the electrical equipment or the electrical operating material is not used.

Tests (taking Germany as an example):

- The contractor must ensure that all electrical equipment and operating material is tested to see if it is in proper working order:
 - Before starting up for the first time and, following any modification or repair work, before a restart by a skilled electrician or under the guidance and supervision of a skilled electrician.
 - At specific time intervals. Intervals are to be measured such that faults that must be expected to occur, are determined in good time.
- The test is to take the electrical engineering principles relating hereto into account.
- Upon request of the trade association a test manual is to be maintained into which specific entries are made.

3. Safety instructions

3.1 Risk of electric shocks

3.1.1 Low voltages, high voltages



Hazardous voltages occur in both the lighting system and the electrical system of a motor vehicle. If contact is made with live parts (e.g. with the ignition coil), there is a risk of electric shock from flashover voltages caused by damaged insulation (e.g. ignition cables which have been attacked by martens). These apply to the secondary and primary sides of the ignition system, the wiring harness with connectors, lighting system (Litronic) as well as connection to the vehicle.

Safety measures:

- Only connect to a properly grounded outlet.
- Only the enclosed or a tested power supply cable is to be used.
- All extension cables must be fitted with shock-proof contacts.
- Any cables with damaged insulation must be replaced.
- First connect the lighting system and turn it on before connecting it to the vehicle.
- Before switching on the ignition connect the (B-) cable to engine ground or the battery (B-) terminal.
- Always switch off the ignition before performing any work on the electrical system of the vehicle. Intervention includes, for instance, connection to the vehicle, replacement of ignition system components, removal of equipment (e. g. alternators), connection of equipment to a test bench.
- Wherever possible, tests and settings should always be carried out with the ignition switched off and the engine stationary.
- If tests or settings are carried out with the ignition switched on or the engine running, care must be taken not to touch any live parts. This applies to all connection cables and leads as well as to connections of equipment to test benches.
- Test connections must always be made using suitable connectors (e.g. Bosch testing cable set or vehicle-specific adapter cables).
- Make sure that all test connections are properly plugged in and secure.
- Before disconnecting the (B-) cable from the engine ground or battery (B-), switch off the ignition.
- Never open the enclosures.

3.1.2 High voltages in hybrid vehicles and electric vehicles as well as their high-voltage components



If high-voltage components or high-voltage wires are inexpertly handled, there is a risk of fatal injury from high voltages and the possible transmission of current through the body.

- Deenergization is only to be performed by a qualified electrician, a qualified electrician for specific tasks (hybrid) or a power systems engineer.
- Work on vehicles with high-voltage components is only ever to be performed in a safe, deenergized condition by persons with the minimum qualification "Trained to perform electrical work".
- Even after deactivating the high-voltage vehicle electrical system, the high-voltage battery may still be live.
- Operating condition cannot be established from any running noise, as the electric machine is silent when stationary.
- In gear positions "P" and "N" the engine or electric motor may start spontaneously depending on the charge of the high-voltage battery.

Safety measures:

- Never open or damage high-voltage batteries.
- On accident vehicles, never touch high-voltage components or exposed high-voltage wires before deactivating the high-voltage vehicle electrical system.
- Avoid contact with any high-voltage components and high-voltage wires (orange sheathing) when in operation.
- Secure against unauthorized renewed start-up (e.g. by means of a padlock).
- Always wait at least 10 seconds after deactivating the high-voltage system.
- Visually inspect the high-voltage components and high-voltage wires for damage. The power systems engineer responsible should always be immediately notified of any irregularities, doubts or defects found.
 - High-voltage components must never exhibit signs of external damage.
 - The insulation of the high-voltage wiring must be intact and undamaged.
 - Watch out for any abnormal deformation of the high-voltage wiring.

3.2 Danger of acid burning



When exhaust gas measurements are taken, the **sampling hoses** which are used release a highly caustic gas (hydrogen fluoride) that can cause acid burning in the respiratory system when heated to temperatures in excess of 250 °C (482 °F) or in the event of fire.



Rules of conduct:

- Consult a doctor immediately after inhaling!
- Always wear gloves made of neoprene or PVC when removing residues left after a fire.
- Neutralize any residues left after a fire with a calcium hydroxide solution. This produces non-toxic calcium fluoride, which can be washed away.



Acids and alkalis can cause severe burning on unprotected skin. Hydrogen fluoride in combination with moisture (water) forms hydrofluoric acid. The **condensate**, which accumulates in the sampling hose and in the condensate container likewise contains acid.

Rules of conduct:

- When replacing the O₂ measuring sensor, bear in mind that it contains alkali.
- When replacing the NO measuring sensor, bear in mind that it contains acid.
- Rinse any affected parts of the skin immediately in water, then consult a doctor!
- NO and O₂ measuring sensors are hazardous waste and must be disposed of separately. Your Bosch specialist equipper can dispose of sensors in the proper manner.



If liquid crystal escapes from a damaged **liquid crystal display**, it is imperative to avoid direct skin contact, inhalation and swallowing.

Rules of conduct:

- If you have inhaled or swallowed liquid crystal, consult a doctor immediately!
- Wash the skin and clothing thoroughly with soap and water if it has come into contact with liquid crystal.



If fluid (electrolyte) escapes from **batteries and rechargeable batteries**, avoid getting it on your skin or in your eyes.

Rules of conduct:

- If contact with skin or eyes happens nevertheless, wash the affected parts immediately with clean water and then consult a doctor.

3.3 Danger of injury, Danger of crushing



The vehicle has rotating and moving parts that can injure fingers and arms.



If the vehicle is not prevented from rolling away, there is a danger of people being crushed against a workbench, for example.



There is the risk with electrically operated fans in particular that the fan can start running unexpectedly even when the engine and ignition are off.

Safety measures:

- Take steps to prevent the vehicle from rolling away while it is being tested. Select the park position if the vehicle has an automatic transmission and apply the handbrake or lock the wheels with chocks (wedges).
- Operating staff must wear work clothes without loose bands and loops.
- Do not reach in any area with rotating or moving parts.
- When working on or in the vicinity of electrically driven fans, allow the engine to cool down first, then disconnect the plug of the fan motor.
- Route cables at a suitable distance from rotating parts.
- Secure the trolley against rolling away by setting the brakes.
- Do not place heavy objects on or lean on the sensor holder.
- Transport and operate the equipment only in accordance with the operating instructions.

3.4 Danger of burning



When working on a hot engine, there is a risk of injury from burning if such components as the exhaust gas manifold, the turbo-charger, the Lambda sensor, etc. are touched or if parts of the body come too close to them. These components may be heated to temperatures of several hundred degrees Celsius. Depending on the duration of the exhaust gas measurements, the sampling probe of the exhaust gas measuring instrument may also become extremely hot.

Safety measures::

- Always wear protective clothing, e.g. gloves.
- Allow the engine to cool down first. This also applies to auxiliary heating systems.
- Keep connecting cables well away from all hot parts.
- Do not leave the engine running any longer than necessary for the test or setting.

3.5 Danger of fire, Danger of explosion



There is a risk of fire and explosion from fuels and fuel vapors when work is performed on the fuel system or on the mixture control system.

Safety measures:

- Switch off the ignition.
- Allow the engine to cool down first.
- Avoid naked flames and potential sources of sparks.
- Do not smoke.
- Collect any leaked fuel.
- Always ensure effective ventilation and suction when working in closed areas.

3.6 Danger of asphyxiation



Car exhaust fumes contain carbon monoxide (CO) - a colorless, odorless gas. If inhaled, carbon monoxide causes an oxygen deficiency in the body. Extreme caution is therefore essential when working in a pit, as some of the components of the exhaust gas are heavier than air and settle at the bottom of the pit. Caution is also necessary when working on LPG-driven vehicles.

Safety measures:

- Always ensure effective ventilation and suction (especially when working in a pit).
- Always switch on and connect the suction plant in a closed area.

3.7 Noise



Noise levels in excess of 70 dB(A) can occur when measurements are carried out on a vehicle, especially at high engine speeds. Damage to hearing may result if human beings are exposed to noise at such levels over an extended period of time.

Safety measures:

- Noise protection facilities must be provided by the owner at all workplaces in the vicinity of the testing area.
- Suitable personal noise protection facilities must be used by the operator.

3.8 Danger of tripping



When conducting tests or making adjustments, the sensor and connection cables increase the risk of tripping.

Safety measures:

- Route the connecting cables such that any risk of tripping up is prevented.

3.9 FCC Warning

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: changes or modifications not expressly approved by the party responsible for compliance 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, users 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 the 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.


3.10 WLAN (Wireless Local Area Network)

3.10.1 Important information on WLAN

WLAN stands for Wireless Local Area Network. As with Bluetooth, WLAN provides a radio link on the free 2.4 GHz ISM band (ISM: Industrial, Scientific, Medical). This frequency range is subject to government regulations, but may be used without a license in most countries. Consequently a large number of applications and devices employ this frequency band for transmission. This can result in frequency interference.

Depending on ambient conditions, the WLAN link may therefore deteriorate, e.g. in the case of Bluetooth links, cordless telephones, radio-controlled thermometers, radio-controlled garage door openers, radio-controlled light switches or radio-controlled alarm systems.

 Bluetooth can lead to interference in the bandwidth of the WLAN network. The antennas of Bluetooth and WLAN devices should be at least 30 centimeters apart. Do not plug Bluetooth USB adapters and WLAN sticks into adjacent USB slots on PCs/laptops. Use the USB extension cable (special accessory) to maintain a distance between the Bluetooth USB adapter and the WLAN stick on the PC/laptop.

 Exercise extreme caution if wearing pacemakers or other vital electronic devices when using radio systems, as proper functioning of these items could be impaired.


Note the following to ensure the best possible connectivity:

- The WLAN radio signal always tries to find the most direct path. When setting up the PC/laptop and access point (see section 2.6.2), make sure there are as few obstacles as possible (e.g. steel doors and concrete walls), which could interfere with the radio signal from and to the KTS 340. Inside buildings, the range of the WLAN is also greatly influenced by the construction materials used. Conventional masonry, wooden walls and certain types of dry construction wall scarcely impede radio waves. Thin gypsum walls can however cause problems, as considerable amounts of moisture may accumulate in the gypsum and result in the absorption of radio signals. Concrete (and in particular reinforced concrete) largely blocks out radio waves. Cellar ceilings are often impenetrable. Generally speaking, walls with a lot of installed metal (e.g. pipes, wires) obstruct radio waves.
- Radio reception is also impeded by large metal objects such as radiators and window frames as well as active sources of interference such as DECT telephones and microwave ovens.
- Have your network infrastructure installed and tested in advance by a data systems expert.

- Keep the SSID and the codes for the radio link in a safe place. Make sure these data are readily to hand in case faults occur.
- We recommend a thorough inspection of the premises on commissioning: Establish where in the building the VCI works properly and where the operating limits are.
- If the VCI is to be used in a vehicle, radio communication can be severely limited.
- The radio link is affected by weather conditions. The reception signal may therefore vary.
- Please contact your network administrator with any queries.

3.10.2 Information on access points

A wireless access point is an electronic device, which acts as an interface between a radio network and a cable-connected computer network. It provides a wireless connection between the KTS 340, the PC/laptop with ESI[tronic] Startcenter and a printer, for example.

 We recommend using WLAN standard IEEE 802.11b (data transmission rate max. 11 Mbps) for the access point. The "extended range" function is not supported.

Please note the following:

- The access point should be located as centrally and high up as possible, ideally under the ceiling.
- The access point antenna should face downwards towards the floor.
- In the event of a poor connection it may be useful to change the set channel on the access point. If possible, avoid using neighboring channels to channels that are already in use.
- We recommend that encryption of radio communications is configured at the access point.

3.11 Safety Warning

- Inspection shall be carried out in good ventilation. Connect the exhaust pipe to outside if there is no enough ventilation;
- Smoking and open fire are prohibited in the inspection;
- The battery liquid contains sulphuric acid that could erode the skin. Avoid battery liquid from touching the skin directly in operation, especially note that the liquid shall not be splashed into eye;
- The engine temperature is high when running. Avoid touching the high-temperature parts, such as radiator and exhaust pipe;
- Pull manual brake before starting the engine. Block the front wheels and place shift lever at P or neutral gear to avoid accident when starting the engine;
- If external batter is used as power supply, pay attention to the electrode; use red alligator clip to connect anode and black alligator clip to connect cathode;
- Keep all the power cables, pens and tools away from belt or other moving parts if using instrument in engine compartment;
- Do not wear watch, ring and loose clothes in maintenance for engine compartment;
- Wear approved safety glasses in all inspection processes;
- Only the enclosed power adapter or power supply cable can be used for supply connection;
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

3.12 Using notes

- The instrument is precise electronic instrument, do not drop it;
- The instrument may respond slowly in first inspection. Please be patient. Do not operate the instrument frequently;
- If the program is interrupted or the display is disordered after flashing. Shut off the power and switch it on again for test;
- Ensure that the instrument and the diagnosis retainer are connected securely, otherwise the interrupted signal will affect the test. If they can't be connected normally, pull out the connector and plug it again. Do not shake the connector in using;
- Use screw to fasten the connection wire and connectors to avoid disconnecting and damaging the interface. Hold the front end of the connector when pulling it. Do not pull the rear connection wire;
- Handle the instrument gently and put it in safe place to avoid impact. Shut off the power when not using;
- After using put the accessories into the kit;
- Online upgrade will be affected by local wire speed. Please wait patiently if the loading is slow;
- Certain inspection and maintenance basis are required to operate the instrument, as well as electrical control system of the inspected automobile.
- Ensure that instruments and PC connection, to prevent signal interruption affect the test. If it is found Can not be properly connected, please unplug the communication cable to plug it back again, not in the course of Violently shaking the lines of communication.

3.13 Notes for operation of automobile ECU

Pay attention to the following when diagnosing the automobile equipped with computer control system:

- Do not put the magnetic objects, such as radio loudspeaker near the computer, because the magnetism of the loudspeaker will damage the circuits and parts in ECU;
- Never switch off the internal electrical devices when the ignition switch is on. The self-induction of the coil when power-off will generate high instantaneous voltage that will damage the sensor and ECU;
- Special attention shall be paid to avoid damaging ECU and sensor when carrying out maintenance near the computer or sensor;
- Connect the ECU harness connector securely, otherwise it will damage the electronic units, such as integral circuit in ECU;
- Wear earthing metal strap with one end on the body and another end twisting finess when repairing or approaching ECU-control digital instrument;
- Shut down ECU system power before welding on the automobile;
- Unless specified, do not test the electrical devices related to ECU with test lamp to avoid damaging ECU or sensor;
- Unless specified in test process, use digital instrument with high impedance to test ECU and sensor, rather than pointer ohm gauge.

4. PC Software environment

As VCI operates based on the computer, the VCI software and relevant hardware driver software shall be installed onto the computer first of all.

4.1 Computer parameters


Configuration	Parameter (Recommended)	Parameter (Minimum)
Main frequency	CPU larger than 2G	CPU larger than 1.5G
Memory	Larger than 1G	Larger than 512M
Free space of hard disc	Larger than 2G	Larger than 1G
USB interface	USB2.0 full speed or high speed	USB2.0 full speed or high speed
WLAN	Wireless network card	Wireless network card
LAN	10M/100M ethernet card	10M/100M ethernet card
Display resolution	Higher than 1280*800, 32-bit above color depth	Higher than 1024*768, 16-bit above color depth
OS	WINDOWS XP /WINDOWS 7	WINDOWS XP /WINDOWS 7


4.2 Installation guidance


4.2.1 VCI Software installation


Installation Steps:


1. Get the installation file KT700 SETUP.EXE from the CD disc furnished by Bosch Automotive Diagnostics Equipment (Shenzhen) Limited or its official website;
2. Double click the "KT700 SETUP.EXE";
3. Click the **"Next"** button to get the interface displaying the user license protocol, which shall be carefully read; if you accept all protocols, please click the **"Accept (I)"** button;
4. Select the target folder for software installation (disc C is the default file location); you can click the **"Browse"** button to select the target folder, and the program will automatically detect the corresponding used and free spaces of target disc;
5. Click the **"Installation"** button, and the software will be under installation; please wait for the installation completion;
6. After installation, if you select the "Run KT700" and click the **"Finish"** button, the installation completion will be confirmed and the VCI software will be run; if you only click the **"Finish"** button, the installation completion will be confirmed but the VCI software will not be run;
7. After installation, the shortcut will be displayed on the computer desktop; just click the shortcut to run the VCI software.

 You are administrator when you install software;

 USB driver has been installed when install VCI software;

 After installed the driver of wireless, you should ensure the protocol(WLAN transport or 802.11x) has been installed;

 You have access to write installed folders;

 Please install the PDF reader to view more help files conveniently.






4.3 Software uninstall

After installing the software, KT700 folder will be displayed under the program submenu of the **"Start"** menu.

Directly click "Uninstall" to uninstall the software. Please operate following the interface prompts till the uninstall completion.

5. Introduction to VCI host

5.1 Host identifications

Identification	Description
	The power indicator lamp, lighting in green to indicate the normal power supply;
	The computer communication indicator lamp, lighting in green to indicate the wired connection or in yellow to indicate the wireless connection;
	The malfunction indicator lamp, lighting in red to indicate the VCI malfunction;
	The ECU communication indicator lamp, lighting in green to indicate the CAN communication mode or in yellow to indicate other communication modes;
	The travel recorder button identification, used for your convenient and rapid operation.

5.2 Diagnosis port

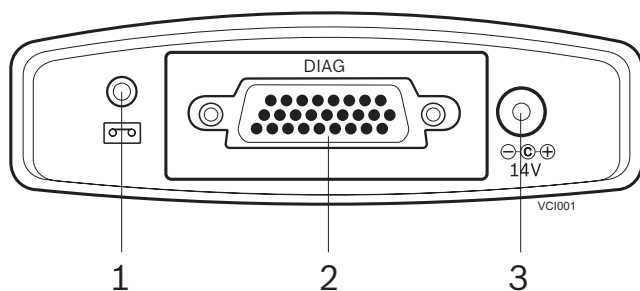


Fig. 1: Diagnosis Port

1. Data record interface
2. Diagnosis interface
3. Power interface

5.3 Connection Port

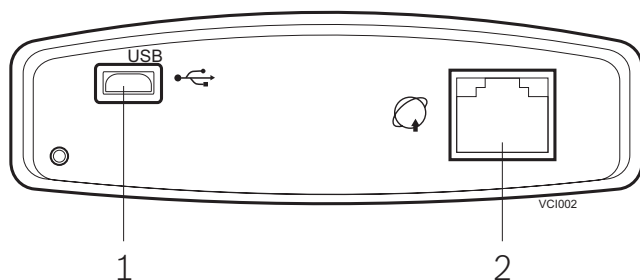


Fig. 2: Connection port

1. USB communication interface
2. Network communication interface

6. Equipment connection

According to different functions, the connection modes are: including diagnostic connection, selfcheck connection and firmware upgrade connection.

6.1 Diagnostic connection

Before using the equipment, please ensure the normal connection among the VCI, computer, and on-board ECU. The main connection modes are: including the USB port connection, network port connection and wireless connection. If all connected, the USB port connection is preferential.

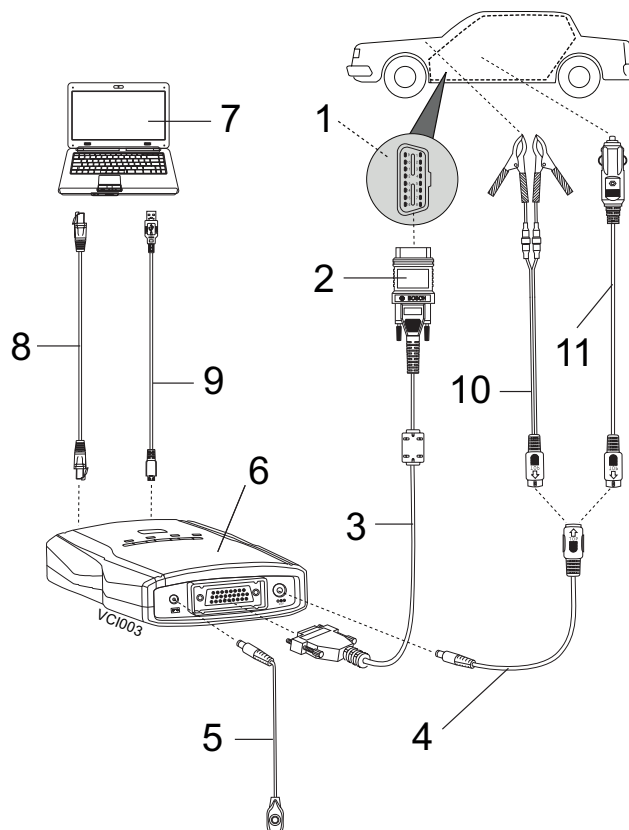


Fig. 3: Diagnostic connection

1. Interface on car
2. Connector
3. Diagnostic extension cable
4. Power extension lead
5. Record cable
6. VCI host
7. Computer
8. LAN cable
9. USB cable
10. Alligator clip
11. Cigarette igniter connector

6.2 Selfcheck connection

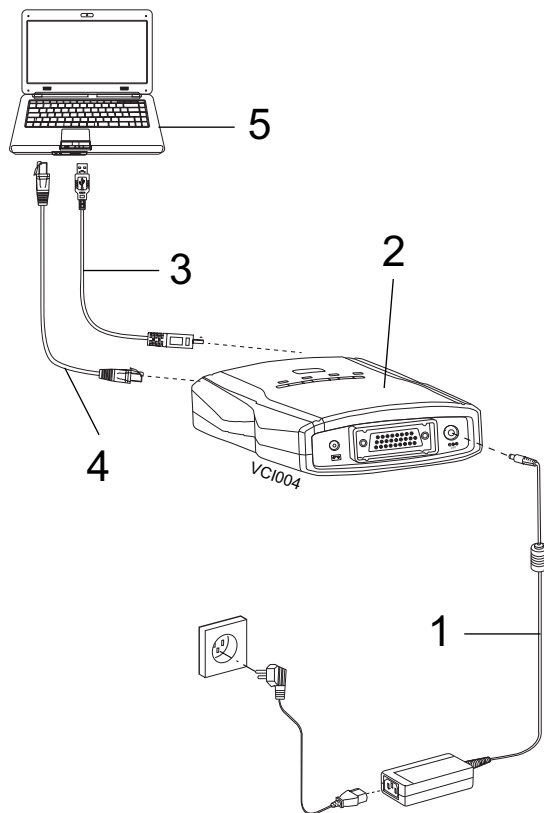


Fig. 4: Selfcheck connection

1. Power adapter
2. VCI host
3. USB cable
4. LAN cable
5. Computer

6.3 Firmware upgrade connection

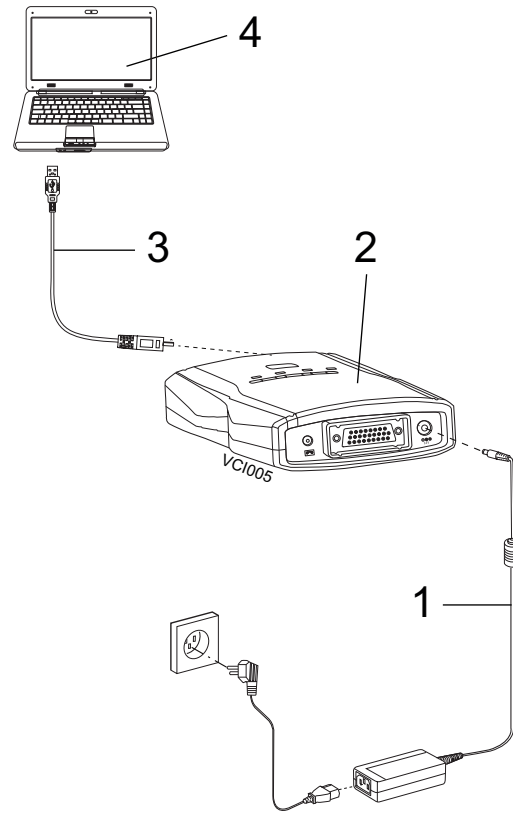


Fig. 5: Firmware upgrade connection

1. Power adapter
2. VCI host
3. USB cable
4. Computer

7. Initial Start-up

Upon the initial start-up, the normal use of VCI can be achieved after setting the communication port.

If your VCI is connected with the computer through the USB communication line, please make settings following descriptions in section <8.3.1.1>;

If your VCI is connected with the computer through the network cable, please make settings following descriptions in section <8.3.1.2>;

If your VCI is connected with the computer through the wireless mode, please make settings following descriptions in section <8.3.1.3>.

8. VCI system settings

8.1 System Settings

The system settings include the language settings, system information, user information, proxy settings, product activation.

8.1.1 Language Settings

The VCI provides the multi-language system for user to switch languages.

Operation Steps:

1. Proceed to the language settings module and select the target language from the "Language Type Selection" box;
2. Click the "OK" button and the interface will prompt "Effective after System Restart".
3. The language settings will be effective after the system restart.

8.1.2 System information

The system information includes the product serial number, instrument type, machine type, software version, and activation status.

8.1.3 User information

The user information includes the contact information, telephone number, maintenance station name, maintenance station code, maintenance station address, and remarks.

If such information is consistent with that upon printing, you can directly enter them and click the "OK" button for saving. It is unnecessary to enter such information upon printing.

Operation Steps:

1. Enter your information in the "*" input box marked;
2. Click "OK" button and save your informations; you can click "Cancel" button and don't save information.

8.1.4 Proxy Settings

This function is intended to judge whether the proxy server is required for the computer networking; if not required, select "Don't Use the Proxy Server".

Setting method for using the proxy server:


1. Select "Use the Proxy Server";
2. Enter the address and port information;
3. You can set the user name and password for settings protection;
4. Click the "OK" button.


8.1.5 Product Activation

If the product is not activated, you can only view the test demonstration rather than carrying out the diagnosis with VCI.

Operation Steps:

1. Check whether your VCI host is normally connected with the computer; If ok, the VCI software will automatically detect the product serial number;
2. Please read the display information, then click "Activation" button, the software will automatically detect the network; If not ok, display "Network connection overtime";
3. If network is worked to proceed to the individual information filling interface; please enter your information following the interface prompts; If information incorrect, you must to re-enter;
4. If all information is accurate, click the "Next" button, the interface will display "Successful product activation, software must to restart";
5. Please restart software, you can using it.


 User name is combined by letters and numbers, the length is 3-16 characters; the password length is 6-16 characters;


 The user name is used for upgrade log-in, which can't be repeated, and real-name registration is recommended; the E-mail is used for the password retrieve, and please fill your frequently-used E-mail; upon submitting your individual information, please remember your user name and password.

8.2 Software upgrade

Software upgrade includes software upgrade and VCI firmware upgrade.

This function is available only after the product activation. If not, display "Not activation".

 Before upgrade, please ensure the normal connection between the VCI and computer;


 Ensure the integrity of the upgrade process by not forcing to terminate the program.

8.2.1 Software Upgrade

Software upgrade includes application software upgrade and diagnostic database upgrade.

Operation Steps:

1. The software will automatically detect the version of application software and diagnostic database;
2. If you didn't change the user name and password, click the "New Version Detection" button to detect the latest version; If you changed, you must to enter user name and password at first;
3. If there have new version, the interface will display "Download" button;
4. Click "Download" button, waiting for finished; You can monitor download progress;
5. After successfully download, click "Install" button to install upgrade package;
6. After restart software, you can using the latest software.


 When you log-in, user name and password is entered 3 times, if more, you must to wait 15 minutes.


8.2.2 VCI Firmware Upgrade

If VCI firmware have new version, VCI will automatically upgrade when you start VCI software.

Operation Steps for manual Upgrade:

1. Click "Upgrade" button, then operate according to interface display;
2. After successfully upgrade, display "Successfully upgrade".

 Upon the VCI firmware upgrade, the VCI can be connected with the computer only through the USB port;

 If you didn't operate according to display information.

8.3 VCI

The VCI include VCI communication settings, VCI information, and VCI selfcheck.

8.3.1 VCI Communication Settings

The VCI communication port settings include the USB settings, LAN settings, and WLAN settings.

8.3.1.1 USB Settings

When the VCI is normally connected with the computer, the system will automatically match with the available serial port list.

Operation Steps:

1. Select a serial port name, and click the “Automatic Connection Test” button to test the available serial port;
2. After the test is completed, the system will automatically prompt whether to save the settings;
3. Click the “Yes” button to save the successful serial port and the result will be displayed in the test result display box.

8.3.1.2 LAN Settings

The LAN settings include the P2P mode and the route mode.

Operation Steps for P2P Mode:

1. Select the P2P mode;
2. Enter the relevant information;
3. Click the “Automatic Connection Test” button and wait for the test completion;
4. After the test, the test result will be displayed in the result display box.

Operation Steps for Route Mode:

1. Select the route mode;
2. Enter the relevant information;
3. Click the “Automatic Connection Test” button and wait for the test completion;
4. After the test, the test result will be displayed in the result display box.

8.3.1.3 WLAN Settings

The wireless network settings include the P2P mode and the route mode.

Please ensure WLAN normally connected of computer.

Operation Steps for P2P mode:

1. Select the P2P mode;
2. Click the “Scan Network” button to search the available wireless network;
3. Select the available wireless network, click the “OK” button, and the interface will display the information concerning all networks connected with the VCI;
4. Click the “Automatic Connection Test” button and wait for the test completion;
5. After the test, the test result will be displayed in the result display box.

Operation Steps for Route Mode:

1. Select the route mode;
2. Click the “Scan Network” button to search the available wireless network;
3. Select the available wireless network, click the “OK” button, and the interface will display the information concerning all networks connected with the VCI;
4. Click the “Automatic Connection Test” button and wait for the test completion;
5. After the test, the test result will be displayed in the result display box.

8.3.2 VCI Information


The VCI information include the serial number and firmware (VCI) software version; after the VCI is normally connected with the computer, the system will start the automatic detection.

8.3.3 VCI Selfcheck

This function is used to detect whether the VCI is normal.

Operation Steps:

1. Ensure normally connection between the VCI and the computer;
2. Click the “Start Selfcheck” button and wait for the selfcheck completion and detection result display.

 When VCI selfcheck, ensure disconnection between VCI and diagnostic cable.


8.4 Vehicle Logo Replacement

There are two vehicle logo replacement methods: single replacement and integral replacement, with the single replacement taken as the default mode. The picture size is 136*115 (mm) and the picture format is bmp.

8.4.1 Single Replacement

Only one vehicle logo can be replaced one time.

Operation Steps:

1. Select "Single Replacement";
2. Select the vehicle logo to be replaced in the left dropdown box;
3. Select the target vehicle logo on the right;
4. Click the  button in the middle to synchronize logos at both sides; at the same time, the replacement button changes to the available status;
5. Click the "Replace" button.

8.4.2 Integral Replacement

Several vehicle logos can be replaced one time.

Operation Steps:

1. Select the "Integral Replacement";
2. Click the "Browse" button to select the target picture folder, and its path shall correspond with the path in the CF card;
3. Click the "Replace" button.

9. Vehicle Diagnostic

Main Interface of Vehicle Diagnosis:

No.	Description
①	The main function area, including vehicle diagnosis, vehicle analyzer and service help;
②	The system function area, including screenshot, playback, setting, help and feedback;
③	The display area for vehicle series, including All, Chinese, American, European, Japanese, Korean, OBD-II and history record;
④	The display area for testable vehicle models, including all testable vehicle models of each vehicle series;
⑤	The display area for additional functions, including brand search;
⑥	The status column, including diagnosis path, VCI connection status and VMI connection status;
⑦	The scrolling bar, which can be dragged for viewing contents of multiple screens when the displayable contents are in more than one screen.

9.1 Test Conditions

- The vehicle power switch turned on;
- The vehicle battery voltage at 12V or 24V;
- There is communication between the host and PC .

9.2 Power supply of host

There are 4 power supply modes for VCI host, you can select according to your requirement:

- AC power supply: take out VCI standard configuration power adapter in the instrument; Connect one end to the power interface of the instrument and another end to 100~240V AC socket;
- Automobile battery cell power supply: take out KT600 standard configuration power extension lead and alligator clip; connect one end to the power interface of the instrument and another end to battery end;
- Cigarette lighter power supply: take out VCI standard configuration power extension lead and cigarette lighter; connect one end to power interface and another end to cigarette lighter;
- Diagnosis retainer power supply.

9.3 Selecting a Method to Access the Diagnosis System

There are three methods available for accessing the diagnosis system, i.e. Manual Selection, Brand Search and History Record. You may select the most suitable operation method out of them depending on your available information.

9.3.1 Manual Selection


You may manually select the corresponding vehicle model, system or system function to proceed to the diagnosis operation.

For example, you may: click “Chinese Vehicle Series” --- “Chery” --- “Fulwin” --- “Engine” --- “Motorola EFI System”, and then carry out the diagnosis test on your desired system function.

9.3.2 Brand Search


This function searches the corresponding vehicle brands according to the information input, but it only supports the search by letters.

Operation Steps:

1. Enter CHANGAN in the search box.
2. Just click the  button on the right to find out the CHANGAN brand and carry out the diagnosis test.

9.3.3 History Record

You may access your desired vehicle model or system through the “History Record”, provided that you had diagnosed this vehicle model or system. Only 30 latest tested vehicle models can be saved in the “History Record”.

 For your convenient choice, we recommend that you use to manual selection or brand search into diagnostic system.

9.4 Diagnostic

9.4.1 Introduction to Main Interface of Diagnosis System

After you access the diagnosis system, the VCI software interface will display all diagnosis functions that can be achieved by this system.

No.	Description
①	The display area for diagnosis functions: it shows all diagnosis functions of this system;
②	The display area for help information: it shows the help information of a diagnosis function and supports both literal and graphic information.



: Click this button to go back to the main interface. You can find this button on display of select menu, read DTC and read data stream.



: Diagnostic help button, if there have help information, the button will display. Otherwise not display.

9.4.2 Reading Version Information

This function is used to read the computer information of the system being tested. The information read varies with different vehicle models or systems. Generally, when you replace the vehicle control unit, it is necessary to read and record the information of original control unit and take such information as a reference for purchasing a new control unit. Coding a new control unit requires the information of original control unit.

Operation Steps:


1. After proceeding to the diagnosis function, click “Read Version Information” to get a pop-up dialogue box, which shows the relevant information of vehicle computer such as software version, hardware version and part numbers.
2. Click the “OK” button to quit this function.


9.4.3 Reading DTC

This function is used to read the fault code in the ECU memory of the system being tested, helping the service personnel quickly find out the cause of vehicle fault.





Operation Steps:

1. After proceeding to the diagnosis function, click "Read Fault Code".
2. Open the fault code interface to view the fault code items, including content, status (current or random), freeze frame and help.
3. Click the "Exit" button to quit this function.

 If the system being tested is normal, the interface will display "System OK" and the button "Clear Fault Code" will not appear on the interface.

 If the fault code has some freeze frame or help information, its icon is blue. Or else, its icon is gray, which means unavailable.

 Button Description:


Button	Description
	Reading the freeze frame information; when it is displayed in grey, this means there is no freeze frame information;
	The help information for fault code; when it is displayed in gray, this means there is no help information;
	Clearing the fault code, see 9.3.4; if the system being tested is normal, this button will not appear on the current interface;
	Refreshing the current fault code; after eliminating some faults, you may click this button to refresh the existing fault codes.

9.4.3.1 Help Information for DTC

It is used to display the help information for the opposite fault code.

Operation Steps:

- Select a fault code, and click the "Help Information for Fault Code" button. Then the interface will show the help information for this fault code, helping the service personnel quickly find out and solve the problem.


 This interface is an independent window, regardless of the diagnosis software.

9.4.3.2 Reading Freeze Frame

In the engine management system, the freeze frame function is supplementary to the fault code function. It is basically used to freeze the relevant working conditions of engine when engine fault arises, helping the service personnel know the working conditions of the whole vehicle upon the fault occurrence.

Operation Steps:

1. Select a fault code, and click "Read Freeze Frame Information" to proceed to the corresponding interface. Each freeze frame can display a maximum of 5 groups of data;
2. Click the "Exit" button to quit this function.


 You may also proceed to this function through the "Read Freeze Frame" button at the diagnosis function area, but then only the freeze frames for common data streams can be read and generally only one group of data will be displayed.


9.4.4 Clearing DTC

It is used to clear the DTC saved in the ECU memory of the system being tested.

Operation Steps:

1. After proceeding to the diagnosis function, click "Clear Fault Code" to get the dialogue box, which displays the clearing conditions.
2. After the completion of fault code clearing, the interface will display "Clearing Command Executed";
3. Click the "OK" button to quit this function.

 For the common vehicle models, you shall strictly comply with the following regular work procedures: firstly, read, record (or print) and clear the fault codes; then, test the vehicle, and re-read the fault codes for verification; next, service the vehicle and clear the fault codes; finally, re-test the vehicle and confirm that the fault codes are no longer present;


 It is impossible to immediately clear any current hard fault code. Although such technical fault codes involving oxygen sensor, knock sensor, mixture correction and cylinder misfire can be immediately cleared, they would reappear within a certain period. Only after the fault has been completely eliminated will a fault code never reappear.

9.4.5 Reading Data Stream












By means of values or conditions of data streams, this function can identify whether the vehicle components are faulty.

Operation Steps:

1. After proceeding to the diagnosis function, click "Read Data Stream" to get the "Read Data Stream" dialogue box;
2. Click the "Select All" check box to select all data streams; also, you may only click the check boxes in front of data streams to select the desired data streams;
3. Click "Read Data Stream" to view names, results and units of data streams;
4. Click the "Exit" button to quit this function.

 When you are reading the data streams, the "Pause" button can be clicked to provide convenience for you to view the results of data streams. Once clicked, the "Pause" button will switch to the "Resume" button.

Button Description:


But-ton	Description
	The "Top" button; to set a data stream to the top for display, click this button in front of this data stream; to cancel the setting, click this button again;
	The "Exit" button, used to quit the function "Read Data Stream";
	The "Print" button, see <9.5.1>;
	The "Compare Data Streams" button, see <9.4.5.2>;
	The "Pause/Resume" button; when clicked during the course of reading data streams, it pauses the reading and switches to the "Resume" button; to resume the reading, click the "Resume" button;
	The display mode of data stream, see <9.4.3.5>;
	The "Travel Recorder" function, see <9.4.6>;
	The "Capture Data Streams" function, see <9.4.5.1>;
	The "Save Data Streams" function, see <9.4.5.3>;
	Viewing the previous page of data stream;
	Viewing the next page of data stream;

9.4.5.1 Capturing Data

It records the data stream being tested.

Operation Steps:

1. Click the "Capture Data" button and start to record the current value of data stream; you may turn the pages to record all data streams. If you do not turn the pages, only the data stream displayed in the current screen will be recorded;
2. Click the "Save" button to save the data stream read.


 Before you activate the "Capture Data" function, the "Save" button is gray, which means unavailable.


9.4.5.2 Comparing Data Streams


By means of comparing the current values of data streams with the saved history values of data streams, this function can identify whether the relevant components present a good working condition.

Operation Steps:

1. Click the "Compare" button to get the dialogue box which displays all openable data stream files.
2. Select a data stream file and click the "Open" button to get the interface which displays the current read values and recorded history values.

 The data stream save path is assigned by the system and cannot be modified; the current values are displayed in black, while the recorded history values are in green;

 In the opened dialogue box, you may delete the unnecessary data files which are previously saved;

 The "Save" button will switch to the "Clear" button.

9.4.5.3 Saving Data

This function is used to save the values of all currently captured data streams.

Operation Steps:

1. Click the "Save" button to get the "Save" dialogue box, in which the save path is assigned by the system and cannot be modified;
2. Enter the file name and click "Save"; then, the interface will display "Data Saved".
3. Click "OK" to complete the saving of data streams; then, the "Save" button will go gray, which means unavailable.

9.4.5.4 Clearing Data

This function is used to clear the comparison between data streams.

Operation Steps:


- Click the “Clear” button to clear the history values of data comparison; meanwhile, the “Clear” button switches to the “Compare” button.

9.4.5.5 Display Modes of Data Streams

The value of a data stream can be displayed in three modes, i.e. numeral, waveform and control. The numeral display mode is taken as a default.


Operation Steps:

1. After reading the data streams, the values of read data streams will be displayed in numerals;
2. Click the “Numeral” button and select “Waveform” from the pop-up options; then the values of data streams will be displayed in waveforms, and the “Numeral” button will switch to the “Waveform” button;
3. Click the “Waveform” button and select “Control” from the pop-up options; then the values of data streams will be displayed in controls and the “Waveform” button will switch to the “Control” button;
4. Click the “Control” button and select “Numeral” from the pop-up options; then the values of data streams will be displayed in numerals and the “Control” button will switch to the “Numeral” button.

 The button status switches in compliance with the mode in which the current data streams are displayed.

9.4.6 Travel Recorder


The travel recorder is mainly used to record some data of ECU for a long time. Each data is continuous recording up to 2 hours. During the course of recording, it can save the data at any time and save them in the “.REC” format under the specified folders.


You may click the “Travel Recorder”  button at the “Read Data Stream” interface to proceed to the “Travel Recorder” interface.


Parameter Description:

- **Period:** according to the period you select, the system will automatically match it with the selectable data streams; the system provides 3 optional periods, i.e. 250 ms, 500 ms and 1000 ms; the default period is 250 ms;
- **Maximum Records:** according to the period, the system will automatically match it with maximum records.
- **Record Time:** it can be manually set to 10 min as a minimum and 120 min as a maximum; the default record time is 120 min;
- **Trigger Time:** it can be manually set to 20 s as a minimum and 120 s as a maximum; the default trigger time is 20 s.


Operation Steps:


1. Select the period you desire;
2. Select the record time you desire;
3. Select the trigger time you desire;
4. Select the desired data stream to be recorded; if you don't select a data stream, the system will pop up a warning dialogue box after you press the “Record” button; if the selected data streams outnumber the displayed maximum records, the system will also pop up a warning dialogue box;
5. Click the “” button to start recording;
6. Click the “Record” button to stop the recording; enter the file name in the pop-up dialogue box, and click “Save” to save the currently recorded data.


 **Trigger Records:** when you click this button, the VCI will automatically save the data streams within the trigger time to the fixed default paths of system; this function supports the data stream playback;

 How to start recording (on the premise that you have proceeded to the software interface of travel recording function):

- Click the “Record” button on the software interface of travel recording function;
- Press the “Record” button on the VCI host;
- Correctly connect one end of recorder cable to the VCI host, and press the button on the other end of recorder cable;

 How to use the recorder cable: hold on (i.e. the buzzer continuously sounds for 3 times) to start/stop the travel recording function; press it short (i.e. the buzzer sounds once) to trigger the record;

 The save paths for the recorded data are system defaults and cannot be modified.

 You may monitor the data record time by the time progress bar on the screen.




9.4.7 Playing Back Data Stream


Playing back the saved data streams is helpful for timely finding out faults.


Button Description:


- **Exit:** quit the travel record playback;
- **Load:** load the data stream record to be played back;
- **Export:** after loading the data stream playback, the system can export the data stream playback and save it in the “CSV” format to the assigned path;

Operation Steps:

1. After saving the data stream record, the “Load” button automatically becomes available. Now, click “Load”, and select the data file you want to play back;
2. Click the  (“Play”) button. Now, the “Play” button switches to the  (“Pause”) button;
3. You may also click the  (“Stop”) button to stop the data stream playback and carefully observe whether the data stream is normal;
4. If you want to export the data stream playback, you just need to select a folder directory and click the button “Save”. The file will be saved in the “.CSV” format to the path as assigned.
5. Click “Exit” to quit the “Play Back Data Streams” function.

 You may also proceed to the “Play Back Data

Streams” function through the  (“Playback”) button at the main interface of software;

 The software interface provides a time progress bar, through which you can view the duration of current playback.

9.4.8 Action Test

This function is used to test whether the executive elements and components of electronic control system can work normally.

Operation Steps:

1. After proceeding to the diagnosis function, select “Action Test”. Now, the interface will display all available action tests.
2. Click a test item to proceed to the action test interface. There are three modes for the action test, i.e. Enable, Disable and Exit;
3. Click “Enable” to activate the action test;
4. Click “Disable” to deactivate the action test;
5. Click “Exit” to quit the action test.

9.4.9 Advanced Functions

The advanced functions (such as Write IQA Codes and Reset Maintenance Lamps) are functions other than the basic ones and can modify the internal information of ECU.

Operation Steps:

- Proceed to an advanced function, and operate as per the interface prompts till the completion.

9.5 Other Functions Related to Diagnostic

9.5.1 Print

The “Print” function provides three options, i.e. “Print Current Screen”, “Print Detection Record” and “Print Diagnosis Report”.

Print Modes:


- Print: if the computer has been connected with a printer, direct print is available; or else, you can only preview the information to be printed.
- Print to File: see 9.5.1.4.

9.5.1.1 Print Current Screen

It is used to print the content displayed in the current screen.

Operation Steps:

1. Select “Print” --- “Print Current Screen”;
2. Just select a print mode (either “Print” or “Print to File”) to start printing.

 When you select “Print Current Screen”, it is unnecessary to enter any information, and all information displayed in the current screen will be directly printed.

9.5.1.2 Print Detection Record

It is used to print the current detection information.

Operation Steps:

1. Select “Print” --- “Print Detection Record”; only after detection functions (such as “Read Fault Codes”, “Read Data Streams” and “Read Version Information”) have been enabled can this button be available; or else, this button will be gray, which means unavailable;
2. Fill in the corresponding blanks with the information relevant to detection record; any blank marked with “*” must be filled in, otherwise it is impossible to print the detection record;
3. Just select a print mode (either “Print” or “Print to File”) to start printing.

9.5.1.3 Print Diagnostic Report

It is used to print the diagnostic report.

Operation Steps:

1. Select “Print” --- “Print Diagnosis”; only after any of the functions (i.e. “Fault Codes”, “Data Streams” and “Version Information”) has been enabled can this button be available; or else, this button will be gray, which means unavailable;
2. Select the diagnosis report(s) to be printed; it is available to simultaneously print the diagnosis reports on Version Information, Fault Codes and Data Streams, provided that such three functions have been enabled; if merely the “Read Version Information” function has been enabled, then the Fault Codes and the Data Streams will be gray and cannot be printed;
3. Fill in the corresponding blanks with the information relevant to diagnosis report; any blank marked with “*” must be filled in, otherwise it is impossible to print the diagnosis report;
4. Just select a print mode (either “Print” or “Print to File”) to start printing.

9.5.1.4 Print to File

5. It is used to print the desired content into an image file in the “JPG” format.

Operation Steps:

1. Select “Print to File” to get a pop-up dialogue box for saving;
2. Select the save path for the file;
3. Enter the file name;
4. Finally, click the “Save” button.

9.5.2 Image Browse








It provides convenience for you to browse images.

Operation Steps:

- Double click the image to proceed to the “Image Browse” function.

 Toolbar Description:




Identification	Description
	The “Zoom In” button, used to zoom in the browsed image;
	The “Zoom out” button, used to zoom out the browsed image;
	The “Restore” button, used to restore the browsed image to its original size;
	The “Clockwise Rotate” button, used to rotate the browsed image clockwise;
	The “Counterclockwise rotate” button, used to rotate the browsed image counterclockwise;
	The “Print” button, used to directly print the image into a file, provided that the computer has connected with a printer;
	The “Close” button, used to close the image browse tool.

9.5.3 Screenshot

It is used to capture the information of current window, and the system will save the information as a file in the “JPG” format under the default path (e.g. KT700/SCREENSHOTS/); such a file cannot be modified, and its name is automatically assigned by the system.



Operation Steps:


1. Click the  (“Screenshot”) button from the left top of screen; the system automatically saves the file, and the interface displays the save path and the name of this file.
2. Click the “OK” button to quit the function “Screenshot”.

9.5.4 Help

It is the on-line help function for the VCI, telling you how to operate the VCI and how to implement the diagnosis. It works as an independent interface.

Operation Steps:


1. Click the  (“Help”) button on the main interface of system to proceed to the “Help” interface;
2. You may view the desired content through the navigation bar on the right;
3. You may also use the  (“Search”) button to enter the keyword and view the desired content.

 For easy and fast search, you may place the items frequently viewed into the “Favorite” folder; you may print the content displayed in the current page.

9.5.5 Feedback

The VCI provides the on-line feedback function by which you can feed back any problem found during the diagnosis, provided that your computer has connected with the Internet.

Operation Steps:

1. Click the  (“Feedback”) button on the main interface of system to get a pop-up feedback information interface;
2. If your VCI has been registered, the system will automatically check the customer information, vehicle information and KT information, and you just need to provide the fault information;
3. Just click the “OK” button to submit your feedback.

9.6 Service Help

This function, specially provided by Bosch Automotive Diagnostics Equipment (Shenzhen) Limited, is the help information on vehicle service and can be used as a reference for the service personnel.

10. Service and Maintenance

10.1 Cleaning

It is not recommended to clean the VCI host with the corrosive detergent or any coarse cloth; only the soft cloth and neutral detergent can be used.

10.2 Maintenance

- Place the VCI in the flat and dry place with moderate temperature and less dust when the VCI is not used;
- Don't place the VCI in the place with direct sunlight or close to the heating device;
- Don't place the VCI near the stove or in the place where will be easily subjected to smoke erosion, water entry, and oil splashing;
- Don't disassemble the host without permission;
- If the vehicle test is not performed for a long time, please periodically run the VCI host to avoid being affected with damp.

11. Technical Parameters

11.1 Host Parameters

Item	Index
Size	175*115*51(mm)
Host Weight	Approximately 330g
External power supply	100V~240V/50~60HZ
Power	<5W
Working temperature	-10~45°C
Storage temperature	-15~50°C
Relative humidity	<95%
Input voltage	DC 7~32V
USB	Micro USB-B
LAN	10M/100M ethernet card
KEY	Recorder key
LED	4 LED indicator lamps indicating the working status
CPU	FREESALE 16BIT microprocessor
WLAN	802.11b
Diagnosis switch array	FULL for SAE J1962
Protection grade	IP31
External battery	Optional

12. Warranty

- Host warranty period within 12 months from the date of activation(within 24 months from the date of manufacture); Accessories warranty period within 6 months from the date of their host activation(within 12 months of the date of manufacture);
- Company supply free maintenance if product damaged under normal operation within guarantee time
The following cases are not included, we will charge material cost or other relative fees:
 - Damage due to improper operation or accident;
 - Remove and repair without technical people's advice;
 - Components damaged or wear out naturally;
 - Encounter force majeure such as disaster.
- Instrument itself is the limit of our maintenance service. For damage except that, we will not take responsibility.



EU Declaration of Conformity

according to the Radio Equipment and
Telecommunications Terminal Equipment Directive
1999/5/EC

For the following equipment

Product : Vehicle Diagnosis
Type Designation/Trademark: KT700VCI
Manufacturer's Name : Bosch Automotive Diagnostics Equipment
(Shenzhen) Limited
Manufacturer's Address : 5/F,A, Gardon City Cyber Port, Nanhai Road
No.1079, Nanshan District,
Shenzhen 518067 P.R. China

is herewith confirmed to comply with the requirements set out in the Council
Directive 1999/5/EC for radio equipment and telecommunications terminal equipment.
For the evaluation of the compliance with this Directive, the following standards
were applied:

Safety: EN 61010-1:2010

Health: EN 62311 : 2008

EMC : EN 301 489-1 V1.9.2

EN 301 489-17V 2.1.1

EN 61326-1: 2006

EN 61000-3-2:2006+ A1:2009+ A2:2009

EN 61000-3-3:2008

Radio: EN 300 328 V1.9.1

Responsible for making this declaration is the:

☒ Manufacturer Authorised representative established within the EU

Person responsible for making this declaration

Name, Surname : Shensong.Li

Position/Title : Hardware Testing Engineer

China
(Place)

2012.7.2
(Date)

Shensong. Li
(Company stamp and legal signature)

Bosch Automotive Diagnostics Equipment(Shenzhen) Limited
5/F,A,Garden City Cyber Port, Nanhai Road No.1079,
Nanshan District, Shenzhen
518067
China
400 000 5109
www.bosch-diagnostics.com.cn