

NEWCHIP

USER MANUAL HDT301

Ver: V1.00.001

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Safety Precautions and Warnings

To avoid personal injury, property loss, or accidental damage to the product, read all of the information in this section before using the product.

Handle Device Carefully

Do not drop, bend, or puncture the tool, or insert extra objects into or place heavy objects on the device. The vulnerable components inside may be damaged.

Do not Disassemble or Modify the Device

The device is a sealed device with no user-serviceable parts inside. All internal repairs must be performed by an authorized maintenance organization or qualified technician. Attempts to disassemble or modify the device will void the warranty.

Do not Try to Replace the Internal Battery

The internal rechargeable lithium battery must be replaced by an authorized maintenance organization or qualified technician. Contact the dealer for factory replacement.

Adapter Information

Avoid immersing the device in water or placing it in a location where it may absorb moisture or other liquids.

During normal use, the charging device may become hot. Please ensure that there is good ventilation while charging device.

If any of the following situation occurs, please unplug the charging device:

- The charging device is exposed to rain, liquid or in an environment with excessive overlap.
- The charging device showed physical damage.
- Cleaning the charging device.

Data and Software Protection

Do not delete unknown files or change the names of files or directories created by others, otherwise the device software may not run.

Tips: Access to network resources makes the device vulnerable to computer viruses, hackers, spy-ware, and other malicious behaviors, and may damage the device, software, or data. To make sure that you are using firewalls, anti-virus software and anti-spy-ware software to provide adequate protection for your computer and keep these software up to date.

Precautions on Using this Tool

The ignition switch should be in the OFF position when plugging and unplugging the diagnostic connector.

Precautions on Operating Vehicle's ECU

- Do not disconnect battery or any wiring cables in the vehicle when the ignition switch is on, as this could avoid damage to the sensors of the ECU.
- Do not place any magnetic objects near the ECU.
- Disconnect the power supply to the ECU before performing any welding operations on the vehicle.
- Be extreme caution when performing any operations near the ECU or sensors. Ground yourself when you disassemble PROM, otherwise ECU and sensors can be damaged by static electricity.
- When reconnecting the ECU harness connector, be sure it is attached firmly, otherwise electronic elements, such as ICs inside the ECU, can be damaged.

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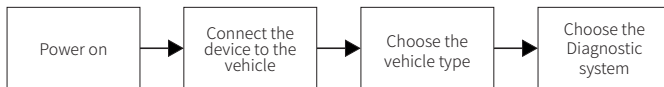
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1.Quick Start Guide

1.1 Initial Use

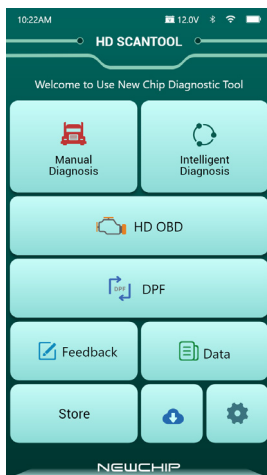
Please enter the upgrade menu to upgrade the diagnostic software when you use the device for the first time.

1.2 Diagnostic Process



1.3 Function Menu

Power on the host,the system will automatically enter into the function menu selection interface.



It mainly includes the following features:

Manual Diagnosis: Manually select the vehicle type and system for diagnosis.

Intelligent Diagnosis:Fast scanning vehicle ECU based on artificial intelligence.

HD OBD:Diagnose vehicles with universal protocols.

Data:Including diagnostic records, diagnostic reports, OBD location, image view, etc.



Feedback:Any abnormal of software or function during the diagnosis,just feedback to us, our professional technician will track and deal with it in time.

Others:Online store etc.

Upgrading:Diagnostic software upgrading.

Setting:Unit,language,WIFI,volume setting etc.

1.4 Charging

- Follow the steps below to charge the host:
- Connect one end of the power cord to the socket of the power adapter.
- Connect the other end to the charging jack on the bottom of the host.
- Plug the charger power plug into a power socket to charge.
- When the battery status icon displays , the host is being charging.
- When it displays , the charging process is completed and you should disconnect the host.

1.5 Battery

It is normal that the host won't turn on while charging because the battery has not been used for a long time or it is exhausted.Please turn on the host again after charging the battery for a while.

Please charge the host through the charger in the package.The company assumes no responsibility for damages and losses caused by charging with chargers other than those specified by NEW CHIP.

The battery charging time varies with temperature and battery status.

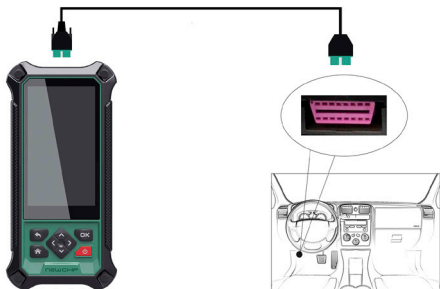
When the battery power is low,the system will pop up a prompt reminding you to connect the charger.When the battery power is too low,the device will turn off.

 **Tip:**Please do not charge the battery when the temperature is lower than 0° C (32° F) or higher than 45° C (113° F).

1.6 Device Connections

The connection steps are as follows:

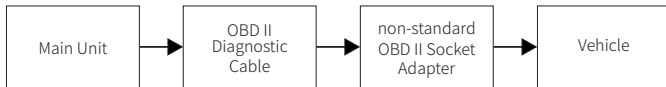
(1) Find the diagnostic socket on the vehicle. Most of the diagnostic sockets are standard OBD II diagnostic sockets (for non-standard OBD II vehicle diagnostic sockets, corresponding adapters are required), which are generally installed on the driver's side, away from the center of the dashboard 12 inches away. If you cannot find the location of the vehicle diagnostic socket, please refer to the vehicle maintenance manual.



(2) For the standard OBD II diagnostic socket, its connection method as below:



(3) For non-standard OBD II diagnostic sockets, the connection method is as follows:



2. Basic Introduction

2.1 Product Profile

Please enter the upgrade menu to upgrade the diagnostic software when you use the device for the first time.



- ① Display Screen
- ② Main Menu Button
- ③ Return Button
- ④ Confirm Button
- ⑤ Power on/off
- ⑥ Up/Down/Left/Right Button
- ⑦ Charging Slot
- ⑧ Diagnostic Interface

2.2 Device Operation

The device can be operated on the touch screen or through the buttons below the screen.

2.3 Parameters

| | |
|-------------------|--------------------------------|
| Operating System: | Android |
| RAM | 2G |
| Storage | 16G |
| Battery | 6100mAh/3.7V |
| Screen | 5inch HD touch screen |
| Working Temp. | 32° F ~ 122° F(0°C ~ 50°C) |
| Storage Temp. | 14° F ~ 140° F(-10° C ~ 60°C) |
| Network | Wi-Fi |
| Dimension | 214.5×103.5×35 mm |

3.Begin to Use

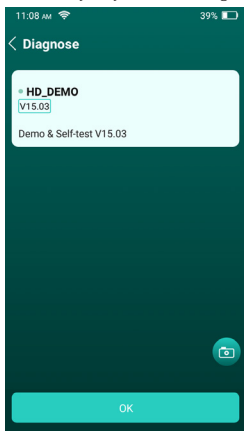
3.1 Diagnosis

Enter this menu and you can manually select the vehicle model and system to diagnose.

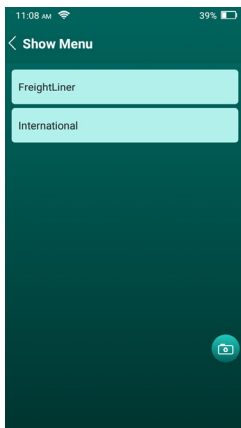
Take the Demonstration program as an example to introduce how to start a diagnosis:

(1)Select vehicle brand and model:tap the Demo icon on the main diagnostic interface to enter.

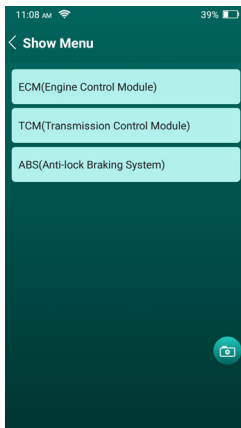
⚠️ **Tips:**Different models of diagnostic software may vary with their diagnostic menu.



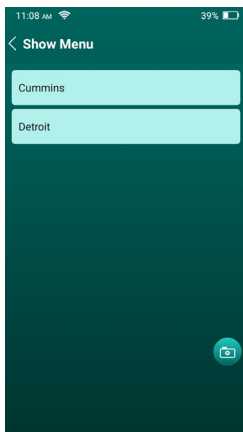
(2) Select vehicle brand and model: The screen will enter the test project selection interface.



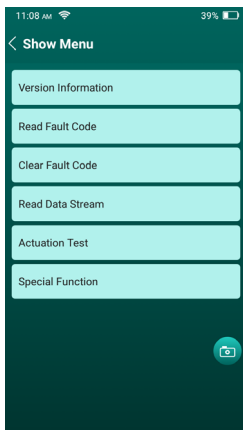
(3) Select the system that you want to diagnose.



(4) Select the system brand that you want to diagnose.



(5) Select the functions that you want to diagnose after entering the system.




a) Version information

Tap Version Information button to read the version information of the current vehicle ECU.

b) Read fault code

This function is used to read the fault codes in the current vehicle ECU.

 **Tips:**Reading fault code during vehicle diagnosis is only a small step during the entire diagnosis.The vehicle fault code is only as a reference and components cannot be replaced directly on the basis of the given fault code definition. Each fault code has a set of testing procedure,and the maintenance technician must confirm the root node of the fault in strict accordance with the operation instructions and procedures described in the vehicle repair manual.


c) Clear fault code

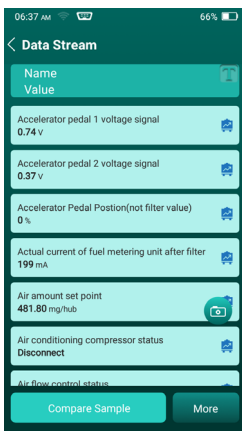
Tap "clear fault code",and the system will automatically delete the current fault code and the dialog box "clear fault code completed"will pop up.

Tips:For general models,please operate in the regular sequence:read fault code first,and then clear the fault code,start the vehicle to test,read the fault code again for verification, repair the vehicle,clear fault code,and start vehicle to test again to confirm that the fault code no longer appears.

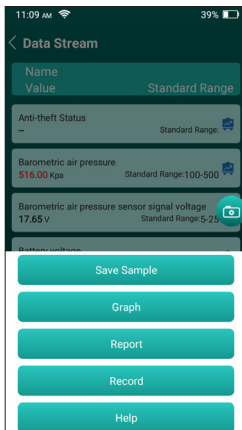
d) Read data stream

This function is majorly used to read and display real-time data and parameters of the vehicle ECU.Through observing these data streams, maintenance technicians can understand the vehicle's overall performance and offer maintenance suggestions.

 **Tips:**If you have to drive the vehicle in order to perform a troubleshooting procedure, always have a second person help you.Trying to drive and operate the diagnostic tool at the same time is dangerous,and could cause a serious traffic accident.



Screen buttons:



Select all:If you want to check some data stream,tick the box before its name.If you want to choose all the data streams,tap this button.

Unselect: Tap this button to unselect all checked data streams.

OK: Confirm current operations. Tap "OK" after selection, and then the system will display the dynamic data of selected data streams.

Screen buttons <more>:

Graph: Displays the parameters of the selected data stream in waveform.

Report: Tap this button to save the current data stream value.

Record: Used to record diagnostic data for user playback and viewing. To stop reading, tap Stop (progress bar).

With 3 display modes available, you can browse it with suitable ways:

Figure: Displays parameters with wave patterns.

Value: The default display mode shows parameters with numbers and lists.

(Tips: If the value of the data stream is not within the standard value range, the data stream will be displayed in red.)

Combine: The graphs are presented together for users to make comparisons.

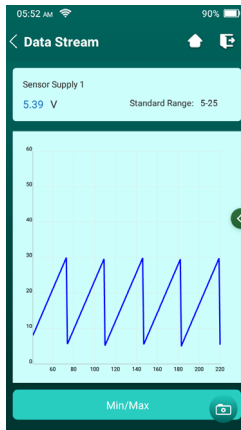
(Tips: Different data stream options are marked in different colors.)

How to view a single waveform chart ?

Tap the button to display the data stream in a waveform chart. Tap to display the current (individual) data stream in a waveform pattern.

On the waveform chart display page, the user can do the following actions.

[Max / Min]: Tap more to set Max/Min value. Once the running value exceeds the set value, the system will warn.



Select the data stream option to be viewed (Tips:You can only display up to 4 data streams), and the selected data stream waveforms will be automatically displayed.To remove the display of a data flow option waveform,just uncheck.

How to view multiple waveform graphs ?

Tap the graph button to enter,and the system displays the parameters of the selected data in a waveform.

Screen Buttons<more>:

Combine:Present the graphics in a combined way for user comparison.

Value:The default display mode displays the parameters as numeric and list.

Save Sample:Use to collect sample data streams.After acquisition,entry,and preservation, each time you can view the data stream options,you can import data stream sample files to override the current data stream value.

Report:Tap this button to save the current data flow value.

Record:Used to record diagnostic data for user playback and viewing.

e) Actuation Test

This function is mainly used to test the operating components in the ECU.

f) Special Functions

Some vehicle models' systems have a special function menu, and the special functions supported by different models are different. In general, the special functions include the following items:

DPF regeneration, injector coding, EGR, NOx reset, Adblue reset (diesel engine exhaust gas filter) etc.

Tips: The special functions supported by different models are different, subject to the device display.

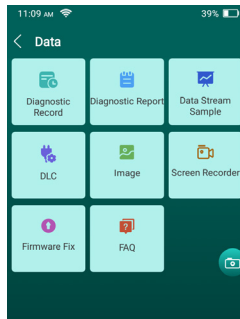
3.2 Intelligent Diagnosis

The fast scanning vehicle ECU is based on artificial intelligence. When the device is connected to the vehicle, it will automatically identify the vehicle ECU.

3.3 HD OBD

Diagnose vehicles with universal protocols.

3.4 Data



3.4.1 Diagnostic Record

This function can view the diagnostic records.

3.4.2 Diagnostic Report

This function can view diagnostic reports and share diagnostic reports with others.

3.4.3 Data Stream Sample

Used to manage recorded sample data stream files.

3.4.4 DLC

Diagnostic socket position prompt.

3.4.5 Image

View the screenshot on the device.

3.4.6 Screen Recorder

View the Screen Recorder.

3.4.7 Firmware Fix

If device does not work properly,download the latest version of the firmware and tap firmware fix button.Do not power off or switch the interface during the firmware fixing.

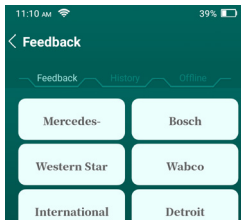
3.4.8 FAQ

View the FAQ.

3.5 Feedback

If the diagnosis encounters unresolved problems or diagnostic software problems, users can feedback the latest 20 test records to NEW CHIP.We will process it to improve our product quality and user experience after We receive your feedback.Tap Diagnostics Feedback and the following dialog box will pop up.

Tap "OK" to enter the vehicle diagnostic record feedback interface.There are 3 options.



Feedback:Displays a list of all the diagnosed vehicle models.

History:Tap to view the processing progress of all submitted diagnostic feedback.

Offline: Tap to view the diagnostic feedback for the upload failure due to network problems. Once the network is restored, the system will automatically upload to the server.

Under the Diagnostic Feedback tab, tap the diagnostic record of the corresponding model to enter.


Tap "Select File" to open the target folder, select the diagnostic log for feedback, and then select the corresponding diagnostic feedback problem type. Input the specific fault description and the specific feedback contact details in the text box. Then tap "upload the log" to send it to us. We will follow up with your fault feedback report in time. Please observe the progress of the diagnostic feedback and the results in the diagnostic feedback history.

3.6 Others

Online store etc.

3.7 Upgrading

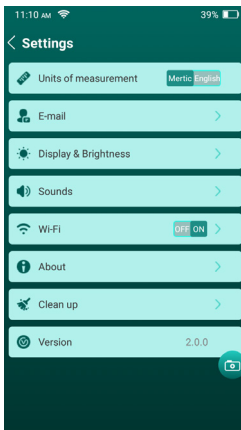
To make sure that you enjoy better functions and upgrade services, we suggest you upgrade your software irregularly. You are prompted to upgrade the software when a new version is available.

Tap "  " to enter upgrading center.

Tap Upgrade to upgrade all the latest versions of the software.

Tips: During the upgrading, please keep normal network connection. It may take a few minutes to upgrade many softwares at the frame time, please wait.

3.8 Settings



3.8.1 Units of Measurement

This option is used to switch between metric and English units.

3.8.2 E-mail

E-mail Setting.

3.8.3 Display & Brightness

Display and brightness setting.

3.8.4 Sounds

Sound volume setting.

3.8.5 Wi-Fi

WiFi network connection setting.

3.8.6 About

Device parameter information display.

3.8.7 Clean up

Cleaning up the cache.

3.8.8 Version

Version information view.

4.FAQ

Here are answers to some common question about devices:

1. Can I use the same type of charger to charge the host?

No,please use original charger.Our company is not responsible for any damage and economic loss caused by using charger which is not provided by NEW CHIP.

2.Why prompt for diagnostic interruption or communication error?

The diagnostic cable connector may be loose.connect the connector properly and restart the device.

3.Why the screen flashes when ignition is on?

It is caused by electromagnetic interference.it is a normal phenomenon.

4.Why ECU system of the vehicle cannot be entered ?

Please confirm:

- Vehicle is equipped with this system.
- The system is electronically controlled.
- Diagnostic connector is properly connected.
- Ignition key is on.

If the inspection is normal please send the vehicle VIN code,model and vehicle production year to us through the diagnostic feedback.

5.How to save power?

- Turn off the screen when the device is not used.
- Set the device standby time shorter.
- Lower the brightness of the screen.
- Turn off the Wi-Fi when it is not used.

6.Software upgrade failed.

- The device is not connected to the Internet.
- Server problem,server maintenance,please try again later.

7.How about non-standard OBDII connector?

There is a several non-standard adapters in the box,Follow the instructions to connect.

8.Why there are so many DTCs?

It is usually caused by the poor connecting or the circuit grounded.

10.How to upgrade system software?

Boot up and connect to the Internet properly,tap "Setting" on the main menu screen,and tap"About ->Version",and then tap"Detection system update"to enter the system upgrade page.Follow the on-screen instructions to finish the system upgrade,If the device automatically reboot and enter the main menu,it indicates that the system upgrade is finished successfully.

11.How about the device still fail to boot up after charging for a short time?

Charge the device for three hours at least.If the power LED indicator is on,then the device could normally boot up.

12.Failure while using the diagnostic software?

Tap Diagnostic Feedback to feedback the specific problems to us.

Warranty Policy

This warranty applies only to users and distributors who purchase NEW CHIP products through normal procedures. Within one year from the date of delivery, NEW CHIP warrants its electronic products for damages caused by defects in materials or workmanship. Damages to the device or components because of abuse, unauthorized modification, use for non-designed purposes, operation in a manner not specified in the instructions, etc. are not covered by this warranty. The compensation for dashboard damage caused by the defect of this device is limited to repair or replacement. NEW CHIP does not bear any indirect and incidental losses. NEW CHIP will judge the nature of the equipment damage according to its prescribed inspection methods. No agents, employees or business representatives of NEW CHIP are authorized to make any confirmation, notice or promise related to NEW CHIP products.

Customer Service Center

For any problems encountered in the device operation process, please contact SHENZHEN NEW CHIP INTELLIGENCE CO., LTD

Service line: +86-755-21036827

E-mail: service@inewchip.com

Official Website: www.inewchip.com

Products tutorial, videos, Q&A and coverage list are available on NEW CHIP official website.

FCC & ISED Checklist

FCC Warning:

Any 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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. The device is designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (USA). These requirements set a SAR limit of 1.6 W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body is 0.825 W/kg.

ISED Warning:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) L'appareil ne doit pas produire de brouillage;
- 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. Cet émetteur ne doit pas être colocalisé ou fonctionner en conjonction avec une autre antenne ou un autre émetteur.

The device is designed to meet the requirements for exposure to radio waves established by the Innovation, Science and Economic Development Canada's. These requirements set a SAR limit of 1.6 W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body is 0.825 W/kg.

L'appareil est conçu pour répondre aux exigences d'exposition aux ondes radio établies par l'Innovation, Sciences et Développement économique Canada. Ces exigences fixent une limite DAS de 1.6 W / kg en moyenne sur un gramme de tissu. La valeur DAS la plus élevée rapportée selon cette norme lors de la certification du produit pour une utilisation lorsqu'il est correctement porté sur le corps est 0.825W/kg.