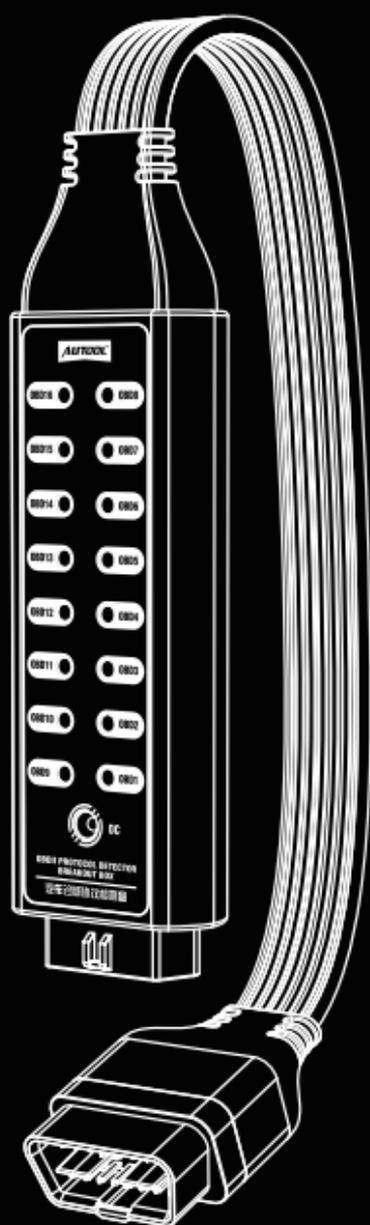


## OBDII Protocol Detector Breakout Box

User Manual

用户手册





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## CAUTIONS

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### Warning

 Before using the instrument, please read this manual carefully for proper operation.

- ▶ This product is intended for automotive professionals only.
  - ▶ This product is directly connected to the vehicle data link.
  - ▶ Improper use may damage the vehicle data communication system, related circuits or systems.
  - ▶ When you are not sure whether your operation will cause problems, please stop using this product immediately.
  - ▶ When you are not sure about the electrical circuit on the car, do not use a jumper to short-circuit the input jack of this product.
  - ▶ Do not use this product to connect a load device with a power exceeding 1 ampere.
  - ▶ Do not directly short-circuit the 16th pin, the 4th pin, and the 5th pin of this product.
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## PRODUCT INTRODUCTION

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### Overview

- The automotive OBD II Protocol Detector & Breakout Box is a straight-through circuit detector for OBD II data. The communication protocol, power supply and grounding circuit of the OBD II on-board diagnostic system are easily and safely detected by connecting this instrument and the vehicle OBD II system.
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### Features

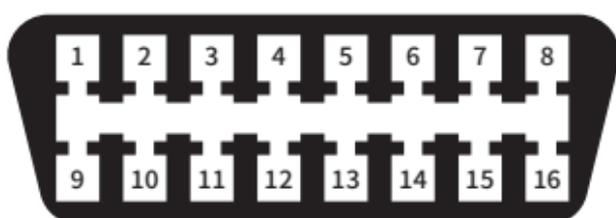
- The extension wire of OBD II connector adopts the technology of multithreading data connection, which makes the connection faster and smoother. The wire body is made of elastic thermoplastic TPU material, which is characterized by high elasticity, high strength and high resilience.
- When the decoder communicates with the vehicle, all 16 OBD II pins can be easily connected.
- The layout of the input jack completely simulates the 16 pin layout of the OBD II interface, so that more tests can be carried out quickly and visualized.
- Quickly, safely and conveniently check various signals of the vehicle.

- The built-in input jack can be connected to any type of 4mm banana plug, which is convenient for connecting with a multimeter or oscilloscope for further measurement.

**Parameters**

Diagnostic port	<b>OBDII</b>	Working voltage	<b>DC 8V~30V</b>
Operating temperature	<b>-20~70°C (-4~158°F)</b>	OBDII extension cable length	<b>45cm</b>
Load	<b>2.0A</b>		

**PORT / PIN**



PORT/PIN	DEFINITION	CONTENT
1	Self-Define by car manufacturer	
2	SAE-J1850 PWM CAN(+)	The decoder conducts communication measurement on the vehicle.
3	Self-Define by car manufacturer	
4	Body ground	Check whether the body grounding is normal.
5	Signal ground	Check whether the signal grounding is normal.
6	CAN high (ISO 15765-4 and SAE-J2284)	The decoder conducts communication measurement on the vehicle.
7	K-line for ISO 9141-2 and ISO 14230-4	The decoder conducts communication measurement on the vehicle.
8	Self-Define by car manufacturer	
9	Self-Define by car manufacturer	

10	SAE-J1850 PWM CAN(-)	The decoder conducts communication measurement on the vehicle.
11	Self-Define by car manufacturer	
12	Self-Define by car manufacturer	
13	Self-Define by car manufacturer	
14	CAN low (ISO 15765-4 and SAE-J2284)	The decoder conducts communication measurement on the vehicle.
15	L-line for ISO 9141-2 and ISO 14230-4	The decoder conducts communication measurement on the vehicle.
16	Battery positive	Check whether the car circuit is normal.

## DESCRIPTION OF ACCESSORIES

Name	Quantity	Name	Quantity
Manual	1	Universal wire jumper	Red*1set, Black*1set, Yellow*1set, Green*1set.
Host breakout box	1		
Warranty card	1		

## MAINTENANCE SERVICE

- Our products are made of long-lasting and durable materials, and we insist on perfect production process. Each product leaves the factory after 35 procedures and 12 times of testing and inspection work, which ensures that each product has excellent quality and performance.

### Maintenance

To maintain the performance and appearance of the product, it is recommended that the following product care guidelines be read carefully:

- Be careful not to rub the product against rough surfaces or wear the product, especially the sheet metal housing.

- Please regularly check the product parts that need to be tightened and connected. If found loose, please tighten it in time to ensure the safe operation of the equipment. The external and internal parts of the equipment in contact with various chemical media should be frequently treated with anti-corrosion treatment such as rust removal and painting to improve the corrosion resistance of the equipment and extend its service life.
- Comply with the safe operating procedures and do not overload the equipment. The safety guards of the products are complete and reliable.
- Unsafe factors are to be eliminated in time. The circuit part should be checked thoroughly and the aging wires should be replaced in time.
- Adjust the clearance of various parts and replace worn (broken) parts. Avoid contact with corrosive liquids.
- When not in use, please store the product in a dry place. Do not store the product in hot, humid, or non-ventilated places.

## **WARRANTY**

- From the date of receipt, we provide a three-year warranty for the main unit and all the accessories included are covered by a one-year warranty.

### **Warranty access**

- The repair or replacement of products is determined by the actual breakdown situation of product.
- It is guaranteed that AUTOOL will use brand new component, accessory or device in terms of repair or replacement.
- If the product fails within 90 days after the customer receives it, the buyer should provide both video and picture, and we will bear the shipping cost and provide the accessories for the customer to replace it free of charge. While the product is received for more than 90 days, the customer will bear the appropriate cost and we will provide the parts to the customer for replacement free of charge.

### **These conditions below shall not be in warranty range**

- The product is not purchased through official or authorized channels.
- The product breakdown because the user does not follow product instructions to use or maintain the product.

We AUTOOL pride ourselves on superb design and excellent

service. It would be our pleasure to provide you with any further support or services.

**Disclaimer**

- All information, illustrations, and specifications contained in this manual, AUTOOL reserves the right of modify this manual and the machine itself with no prior notice. The physical appearance and color may differ from what is shown in the manual, please refer to the actual product. Every effort has been made to make all descriptions in the book accurate, but inevitably there are still inaccuracies, if in doubt, please contact your dealer or AUTOOL after-service centre, we are not responsible for any consequences arising from misunderstandings.

**RETURN & EXCHANGE SERVICE**

**Return & Exchange**

- If you are an AUTOOL user and are not satisfied with the AUTOOL products purchased from the online authorized shopping platform and offline authorized dealers, you can return the products within seven days from the date of receipt; or you may exchange it for another product of the same value within 30 days from the date of delivery.
- Returned and exchanged products must be in fully saleable condition with documentation of the relevant bill of sale, all relevant accessories and original packaging.
- AUTOOL will inspect the returned items to ensure that they are in good condition and eligible. Any item that does not pass inspection will be returned to you and you will not receive a refund for the item.
- You can exchange the product through the customer service center or AUTOOL authorized distributors; the policy of return and exchange is to return the product from where it was purchased. If there are difficulties or problems with your return or exchange, please contact AUTOOL Customer Service.

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## 注意事项

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### 警示

**⚠** 在使用本仪器之前,请仔细阅读本手册,熟悉产品,避免造成人身伤害和仪器损坏事故。

- ▶ 本产品仅供汽车专业人员使用。
- ▶ 本产品直接对接汽车车载数据链路。
- ▶ 不正确的使用可能会损坏车辆数据通信系统、相关电路或系统。
- ▶ 当您不确定您的操作是否会产生问题时,请立即停止使用本产品。

- ▶ 当不确定车上电气线路时，不要使用跳线将本产品的输入插孔之间进行短接。
- ▶ 不要使用本监测器连接一个功率超过1安培的负载设备。
- ▶ 不要将本监测器的第16脚（电源）和第4脚（车身接地），第5脚（信号接地）进行直接短接。

## 产品简介

### 概述

- 汽车诊断协议检测盒是一款直通式OBD II数据线路检测仪。通过连接汽车诊断仪和汽车OBD II系统后，对OBD II车载诊断系统的通信协议、电源和接地线路，进行非常简便和安全的监测。

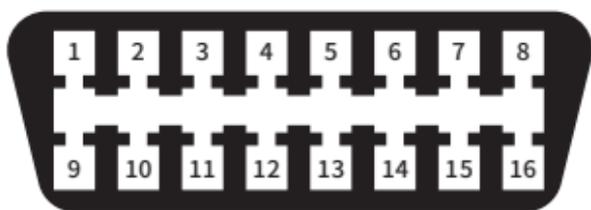
### 产品特点

- OBD II 接头延长线采用多线程连接数据技术，连接更快更通畅，线身由弹性热塑性TPU材料制造，具备高弹性、高强度等特点。
- 当解码器与车辆进行通信时，可以轻松地连接OBD II全部16个针脚。
- 输入插孔布局完全模拟OBD II接口的16个针脚布置，快速直观地进行更多测试。
- 快速、安全、方便地通过本监测器检查车身接地，OBD II信号接地和OBD II电源。
- 内置的输入插孔可以连接任意类型的4mm香蕉插头，方便连接万用表或示波器，进一步测量。

### 技术参数

诊断端口	OBDII	工作电压	DC 8V~30V
工作温度	-20~70°C (-4~158°F)	OBD II 延长线长度	45cm
负载	2.0A		

### 端口/针脚说明



端口/针脚	定义	测量内容
1	汽车厂家自定义	
2	SAE-J1850 PWM 协议总线(+)	解码器与车辆进行通信测量
3	汽车厂家自定义	
4	车身接地	检测车身接地是否正常
5	信号接地	检测信号接地是否正常
6	CAN high (ISO 15765-4 和 SAE-J2284)	解码器与车辆进行通信测量
7	ISO 9141-2和 ISO 14230-4 总线的K线	解码器与车辆进行通信测量
8	汽车厂家自定义	
9	汽车厂家自定义	
10	SAE-J1850 PWM 协议总线(-)	解码器与车辆进行通信测量
11	汽车厂家自定义	
12	汽车厂家自定义	
13	汽车厂家自定义	
14	CAN low (ISO 15765-4 和 SAE-J2284)	解码器与车辆进行通信测量
15	ISO 9141-2和 ISO 14230-4 总线的L线	解码器与车辆进行通信测量
16	蓄电池正极	车身电源是否正常

## 产品清单

名称	数量	名称	数量
主机	1	说明书	1
万用跳线	红*1套 黑*1套 黄*1套 绿*1套	保修卡	1

## 保修服务

- AUTOOL主机自客户签收日起享有3年保修期。其所含附件自客户签收日起享有1年保修期。

## 保修方式

- 根据具体的故障情况对产品进行免费修理或更换；
- 我方保证所有更换的部件、附件或产品都是全新；
- 在客户收到产品90天内出现故障同时提供视频和图片，我方承担运费并免费提供相应配件给客户更换。收到产品超过90天，客户承担相应的费用，我方免费提供配件给客户更换；

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- 未按产品说明书要求使用和维护造成的损坏；

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