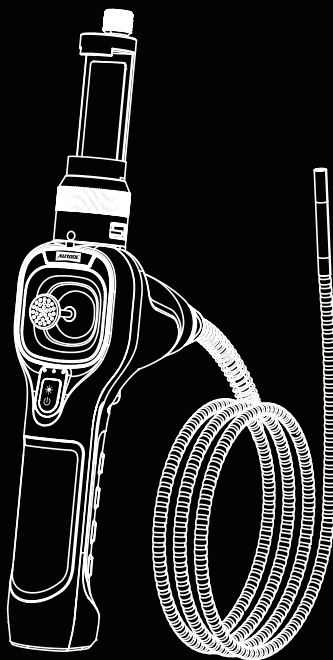


AUTOOL SVB303

Four-way Articulating Borescope

User Manual

用户手册





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执行标准 / Execution standard: JB/T 11130-2011



RoHS
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CAUTIONS

Warning



Before using the product, please pay attention to the following operations:

- ▶ Prior to using this product, carefully read this manual and follow the instructions to avoid improper usage that may result in loss or injury.
- ▶ Do not operate the joystick when the flexible hose is curled, as it may lead to the breakage or deformation of the steering traction line.
- ▶ The bending direction of the probe can only be controlled by the joystick. Do not force the camera probe, as it may cause the steel wire to break or deform.
- ▶ Avoid keeping the joystick at the maximum bending angle for an extended period, as it may put the equipment under high load and affect its lifespan.
- ▶ Do not use this device to observe the interior of the human body or animals, as consequences will be at your own risk.
- ▶ Prohibit usage or storage in explosive, strong electromagnetic, flammable, or corrosive environments, as it may result in fire, explosion, or equipment damage.
- ▶ Avoid operating on objects under electrified conditions to prevent electric shock.
- ▶ Do not touch the end of the camera probe directly, especially after using the borescope in a high-temperature environment, as it may cause burns.
- ▶ Avoid direct close-up viewing of the strong light emitted from the end of the borescope probe to prevent visual impairment.
- ▶ After using the device, allow the joystick to return to its normal state. Do not forcefully pull it out from the tested object to prevent probe jamming and damage to the articulating function.
- ▶ Do not connect this product to devices from other manufacturers (host, flexible hose, etc.), as consequences will be at your own risk.
- ▶ Do not expose the flexible hose to a temperature exceeding 70°C.

PRODUCT INTRODUCTION

Overview

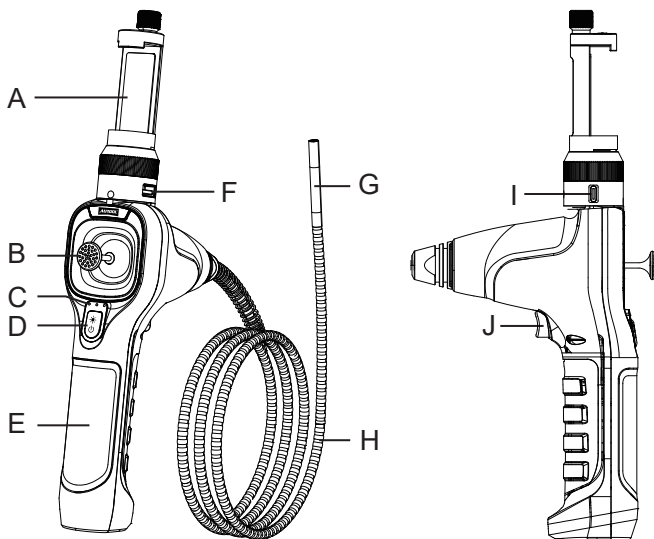
This product is specifically designed for detecting hard-to-reach areas such as car evaporators, combustion chambers, and three-way catalytic converters. It features a unique temperature protection function and comes equipped with a 360° articulating function, allowing users to easily maneuver the camera probe into tight spaces. Real-time footage can be transmitted to external devices via a data cable. With advanced expandable accessories and real-time temperature display, it meets the diverse detection needs of users.

Product parameters

Camera Diameter	6.2mm
Field of View (FOV)	90°
Camera Light Source	6 High-brightness LED lights
Sensor	1/9" CMOS
Pixels	100W
Flexible Hose Length	1m
Flexible Hose Material	Elastic metal hose
Depth of Field (DOF)	20~100mm
Manual Dimming	Supported
Battery	3.7V/2600mAh lithium battery
Power Input	DC 5V
Usage Duration	Approximately 120 minutes
Operating Environment	-10°C~50°C
Protection Level	Not waterproof for the main unit

PRODUCT STRUCTURE

Structure diagram



A	Phone Holder	B	Joystick
C	Power Indicator Light	D	Power On/Off/ LED Light Adjustment
E	Grip Area	F	USB Interface
G	Million High-Definition Lens	H	Flexible Hose
I	Type-C Charging Port	J	Photo/Video Button

OPERATING INSTRUCTIONS

Mobile app installation



- Scan the QR code to download and install the app.



Operation guide

- **Install Phone**
Adjust the knob of the phone holder and place the phone on the holder (supports 3.5-inch to 6.3-inch screens). Connect the phone interface to the grib's USB interface using a connect cable.
- **Power On/Off**
Press and hold the [⏻] button on the grib for 2 seconds to turn on the device. The working indicator light will be on. Open the application on your phone to display the image. Press and hold the [⏻] button for 2 seconds to turn off the device.
- **LED Light Adjustment**
After powering on, the LED light is at its brightest by default. Press the [☀] button to adjust the brightness. Brightness has 3 levels, and the 4th press turns off the LED light.
- **Capture/Record**
Press the [📷] button to take a photo. Long-press the [📷] button for 2 seconds to start recording. Long-press the [📷] button for another 2 seconds to stop recording.
- **Charging**
Use a charging cable to connect to a 5V adapter or a mobile power source and plug it into the device's Type-C interface for charging. The charging voltage is DC 5V. Using a higher voltage may damage the device. Note: This device does not support fast charging.

- **PDF Generation**

In the [] application software, navigate to [] settings. Access the PDF generation settings page to configure the footer, header, and logo settings. Then input information of PDF creation. Click to generate the fuel system inspection form in PDF format.

TIPS & HELP

Trouble-shooting and help

- **1. Issue: No power on**
 - **Possible causes:**
Low battery, incorrect battery installation.
 - Steps:**
Charge the battery or replace it. Check for dirt or deformation in the battery, battery compartment, and contacts. Reinstall the battery.
- **2. Issue: Automatic shutdown**
 - **Possible cause:**
Low battery level.
 - Steps:**
Charge the battery or replace it.
- **3. Issue: Screen freeze after powering on or black screen**
 - **Possible causes 1:**
System startup failure, dirty connect cable interface, damaged connect cable.
 - Steps:**
Restart the app and device. Clean the connect cable interface and reconnect the cable. Replace the connect cable.
 - **Possible cause 2:**
App lacks permissions, app incompatibility.
 - Steps:**
Grant necessary permissions in phone permission settings. Reinstall a new app. Try a different phone to confirm device integrity.

- **4. Issue: Image cannot be recorded or retrieved**
 - **Possible cause:**
App lacks permissions.
 - Steps:**
Grant necessary permissions in phone permission settings.
Reinstall a new app. Check for "Finder Camera Data" in phone storage.
- **5. Issue: Charging failure**
 - **Possible causes:**
Dirty charging interface, damaged charging cable.
 - Steps:**
Clean the charging interface and reconnect the cable.
Replace the charging cable or charger.
- **6. Issue: Blurry image**
 - **Possible causes:**
Dirty probe, out of probe depth of field, lens damage due to high temperature.
 - Steps:**
Clean the probe with a clean cloth. Place the probe within 20-100mm from the target. Avoid exposing the probe to high temperatures (below 70°C).
- **7. Issue: Limited articulating radius of the probe**
 - **Possible cause:**
Twisted or deformed flexible hose.
 - Steps:**
Ensure the flexible hose is laid flat before use.

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 to 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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-

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注意事项

警告

⚠ 在使用产品前，请注意以下操作：

- ▶ 在使用本产品前，请仔细阅读本说明书，并按照说明书指导操作，以免使用不当造成损失或伤害。
- ▶ 禁止蛇管盘曲时操作拨轮，会导致转向牵引线拉断、变形。
- ▶ 探头的弯曲转向只能通过拨轮来控制，切勿用外力掰动探头，否则容易造成牵引钢丝拉断、变形。
- ▶ 不宜将操作手柄长时间控制在最大弯曲角度，这样操作会使设备处在高负载状态影响设备的使用寿命。
- ▶ 禁止使用本设备观察人体或动物的体内，否则后果自负。
- ▶ 禁止在易爆、强电磁场、有可燃性、腐蚀性场所使用或存放，否则可能会导致火灾、爆炸、设备损坏等。
- ▶ 禁止被检测物在带电情况下作业，以免导致触电发生。
- ▶ 切勿直接接触探头末端，尤其要特别注意内窥镜在高温环境中使用后，此时接触末端可能会导致灼伤。
- ▶ 切勿近距离直视内窥镜探头末端发出的强光光源，避免强光影响视力。
- ▶ 使用完设备后，让拨轮恢复回正状态，切勿从被测物体内强力拉出，以防卡住探头，导致转向功能损坏。
- ▶ 请勿将本产品连接其他厂家设备(主机、蛇管等)，否则后果自负。
- ▶ 请勿将蛇管放入超过70℃的高温环境中。

产品简介

概述

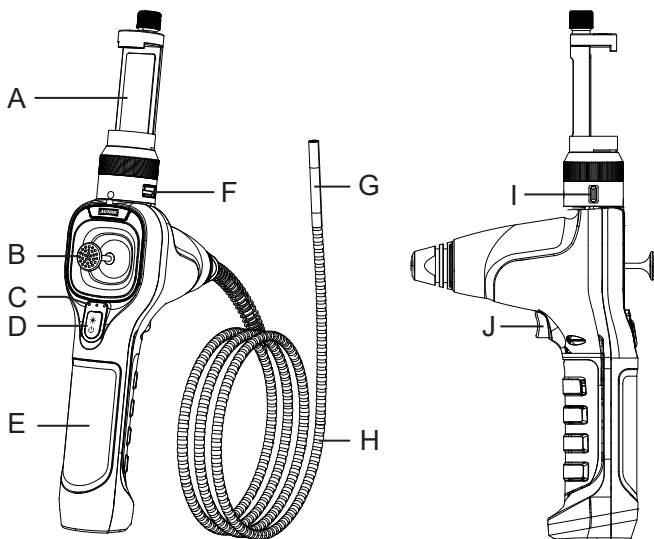
本产品专门用于探测汽车蒸发箱、燃烧室、三元催化传感器等难以进入窄小弯曲空间。该产品具有独特的温度保护功能，配有360°转向功能，方便用户将细小的探头探入狭小的空间内。可以通过数据线将实时画面传送至外置设备上。搭配先进的拓展性配件及实时温度显示能满足用户多样化的检测需求。

产品参数

摄像头直径	6.2mm
视角FOV	90°
摄像头光源	6颗高亮LED灯
传感器	1/9"CMOS
像素	100W
蛇管长度	1m
蛇管材质	弹性金属软管
景深DOF	20~100mm
手动调光	支持
电池	3.7V/2600mAh锂电池
电源输入	DC 5V
使用时长	约120分钟
操作环境	-10°C~50°C
防护等级	整机不防水

产品结构

结构图



A	手机支架	B	摇杆
C	电源指示灯	D	开机/关机/LED灯调节
E	手柄机身	F	USB接口
G	百万高清探头	H	弹性蛇管
I	Type-C充电接口	J	拍照/录像







操作说明

手机APP 安装

- iPhone设备: 在Appstore中搜索“Finder内窥镜”或扫描二维码下载并安装APP。
- 安卓设备: 扫描二维码下载安装APP。



操作指导

- **安装手机**
调节手机支架的旋钮, 将手机装在手机支架上(支持3.5寸屏~6.3寸屏手机), 用数据线连接手机接口与手柄USB接口。
- **开/关机**
按按手柄[]键2秒开机, 工作指示灯亮, 用手机打开应用软件, 显示图像, 长按[]键2秒关机。
- **LED灯调节**
开机后, LED灯默认最亮, 点按[]键调节亮度, 亮度分3档, 第4档为关闭LED灯。
- **拍照/录像**
点按[]键拍照, 长按[]键2秒开始录像, 再次长按[]键2秒关闭录像。
- **充电**
请用充电线连接5V适配器或者移动电源与设备Type-C接口进行充电, 充电电压DC5V, 过高的电压, 会损坏本机。请注意: 本机不支持快充。

- **PDF生成**

在[]应用软件点[]设置，点PDF生成设置页脚、页眉、LOGO，点PDF制作输入信息，即可生成燃油系统检测单。

提示与帮助

故障报告

- **1. 故障：开机无反应**
 - 可能原因：电池没电，电池未正确安装
 - 措施：进行充电或者更换电池；检查电池、电池仓和触点是否有脏污、变形；重新安装电池
- **2. 故障：自动关机**
 - 可能原因：电池电量不足
 - 措施：进行充电或更换电池
- **3. 故障：开机停止再开机画面或黑屏**
 - 可能原因1：系统启动失败；数据线接口脏污；数据线损坏
 - 措施：重启APP和设备；清洁数据线接口，并重新插拔数据线；更换数据线
 - 可能原因2：APP未获得权限；APP不兼容
 - 措施：在手机权限管理中心打开APP需要权限；重新安装新APP；更换手机来确认设备是否损坏
- **4. 故障：图像无法记录或找出**
 - 可能原因：APP未获得权限
 - 措施：在手机权限管理中心打开APP需要权限；重新安装新APP；在手机储存查找“Finder Camera Data”
- **5. 故障：无法充电**
 - 可能原因：充电接口脏污；充电线损坏
 - 措施：清洁充电接口，并重新插拔充电线；更换充电线或充电器

- **6. 故障: 图像模糊**
 - 可能原因: 探头脏污; 无在探头景深范围; 高温导致镜头损坏
 - 措施: 用洁净布清洁探头; 请将探头放置距被看处20-100mm内; 请勿将探头放入高温环境中(低于70°C)
- **7. 故障: 探头转向偏小**
 - 可能原因: 蛇管扭曲变形
 - 措施: 请将蛇管摆放平直使用

维修保养服务

您所拥有的AUTOOL产品选用持久耐用的材料，AUTOOL坚持精益求精的生产工艺，每一件产品出厂都经过35道工序及12次质检工作，从而确保每一件产品都拥有卓越的品质及性能。所以您的AUTOOL产品值得您定期维护保养，使其产品将能够长期稳定地工作。

维修保养

维护保养是为了保持产品性能和外观，我们建议您仔细阅读以下产品保养指南：

- 注意不要将产品与粗糙表面摩擦或揉搓产品，特别是钣金外壳。
- 对产品中需要紧固和连接的部位经常进行检查，如发现松动应及时紧固，以保证产品的安全运行。对与各种化学介质接触的产品外部和内部零件要经常进行除锈、喷漆等防腐处理，以提高产品的抗腐蚀能力，延长产品的使用寿命。
- 遵守安全操作规程，不超负荷使用产品。产品的安全防护装置齐全可靠，及时消除不安全因素。电路部分彻底检查，老化电线要及时更换。
- 定期清洗和更换易耗部件；调整各部位配合间隙和更换磨损（已坏）部件清洁时，避免产品接触带腐蚀性的液态物品。
- 不使用时，请将产品存放于干燥的位置。不要将产品存放在高温、潮湿或不通风的地方。

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；

以下情况不在免费保修范围：

- 非正规渠道购买AUTOOL的产品；
- 未按产品说明书要求使用和维护造成的损坏；

在AUTOOL，我们为精湛的设计和卓越的服务感到自豪。我们很乐意为您提供更多的支持或服务。

声明

偶然公司保留更改产品设计与规格的权利，届时恕不另行通知。实物外观与颜色可能与说明书中显示的有差别，请以实物为准。我们已尽最大努力力求使书中所有描述准确，但仍难免有不妥之处。如有疑问，请联系经销商或偶然售后服务中心。本公司对产品拥有最终解释权，不承担任何因误解而产生的后果。

退换货服务

退换货

- 如果您对从线上授权购物平台和线下授权经销商所购买的 AUTOOL 产品不满意, 根据《AUTOOL 全球销售条款》, 您可以自收到产品之日起七日内退货; 或者在产品交付之日起的 30 日内调换等值的其他产品。
- 退回及调换的产品必须处于完全可销售状态, 并附上相关销售单单据, 所有相关配件、纸质发票 (如有)。
- AUTOOL 将会对寄回退货的商品进行检查, 以确保其处于完好无损的状态并且符合条件, 相关条件详情请参阅《AUTOOL 全球销售条款》。任何未通过检查的商品将退还给您, 您将不会获得商品退款。
- 您可以通过客户服务中心或 AUTOOL 授权经销商调换产品; 退换货原则为从哪里购买, 就从哪里退换货。如果您退换货遇见困难或者阻碍, 请联系 AUTOOL 客户服务中心。通过客户服务中心退换货时, 我们建议您通过下面的方式进行:

中国区域致电	400-032-0988 / 18929303778
售后微信号	18929303778
海外区域致电	+86 0755 23304822
E-mail	aftersale@autooltech.com
Facebook	https://www.facebook.com/autool.vip
YouTube	https://www.youtube.com/c/autooltech

- 如您的退换货得到确认, 您将收到确认信息和邮件。