

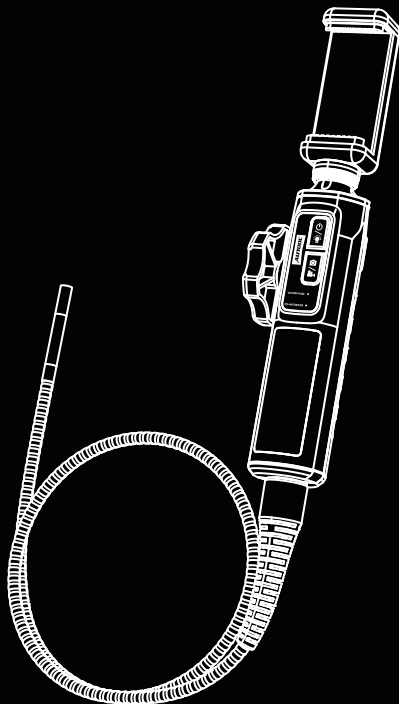
AUTOOL[®]

AUTOOL SVB302

Articulating Video Borescope

User Manual

用户手册



www.autooltech.com



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



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CAUTIONS

Warning



Before using the articulating borescope, please pay attention to the following operations:

- ▶ Please do not use this camera to connect to other manufacturers' hosts without authorization, even if their interfaces are the same;
- ▶ Do not use this product in some areas where live cables or charged objects may be contacted. Exposed metal parts can conduct electricity, which may cause danger;
- ▶ Do not let children operate the product;
- ▶ This product is prohibited from being used for medical treatment or human body testing;
- ▶ Please keep the product clean, avoid exposure to the sun, or direct contact with water, oil and corrosive liquids;
- ▶ The product is not waterproof;
- ▶ It is forbidden to twist or pull the bending body at the front end of the hose;
- ▶ Please handle with care. Do not bend the hose excessively. The bending limit of the hose is one circle.

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PRODUCT INTRODUCTION

Overview

SVB302 Articulating Borescope is the latest professional product launched by AUTOOL for the global automotive market, which is specially used to detect narrow and bending spaces that are difficult to enter, such as auto evaporator, combustion chamber, three-way catalytic, etc.

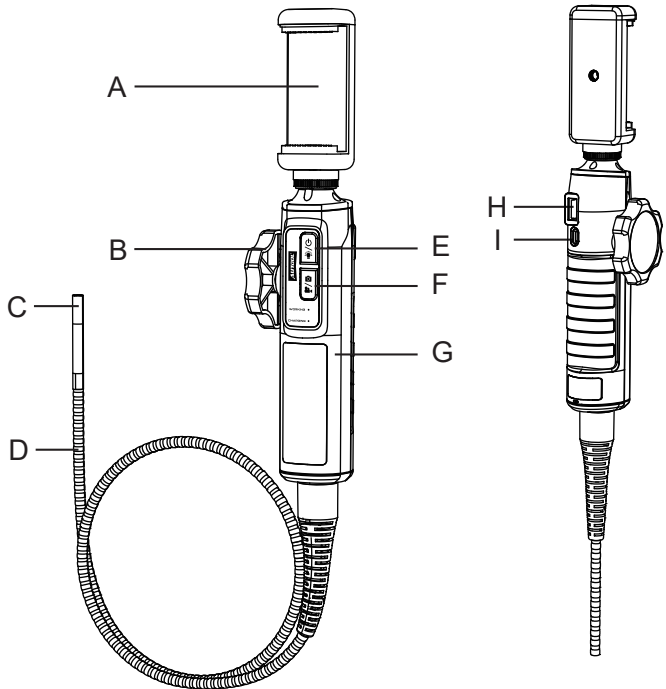
The product has the detection function with 180° rotation in two directions, and has a unique high-temperature alarm function, which makes it convenient for users to penetrate the small probe into the narrow space, and then transfer the vivid, clear and omnidirectional video and pictures to the mobile phone screen through the data line to meet your various detection needs.

Operating environment & Technical indicators

Camera Diameter	6.0mm(±0.35)
Resolution	1920*1080
Depth of Field	20-100mm
Viewing Angle	70°
Manual Dimming	Three-level dimming
USB Interface	USB 2.0
Camera Light Source	Highlight LED
Waterproof Level	IP67
Hose Material	Flexible metal hose
Hose Length	1m
High Temperature Protection	Intelligent protection, automatic shutdown.
Steering Direction	Two-way
Steering Angle	Max.210°
Bending Radius	35mm
Input Power	DC 5V
Operating Environment	-10~80°C
Humidity	15-90%

PRODUCT STRUCTURE

Structure drawing



A	Phone Holder	B	Steering Wheel
C	Megapixel HD Camera	D	Flexible Hose
E	Power on / Light-control	F	Photo / Video
G	Handle Body	H	USB Interface
I	Type-C Charging Port		

OPERATIONS INSTRUCTION

App down- load

- For Android mobile devices, please scan the QR code below to download and install the APP.
- For Apple mobile devices, please search "JCAM" in the Appstore, then download and install the APP; or scan the QR code below to download and install the APP.



Operation guide

- **Phone installation:**
Adjust the rotary knob of the phone holder, install the phone on the phone holder (supports 3.5~6.3 inch screen), and connect the phone and the borescope with a data line;
- **Power on / off:**
Long press the power on key (E) for 2 seconds to power on, and the working indicator light will be green. Open the APP with the phone, the hose LED lights up, and the phone displays the image. If the power on key (E) is pressed for 2 seconds, the machine will shut down;
- **LED Light-control:**
After starting up, the LED light is the brightest by default, press the light-control key (E) to adjust the brightness, the brightness is divided into 3 levels, and the 4th level is to turn off the LED light;
- **Photo / Video:**
Press the photo / video key (F) to take pictures in jpg format; While long press to record video in MP4 format, PDF Generation: Log in the APP, select Settings>>PDF generation, set footer, header, LOGO>>PDF production, and enter information to generate an image detection sheet;
- **Charging:**
Please use a 5V adapter or mobile power supply to connect Type-C / USB cable for charging. The charging voltage and current are 5V / 1A, and excessive voltage may burn out the product. Please note that this product does not support fast charging.

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 resumes 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

警告

⚠ 在使用转向内窥镜前，请注意以下操作：

- ▶ 请勿擅自使用我司摄像头搭配其他厂家主机，即使接口相同也不可；
- ▶ 请勿在某些可能接触带电缆或者带电物体区域使用该产品，裸露在外的金属部位能导电，可能会导致意想不到的结果发生；
- ▶ 请勿让儿童单独操作该产品；
- ▶ 该产品禁止用于医疗或人体检测；
- ▶ 请保持产品干净，避免暴晒、或者与水，油污以及腐蚀性液体直接接触；
- ▶ 本机为整机不防水；
- ▶ 确认拨轮回到中位方可拔出蛇管，严禁暴力转动拨轮；
- ▶ 禁止扭动，拉扯蛇管前端弯曲体；
- ▶ 请轻拿轻放，不要过度弯折蛇管，蛇管弯曲极限为一圈。

产品简介

概述

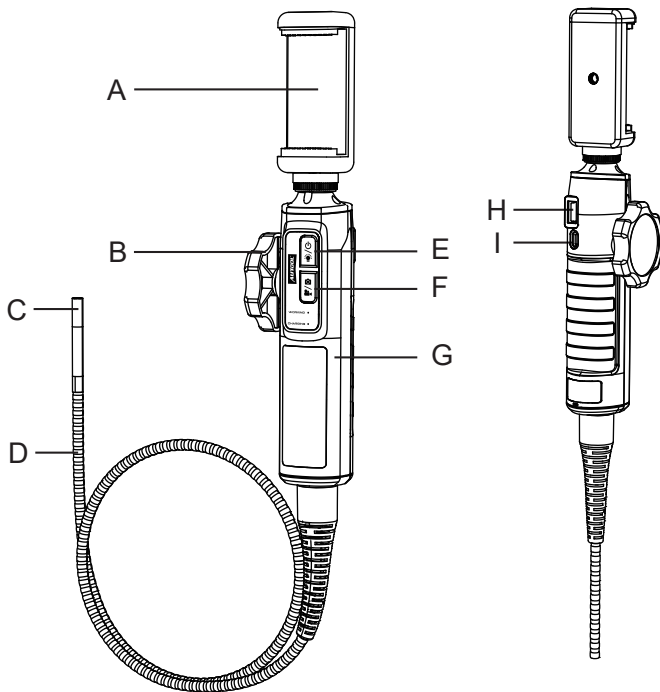
SVB302转向内窥镜是针对全球汽车市场最新推出的一款重要产品，专门用于探测汽车蒸发箱、燃烧室、三元催化传感器等难以进入的窄小弯曲空间。该产品具有两方向180°旋转探测功能，并具有独特的高温警报功能，方便用户将细小的探头深入狭小的空间内部，然后将生动、清晰、全方位的视频与图片通过数据线传送至手机显示屏上，满足您多样化的检测需求。

工作环境及技术指标

摄像头直径	6.0mm(±0.35)
分辨率	1920*1080
景深	20~100mm
视角	70°
手动调光	支持三档调节
USB接口	USB2.0
摄像头光源	高亮LED灯
防水等级	IP67
蛇管材质	弹性金属软管
蛇管长度	1m
高温保护	高温智能保护, 设备自动关机
转向方向	两方向
转向角度	最大210°
弯曲半径	35mm
输入电源	DC 5V
操作环境	-10~80°C
湿度	15~90%

产品结构

结构图



A	手机支架	B	转向拨轮
C	百万高清摄像头	D	弹性蛇管
E	开机/灯光调节键	F	拍照/录像键
G	手柄主体	H	USB接口
I	Type-C 充电口		

操作说明

手机APP 安装

- 安卓移动设备请扫描下方二维码下载安装APP。
- 苹果移动设备请在Appstore搜索“JCAM”，然后下载并安装APP；或扫描下方二维码下载安装APP。



操作指引

- **手机安装：**调节手机支架的调节旋钮，将手机装在手机支架上（支持3.5~6.3寸屏手机），用数据线连接手机和内窥镜；
- **开机/关机：**长按开机键（E）2秒开机，工作指示灯亮绿色。用手机打开APP，蛇管LED灯亮，手机显示图像。如再次长按开机键（E）2秒则关机；
- **LED灯调节：**开机后，LED灯默认最亮，短按灯光调节键（E）调节亮度，亮度分3档，第4档为关闭LED灯；
- **拍照/录像：**长按录像键（F）可以录像，格式为MP4。短按拍照键（F）可以拍照，格式为jpg；
- **PDF生成：**打开APP，依次选择设置>>PDF生成设置页脚、页眉、LOGO>>PDF制作输入信息，即可生成影像检测单；
- **充电：**请用5V适配器或者移动电源连接Type-C/USB线进行充电。充电电压和电流是5V/1A，过高的电压有可能烧坏本机。请注意：本机不支持快充。

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；

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- 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。

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退换货

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- 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:

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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

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