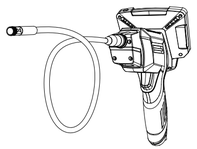
折页
印刷1000份
尺寸：5.5cm*11.5cm

双镜头检测内窥镜



用户手册

CN

inskam112-2

安全警告:

警告！ 阅读并理解所有说明。不遵守下列所有说明可能会导致触电、火灾和 / 或严重的人身伤害。

欢迎:

欢迎购买此产品。使用前请仔细阅读说明书。本产品是具有实时视频观看，录像和图像捕捉等功能的实用类设备，适用于狭窄区域和无法观察的区域。如：汽车维修，下水道检查 / 维护等。

特征:

1. 1080P 高分辨率：1080P HD 和 4.3 英寸大屏幕可以捕获更多细节，并为您提供最佳的视觉体验。
2. 录制视频和拍照：该设备可以创建高清照片和视频，并保存在 SD 卡中。
3. 双镜头设计：70° 前镜和 70° 侧镜（共 140° 视角）有利于消除盲点并拍摄更详细的照片和视频。
4. 对焦距离：焦距为 4 厘米 – 500 厘米。
5. 高强度辅助光源：6 个可调节 LED 灯，便于在黑暗环境中使用。
6. IP67 防水：该设备配备了半刚性防水电缆，可以在潮湿环境中使用。

应用:

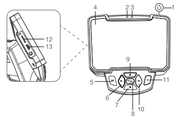
1. **管状 / 水管清洁：**检查管道后，它有助于清洁，生锈，腐蚀，灰尘和裂缝。
2. **造船业：**用于检查锅炉,汽轮机,柴油机,管道。
3. **工业机械：**用于检查发动机疤痕或磨损，变速箱，液压系统，大大减少停机时间。
4. **电子，电子行业：**用于确认产品的接线状态，检查机器的工作状态等。

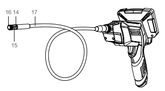
配件清单:

1. LCD数字内窥镜
2. 用户手册
3. USB 数据线
4. 配件 – 挂钩，磁铁，倒镜，保护帽

特征:

(1) 部件名称和功能





1. 电源键
2. 充电指示灯
3. 工作指示灯
4. 4.3 寸显示屏
5. 拍照 / 录像键
6. 返回 / 文件浏览键
7. 下翻键
8. 镜头切换 / 确认键
9. 上翻键
10. 设置键
11. 灯光调节键
12. Micro TF 卡槽
13. DC 5V 输入
14. 侧镜辅助灯光
15. 倒镜
16. 前镜
17. 硬线

(2) 部件说明

1. **电源键：** –– 长按 3 秒钟开关机。
2. **充电指示灯：** –– 充电时亮红灯，充满熄灭。
3. **工作指示灯：** –– 设备开启后，工作指示灯蓝色常亮。
4. **4.3 寸显示屏：**––4.3 英寸全彩液晶屏，可实时查看测试视频。
5. **拍照 / 录像键：**

   –– 拍照预览模式，短按拍照，长按录像，然后按一下停止录像。
6. **返回 / 文件浏览键：**

   –– 拍照预览模式，短按进入文件浏览页面。

   –– 其他模式；短按可返回上一级菜单。
7. **下翻键：**

   –– 向下或向右移动。
8. **镜头切换 / 确认键：**

   –– 拍照预览模式，短按切换镜头。

   –– 其它模式，短按确认。
9. **上翻键：**

   –– 向上或向左移动。

10. **设置键：**

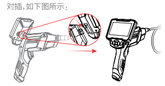
    –– 短按进入菜单页面，您可以在其中设置分辨率 / 语言设置 / 日期、时间 / 日期标签 / 亮度 / 屏幕保护 / 自动关机 / 格式化 / 默认设置 / 版本。
11. **灯光调节键：**

    ––6 颗可调节 LED 灯，灯光亮度分为三级调节。
12. **Micro TF 卡槽：** –– 最高支持 64GB MicroTF 卡，仅支持 10 级或更高级别 FAT32 格式的 TF 卡（常规出货未配 TF 卡）。
13. **DC 5V 输入：** –– 电源充电接口。
14. **侧镜辅助灯光：** –– 提升侧镜观看效果。
15. **侧镜：** ––70° 侧镜，以帮助检测管道的侧面。
16. **前镜：** ––70° 前镜，以帮助检测管道的正面。
17. **硬线：** –– 灵活的半刚性电缆，可自由变形。

安装步骤:

(1) 主机安装

1. **安装：**把显示屏背后接口对准手柄上接口，然后把显示屏后面的连接头与主机的连接头按前头方向对插，如下图所示：



2. **拆卸：**先用手握住手柄，再将主机背面的卡扣扳机向上按然后向上拉，即可轻松的将主机拆卸，如下图所示：

(2) 主机安装

首先确保软管前头与手柄的箭头凹槽对齐，然后用力连接两个部件，将软管安装到手柄上，如下图所示：

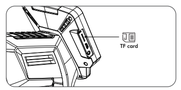
(3) 配件安装

配件安装如下图所示：

使用步骤:

(1) 基本操作

1. 将 MicroTF 卡（常规款未配备）正确插入 MicroTF 卡插槽，轻轻按压直到 TF 卡被锁定（注意：必须插入 Class10 或以上的 MicroTF 卡才能记录和存储图片和视频）。



2. 长按 3s **电源键**，打开设备，然后按**灯光调节键**调节镜头灯的亮度。
3. 短按**拍照 / 录像键**拍照，长按录制视频，再按一次停止录制。
4. 短按**返回 / 文件浏览键**进入文件浏览页面，查看或删除所拍摄和录制的文件。

充电:

当电量偏低或者低电量自动关机时，需要使用电源适配器为设备进行充电，适配器需使用规定的 5V/1A（充电时，设备显示屏和手柄要连接好）。

电池充电状态下，设备的充电指示灯将呈红色，电池完成充电后，充电指示灯将熄灭，整个充电过程约 2.5 小时，充满状态下可以使用 3 小时（注意：设备完全无电状态下，充电时间至少要 1 小时以上才能正常使用）。

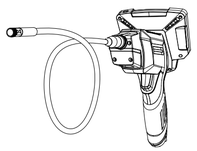
技术参数:

型号	Inskam112-2
显示器	4.3英寸彩色液晶显示屏
分辨率	1920*1080P
正面/侧面镜头	70°/ 70°
语言	简体中文，繁体中文，英语，德语，西班牙语，法语，意大利语，俄语，日语等
线长	3m, 5m 可选
焦距	4CM—500CM
防水等级	IP67 (仅适用于镜头/灯泡)
镜头直径	8mm
电池容量	2600毫安
续航时间	约3小时

故障排除:

问题	解决方法
设备无法开启	1. 检电池充满电后使用 2. 确认电源是否已成功连接
TF卡读取失败	1. 确认TF卡是否符合要求（最高支持格式为FAT32的64GB MicroTF卡，且传输速度必须是Class10以上） 2. 取下TF卡后重新插入
设备死机	1. 插入USB数据线充电，自动关机，然后按电源按键进行重置
屏幕上有污迹或涂抹污迹	1. 用软布仔细清洁屏幕

Dual Lens Inspection Camera



User Manual

EN

inskam112-2

SAFETY WARNING:

WARNING! Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

WELCOME:

Welcome to buy this product. Before use, please read the instructions carefully.This product is a utility class equipment with the function of real-time video viewing, video recording and picture capturing, etc.. which is suitable for usage in narrow area and the area which cannot be observed by sight, such as: vehicle repair, sewer inspection/maintenance, etc.

FEATURES:

1. 1080P high resolution: 1080P HD and a large 4.3-inch screen can capture more details and provide you with the best visual experience.
2. Record video and take photos: The device can create high-definition photos and videos and save them in the SD card.
3. Dual lens design: 70° front mirror and 70° side mirror (total 140° viewing angle) help eliminate blind spots and take more detailed photos and videos.
4. Focusing distance: The focal length is 4 cm–500 cm.

5. High-intensity auxiliary light source: 6 adjustable LED lights for easy use in dark environments.
6. IP67 waterproof: The device is equipped with a semi-rigid waterproof cable, which can be used in a humid environment.

APPLICATION:

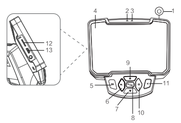
1. **Tubular/Water Pipe Cleaning:** It helps to clean, rust, corrosion, dust and crack after the pipe is inspected.
2. **Shipbuilding industry:** used to inspect boilers, steam turbines, diesel engines, pipelines.
3. **Industrial machinery:** used to check for engine scars or wear, gearboxes, hydraulic systems, greatly reducing downtime..
4. **Electronics, electronics industry:** used to confirm the wiring status of the product, check the working condition of the machine, etc.

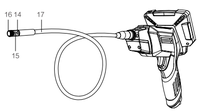
ACCESSORIES LIST:

1. LCD Digital endoscope
2. User manual
3. USB data cable
4. Accessories – hooks, magnets, side mirrors, protective cap

FEATURES:

(1) Part name and function





1. Power button
2. Charging indicator
3. Work indicator
4. 4.3 inch screen
5. Photo / Video button
6. Back / File browse button
7. Scroll down button
8. Lens switch / confirm button
9. Up button
10. Set button
11. Light adjustment button
12. Micro TF card slot
13. DC 5V input
14. Side mirror auxiliary lighting
15. Side mirror
16. Front mirror
17. Hardware

(2) Function introduction

1. **Power button:**––long press for 3 seconds to switch on and off.

   Charging indicator: ––Red light on when charging, full off.
2. **Work indicator:**–After the device is turned on, the work indicator is always blue.
3. **4.3 inch display screen:** ––4.3 inch full color LCD screen, you can view the test video in real time.
4. **Photo / video button:**

   ––Photo preview mode, short press to take a photo, long press to record, and then click to stop recording.

5. **Back / File browse button:**

   ––Photo preview mode, short press to enter the file browsing page.

   ––Other modes: Short press to return to the previous menu.
6. **Scroll down button:**

   –Move down or right.
7. **Lens switch / confirm button:**

   ––Photo preview mode, short press to switch lens.

   –For other modes, short press to confirm.
8. **Up button:**:

   –Move up or left.
9. **Set button:**

   –Short press to enter the menu page, where you can set the resolution / language setting / date, time / date label / brightness / screen saver / auto power off / formatting / default setting / version.
10. **Light adjustment button:**

    ––6 adjustable LED lights, the light brightness is divided into three levels of adjustment.

5. **Micro TF card slot:** ––Maximum support 64GB MicroTF card, only support TF card in FAT32 format at level 10 or higher (normally shipped without TF card).

   DC 5V input: ––Power charging interface.

   Side mirror auxiliary lighting: ––Enhance the viewing effect of the side mirror.

   Side mirror: ––70° side mirror to help detect the side of the pipe.

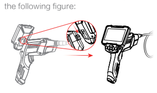
   Front mirror: ––70° front mirror to help detect the front of the pipe.

   Hard wire:–Flexible semi-rigid cable, freely deformable.

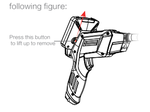
INSTALLATION STEPS:

(1) Host installation

1. **Installation:** Align the connector on the back of the display with the connector on the handle, and then insert the connector on the back of the display and the connector of the host in the direction of the arrow, as shown in the following figure:



2. **Disassembly:** first hold the handle with your hand, then pull the trigger on the back of the host up and then pull it up, you can easily disassemble the host, as shown in the following figure:



(2) Hose Installation

Install the flexible tube onto the handle by first making sure that the hose arrow is aligned with the arrow groove of the handle and forcibly connecting the two parts

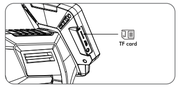
(3) Accessories installation:

The accessories are installed as shown below:

STEPS FOR USAGE:

(1) Basic operation

1. Insert the MicroTF card (normally not equipped) into the MicroTF card slot and press gently until the TF card is locked. (Note: MicroTF cards of Class 10 or higher must be inserted to record and store pictures and videos).



2. Press and hold the 3s **power / set button** to turn on the device, then press the light adjustment / up button to adjust the brightness of the lens.
3. Short press to take a picture, **video / confirm button** to take a picture, long press to record a video, press again to stop recording.
4. Short press the **Back/File Browse button** to enter the file browsing page to view or delete the captured and recorded files.

CHARGING:

When the power is low or the low power automatically shuts down, you need to use the power adapter to charge the device. The adapter needs to use the specified 5V / 1A (when charging, the device display and handle must be connected).

When the battery is charging, the device's charging indicator will be red. After the battery is fully charged, the charging indicator will turn off. The entire charging process is about 2.5 hours. It can be used for 3 hours when fully charged (Note: When the device is completely discharged, charge It must be at least 1 hour before it can be used normally).

TECHNICAL PARAMETERS:

Model	Inskam112-2
Monitor	4.3–inch color LCD
Resolution	1920*1080P
Front / side lens	70° / 70°
Language	Simplified Chinese, Traditional Chinese, English, German, Spanish, French, Italian, Russian, Japanese, etc.
Line length	3m, 5m optional
Focal length	4CM—500CM
Waterproof level	IP67 (only for lens/lamp)
Lens diameter	8mm
Battery capacity	2600mAh
Battery endurance	About 3 hours

TROUBLESHOOTING:

Problem	Solution
Device cannot be turned on	1.Does the battery have electricity? 2.Has the power been successfully connected?
TF card reading is unsuccessful	1.Is the memory card format correct? (this device only supports FAT32 file format) 2.Re–insert the TF card after removing it
After the device is connected to the PC, the TF card cannot be read.	1.Reconnect the device and PC 2.Confirm whether to enter the Mass Storage mode
Device crash	1.Plug in the USB data cable to charge, automatically shut down, then press the power button to reset
Smudged or smeared on the screen	1.Carefully clean the screen with a soft cloth