RF-39B

用户使用手册　USER MANUAL

感谢购买使用我司产品，务请仔细阅读并妥善保管本手册,它将帮助你更好地使用产品。

Thanks for using our products. Please read the manual carefully and it wil be helpful for you to use this products better.

安全指引

- 在安装设备过程中，务必仔细阅读本安全指引，严格按照安装使用说明进行操作，妥善保管此说明书，以备参考。

- 本相机适配的电源电压为AC100V—240V@50-60Hz，使用前请确认电源是否在此范围内。

- 相机标准供电为直流电压5V-2A，建议搭配此电源适配器使用。

- 我们建议相机放置在0℃至50℃，湿度小于90%室内环境中使用，防止异物进入机内，勿将液体溅到机器上，防止出现危险。

- 运输、保管及安装过程中防止剧烈振动和浸泡，以免损坏产品。

- 请不要擅自拆卸相机，机内无用户可自行维修的零件。

- 清洗摄像机外壳时，请使用干的软布擦拭，如污垢严重时，请使用中性清洁剂轻轻擦拭。

- 如果图像出现灰影，请使用吹气球吹掉滤光片上的灰尘，切勿使用清洁剂擦拭。

装箱清单

主机	Type-C线	HD线	鼠标	说明书卡片
1台	1条	1条	1个	1个

操作说明

■ 使用准备

● 拧开镜头盖并安装镜头(注意：撕掉感光片前面的防尘保护膜！)；

● 分别插上HD线和TYPE-C电源线，电源指示灯由红灯变为黄灯后表示相机已经开机；

● 若需连接电脑端使用，仅需将TYPE-C线USB端连接到电脑即可；

■ 主菜单说明（以中文为例）

● 主页设置

如图所示（相机开机二级菜单默认折叠状态）

点击折叠图标后展开菜单

📷 **拍照**：拍照之前先插入U盘，等图标变成深灰色之后可点击拍照。

📹 **录像**：录像之前先插入U盘，等图标变成深灰色之后可点击录像，再点一次为结束录像。

📁 **回放**：点击文件夹图标，可回放查看已拍照片和已录视频。

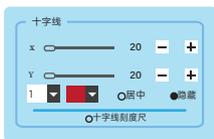❄ **冻结**：点击冻结图标可以冻结画面，再点击一次为解除冻结状态。

📱 **同屏对比**：先将需要对比的产品调至清晰，再点击"同屏对比"图标，会自动冻结画面左半边图像进行比较，左边为冻结的比较图像，右边为实时图像，如果想结束对比，再次点击图标即可关闭。
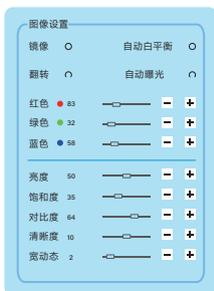
💡 **一键曝光**：曝光作用（**在当前环境下将相机的亮度调为最佳观察亮度**）

⊕ **一键白平衡**：白平衡作用（**用来校准图像颜色**）。操作方法：将一张"白纸（也可以是其它白色物体）"放在镜头下面覆盖全屏，再单击此图标就可以校准颜色。使用一键白平衡以后再放置需要观察的物体。

■十字线说明

```
┌─────────────────────┐
│  十字线              │
│                      │
│  X  ──●──────  20 [−][+] │
│                      │
│  Y  ──●──────  20 [−][+] │
│                      │
│  [1▼] [▼]  ●居中  ●隐藏 │
│        ○十字线刻度尺    │
└─────────────────────┘
```

十字线分为横X轴8根、竖Y轴8根。十字线调节方法：通过"[1▼]"选择几号十字线显示。**注：要把"隐藏"关闭才会显示，**如果需要十字线居中的话直接选中"●居中"即可。也可以通过调节X、Y后面的滑块或者"+""−"来调节十字线的位置。如果需要单独隐藏某组十字线可以先选择对应的某组十字线，再选中后面的"隐藏"。十字刻度尺：选中"十字刻度尺"在显示器中间显示十字刻度线。另外可通过"[▼]"单独设置十字线的颜色。

■图像设置

```
┌─────────────────────┐
│  图像设置            │
│                      │
│  镜像  ○    自动白平衡  ○ │
│                      │
│  翻转  ∩    自动曝光   ∩ │
│                      │
│  红色 ●83  ──●──  [−][+] │
│  绿色 ●32  ──●──  [−][+] │
│  蓝色 ●58  ──●──  [−][+] │
│                      │
│  亮度  50  ──●──  [−][+] │
│  饱和度 35 ──●──  [−][+] │
│  对比度 64 ──●──  [−][+] │
│  清晰度 10 ──●──  [−][+] │
│  宽动态 2  ●──────  [−][+] │
└─────────────────────┘
```

● 镜像：使图像左右镜像。

● 翻转：使图像上下翻转。

● 自动白平衡：实时自动校准图像颜色。

● 自动曝光：实时自动将图像亮度调为最佳观察亮度。

● 红色增益：调整图像中红色占比。

● 绿色增益：调整图像中绿色占比。

● 蓝色增益：调整图像中蓝色占比。

● 亮度：调整图像亮度。

● 饱和度：调整图像中颜色浓度。

● 对比度：图像颜色差异对比。

● 清晰度：调整图像呈现的细节效果。

● 宽动态：调整整体图像的亮度。

■语言设置

● 语言设置英语，简体中文，繁体中文，西班牙语。

■版本号和默认值设置

● 点击版本号可查看当前软件版本

● 点击默认值可将所有设置恢复为出厂设置

◆ 采用829万像素索尼CMOS 图像传感器；
◆ 采用1/2.8英寸图像传感器；
◆ HDMI 3840*2160 30帧/1080P 60帧图像输出；
◆ USB2.0免驱动输出3840*2160 30帧图像输出；
◆ 支持拍照 、录像,JPG格式；
◆ 支持手动/自动曝光,亮度可调
◆ 支持手动/自动白平衡，红、绿、蓝可调；
◆ 提供8条画线功能，线条颜色、粗细，位置可调；
◆ 提供中心十字线显示/关闭；
◆ 支持U盘存储、鼠标操作；
◆ 拍照不抖动图像更清晰；
◆ 支持中文、英文、中文繁体、西班牙文、菜单语言（默认英文）；
◆ 支持关机设置参数保存；

规格参数

传感器	1/2.8英寸索尼CM0S传感器	像素尺寸	1.45μm × 1.45μm
USB接口	USB2.0 X2（插U盘，接鼠标）	HDMI输出	3840*2160 30帧/1080P 60帧
镜头接口	CS接口	曝光	一键曝光/自动曝光
白平衡	一键白平衡/自动白平衡	存储	支持U盘存储、鼠标操作
输入电压	TYPE-C直流5V-2A	十字线	支持中心十字线，共8条（颜色、位置可调）
镜像	支持水平/上下翻转	菜单语言	英文/中文/中文繁体/西班牙文
净重	187克	毛重	582克
产品尺寸	81*59*48mm	包装尺寸	190*150*80mm

Safety Guidelines

- During device installation,read this safety guide carefully, strictly follow the installation and usage instructions, and keep this manual for reference.

- The power voltage of this camera is AC100V－240V@50-60Hz, please confirm whether the power is within this range before use.

- The standard power for the camera is DC 5V-2A, We recommend using it with this power adapter.

- We recommend that the camera be placed at 0°C to 50°C and used in indoor environments with humidity less than 90%. Prevent foreign bodies from entering the machine. Do not splash liquid on the machine to prevent danger.

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Packing List

Host	Type-C cable	HD cable	Mouse	Instruction Card
1	1	1	1	1

Operation Instruction

◼ Preparation for use

● Unscrew the lens head cover and install the camera: Note: Tear off the dust protective fim on the front of the film!

● Plug in the HD cable and TYPE-C power cable respectively. When the power indicator changes from red to yellow, the camera is powered on.

● If you need to connect the computer to use, just connect the TYPE-C cable USB end to the computer.

◼ Main Menu Description (English as an example)

● Home page Settings (Camera startup secondary menu is folded by default)

As shown in the figure (the default folding state of the secondary menu of the camera is turned on)

Tap the collapse icon to expand the menu
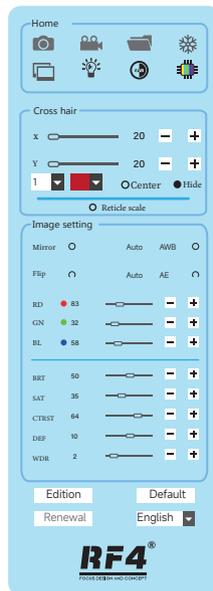
● Take photos: Insert USB flash disk before taking photos, and click to take photos after the icon turns dark gray.

● Video recording: Insert USB flash disk before recording, and click video after the icon becomes dark gray, and click again to end the recording.

● Playback: Click on the file icon to playback to view the taken photos and recorded videos.

● Freeze: Click the freeze icon to freeze the screen, click again to unfreeze the state.

● Screen comparison: First adjust the product screen to be compared to clear, and then click the "screen comparison" icon, it will automatically freeze the image on the left half of the screen for comparison, the left is the frozen comparison image, the right is the real-time image, if you want to end the comparison, click the icon again to close.

● One-click exposure: Exposure effect: (Adjust the brightness of the camera to the optimal viewing brightness in the current environment)Click the icon to enter the one-click exposure state, and the camera will adjust the primary exposure value according to the current ambient brightness, so that it matches the current optimal viewing brightness.

● One-click white balance: White balance action: (used to calibrate image color).operational approach: Put a piece of "white paper (or other white object)" under the lens to cover the full screen, and then click this icon to calibrate the color. Use the one-click white balance before placing the object to be observed.

◼ Cross line description
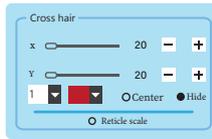
- The reticles are divided into 8 horizontal X axes and 8 vertical Y axes.
- Reticle adjustment method.Display by selecting the number of crosshair" 1 ▼ ", **note:You need to turn "Hide" off to show**.If you want to center the reticle, select Center " ●Center " .You can also adjust the position of the reticle by adjusting the sliders behind X and Y or "+" and "-".If you want to hide a group of reticles, select a group of reticles and select Hide.In addition, the color" ▼ " of the reticle can be set separately.

◼ Image Settings
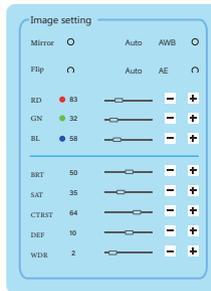
- Mirror: Make the image mirror left and right
- Flip: Flip the image up and down.
- Automatic white balance: Automatic image color calibration in real time
- Automatic exposure: Automatically adjusts the image brightness to the optimal viewing brightness in real time.
- Red gain: Adjust the proportion of red in the image.
- Green gain: Adjust the proportion of green in the image.
- Blue gain: Adjust the proportion of blue in the image.
- Brightness: Adjust image brightness.
- Saturation: Adjusts the color concentration in the image.
- Contrast: contrast of image color differences.
- Sharpness: Adjust the detail effect of the image rendering.
- Wide dynamic: Adjust the brightness of the overall image.

◼ Language Settings

- Language Settings English, Simplified Chinese, Traditional Chinese, Spanish.

◼ Version number and default value Settings

- Click the version number to view the current software version.
- Click default values to restore all Settings to factory Settings.

Camera Specifications

- ◆ Adopt 8.29 million pixel SONY CMOS image sensor;
- ◆ Adopt 1/2.8 inch image sensor;
- ◆ HDMI 3840*2160 30 frames /1080P 60 frames image output;
- ◆ USB2.0 drive free output 3840*2160 30 frame image output;
- ◆ Support photo, video,JPG format;
- ◆ Support manual/automatic exposure, brightness can be adjusted
- ◆ Support manual/automatic white balance, red, green, blue adjustable;
- ◆ Provide 8 lines, line color, thickness, position can be adjusted;
- ◆ Provide center cross line display/close;
- ◆ Support U disk storage, mouse operation;
- ◆ The picture is clearer without shaking;
- ◆ Support Chinese, English, traditional Chinese, Spanish, menu language (default English);
- ◆ Support shutdown Settings parameter saving;

Specification Parameter

Sensor	1/2.8 inch SONY CMos sensor	Pixel size	1.45μm × 1.45μm
USB Interface	USB2.0X2 (insert U disk, connect mouse)	HDMI output	3840*2160 30 frames /1080P 60 frames
Lens Interface	CS interface	Exposure	One-click exposure/automatic exposure
White Balance	One-click White balance/automatic white balance	Storage	USB flash drive storage and mouse operation are supported
Input Voltage	TYPE-C DC 5V-2A	Cross line	Support center cross line, a total of 8 (color, position adjustable)
Mirror	Horizontal or up-and-down flip is supported	Menu language	English/Chinese/Traditional Chinese/Spanish
Net Weight	187g	Gross weight	582g
Product Size	81*59*48mm	Package size	190*150*80mm