BENRO®

REDDOG R2PRO
OPERATING INSTRUCTIONS

请根据手机系统版本选择不同的二维码进行扫描安装APP

Please scan the QR code according to the system of your mobile phone.

Android 应用宝　　Android google　　Apple Store
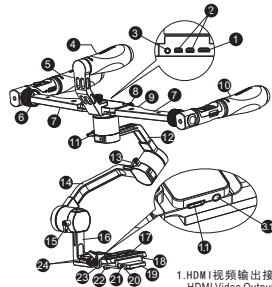

Thank you for making BENRO your choice for professional photographic equipment. Your BENRO gear is manufactured to provide years of dependable service. In order to obtain optimum satisfaction and performance, we suggest that you carefully read these instructions.

感谢您选用百诺专业摄影器材，百诺产品提供值得您信赖的售后服务。为了让您对百诺产品的使用更加满意，我们建议您仔细阅读下面的使用说明。

部件名称 Name of Components

17. 快装板
Quick Release Plate
18. 滑动底座
Sliding Camera Plate
19. 相机支架
Camera Support
20. 滑动底座锁紧旋钮
Sliding Base Lock Knob
21. 保险栓
Safety Button
22. 快装板锁紧旋钮
QR Plate Lock Knob
23. 镜头托
Lens Support
24. 外设拓展总线
External Expand Cable
25. 相机参数显示屏
Camera Specs Display
26. 拨轮
Dial Disk
27. 拨杆
Dial Rod
28. 摇杆
Joystick
29. 外接麦克风接口
Microphone Support
30. 云台及相机状态
指示灯
Gimbal and Camera
Status LED Light

4. 单手提手柄
Single Hand Handle
5. 右手柄
Right Handle
6. 锁紧旋钮
Locking Knob
7. 转动臂
Rotation Arm
8. 锁紧旋钮
Locking Knob
9. 保险栓
Safety Button
10. 左手柄
Left Handle
11. 水平锁紧旋钮
Horizontal Lock Knob
12. 竖臂
Vertical Arm
13. 横滚轴锁紧旋钮
Roll Axis Lock Knob
14. 横臂
Horizontal Arm
15. 仰俯轴锁紧旋钮
Tilt Axis Lock Knob
16. 仰俯臂
Tilt Arm

1. HDMI视频输出接口
HDMI Video Output
1.1. HDMI高清接口
HDMI high definition support
2. 外设拓展总线
External Expand Cable Slot
3. 外接麦克风接口
Microphone Support
3.1. 3. 5mm麦克风接口
3. 5mmMicrophone Support

31. 缩放键
Zooming Button
32. 两段对焦快门键
Shutter Button
33. ON（Mode）/OFF
ON/OFF Button
34. 录像控制键
Recording Button

R2PRO 使用视频二维码 QR codes for R2PRO operation videos
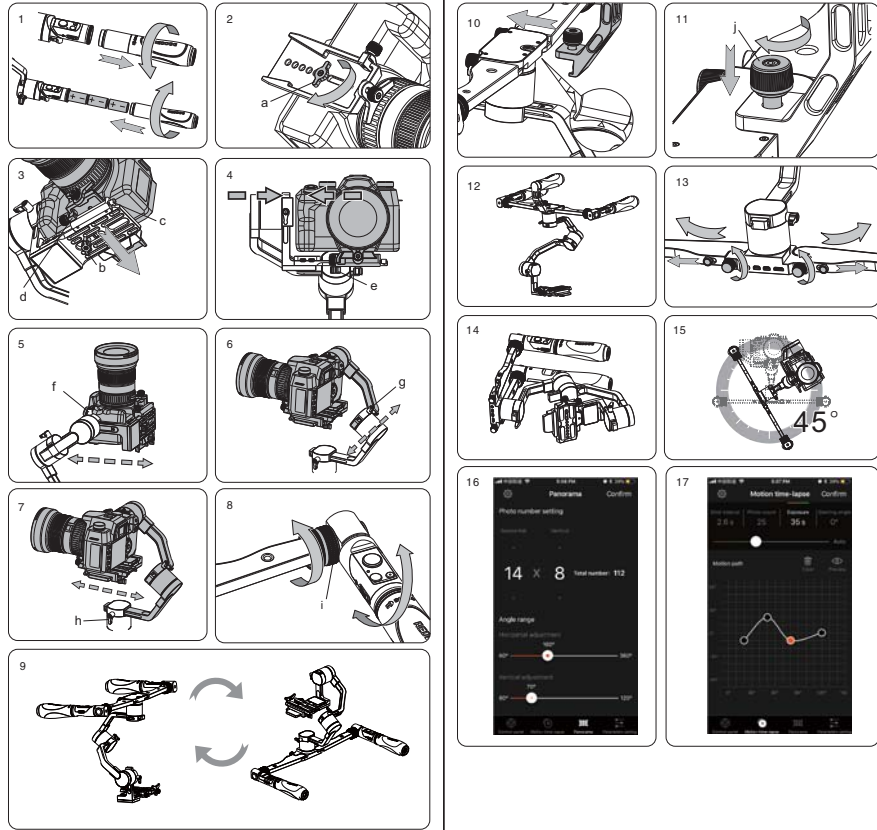
中文视频

控制按键介绍 Control Button Introduction

摇杆
摇杆的动作对应镜头上下左右四个方向调节。
Joystick
In select gimbal modes the Joystick will move the camera up, down, left and right

录像控制键：
单击录像
Recording Button
Press to record

两段对焦快门键：
单击拍照
Shutter Button:
Press to take photos

云台及相机状态指示灯：
低电量 – 红色
切换模式状态灯闪烁
蓝色 – 锁头模式
橙色 – 水平跟随模式
紫色 – 全跟随模式
R2PRO 按键板指示灯颜色定义
1、蓝灯闪烁：蓝牙待机状态
（将电源按钮拨至ON一侧，并保持5秒，进入蓝牙待机状态）
2、蓝灯常亮：APP与云台连接上
3、蓝灯快闪：固件升级中
云台工作模式下
1、蓝色灯常亮：锁头模式
2、橙色灯常亮：横向跟随模式
3、紫色灯常亮：全跟随模式
4、红色灯常亮：电池电量低

缩放键：
放大缩小画面
Zooming Button:
Zoom in and zoom out

ON(Mode)/OF
控制开关机，向下拨动开机，向上拨动关机；
向下拨动一次开机，再一次向下拨动即转换拍摄模式（在全跟随 / 横向跟随 / 锁定模式中切换）
On/Off
Pull down to turn on and pull up to turn off. Pulling the lever down once turns on the gimbal. To change the shooting modes pull down additional times to activate these shooting modes: All Follow, Horizontal Follow and Lock Mode.

The Gimbal and Camera Status LED Light:
Low power status: Red
Changing Mode LED light Blinking Status
Blue: Lock mode
Orange: horizontal follow mode
Purple: all follow mode
RedDog R2PRO LED Color Definition
1.Blue light blinking: Bluetooth is pairing. Pull down (towards on) and hold down the power button for 5 seconds . This enables blue tooth pairing. The blue light starts to blink.
2.Blue light is always on: APP paired with the gimbal.
3.Blue light is blinking fast: hardware is upgrading
Gimbal Working Mode
1.Blue light is always on: lock mode
2.Orange light is always on: horizontal follow mode
3.Purple light is always on: all follow mode
4.Red light is always on: Low battery power

相机参数调节
1、旋转拨轮可以调节相机参数，按下拨轮可以切换到另外一项参数。
2、上下推动拨杆可以让相机进行对焦。
Camera Specs Adjustment
1.You can adjust the camera specs by rotating the Dial Disk and switch to next specs by pressing it.
2. You can focus the camera by pushing up and down the Dial Rod.

OPERATING INSTRUCTIONS

Install Battery (Figure 1)

Please charge the battery before use. Unscrew the handle and put 3 pieces of 26350 batteries inside. Screw the cap.

Note: please install the batteries in the correct polarity. The RedDog R2 pro must be used with the correct batteries (26350). Using other batteries may damage the unit.

Install Camera (Figure 2, 3)

1.Install the QR plate on the camera and tighten the knob "a" clockwise. Then mount the QR plate onto the sliding base to move the plate. Put the gravity center of camera on the center of gimbal. Then tighten the knob "b" clockwise.

Note: If you need to remove the QR plate, you should loosen the lock knob "b", press and hold safety button "c". There is unique memory lock block "d" on the QR plate. You can record the corresponding balance position of camera in order to use directly next time.

Balance Adjustment (Figure 4, 5, 6, 7)

1. Adjust the sliding plate according to the camera size. Make the camera lens stay at front and horizontally. Loosen the lock knob "e" at the bottom of sliding plate. Slides left and right the camera and keep it 5mm away from the camera support

2.The balance adjustment of the tilt axis: Position the camera pointing upwards; Loosen the screw "f" (about three rounds); and then move the Fixed Camera Plate to allow the camera to stay vertical to the ground. Make sure to lock the screw "f" after adjustment is complete.

3.The balance adjustment of roll axis. Position the camera to point forwards; Loosen the screw"g" (about three rounds); and then adjust the horizontal arm to keep the horizontal status to the ground when the horizontal arm is static. Make sure to lock the screw"g" after completed the adjustment.

4.The balance adjustment of the Pan axis. Loosen the screw"h"; adjust the vertical arm to keep the horizontal status with the ground when the vertical arm is static. Make sure to lock the screw "h" after the adjustment is complete. All adjustments completed.

High/Low Position Interchange (Figure 8, 9)

The under-slung position takes less effort when shooting at low angles or shooting for long period of time.

1.Loosen the knob"l" clockwise, and then rotate the left and right handle to be 180 degree clockwise. Fix the knob"l" counter clockwise to complete the handle positioning.

Change to Single Handle Position (Figure 10, 11, 12)

1. Mount the single handle to the rotation arm bracket. Rotate the triangle position of the rotation arm bracket. It needs to align with the single handle. Then rotate knob "j" clockwise till tighten it to finish the change.

Quick Storage (Figure 13, 14)

1.Loosen the knob"k" counter clockwise and pull the safety button to the UNLOCK port at the same time to rotate fold the rotation arm.

2.The gimbal comes with a storage case, which allows quick storage of the gear. It is portable.

Roll Shooting (Figure 15)

1.When the LED light is in purple operation mode, open the roll button at the upper right corner on APP to start the roll follow mode

2.Under this mode, when you tilt the camera, the gimbal will follow this movement.

Panoramic Shooting (Figure 16)

1.Turn on the gimbal and adjust the gimbal to move the camera to shooting position (shutter cable needs to be connected).

2.Connect the APP to the gimbal

3.Specs setting for panoramic shooting: (a) Set photo numbers (b) Set photography angle span (c) Confirmed. Start taking photos.

Motion Time Lapse (Figure 17)

1.When the LED light is in purple operation mode, open the roll button at the upper right corner on APP to start the roll follow mode

2.Connect the APP to the gimbal: (a) Set time-lapse specs (b) Describe photography track (c) Preview photography track (d) Confirmed. Start taking photos.

Note:

1.When the exposure time is set to automatic, the camera needs to be at M stop. Otherwise it will fail to take pictures because it is unable to focus.

2.When the exposure time is set to automatic, the camera needs to be at the slow shutter mode.

When you power up the gimbal, use the on/off switch to select the shooting modes.

Horizontal Follow Mode

The lens will move horizontally with the movement of the handle left and right.

All Follow Mode

The tilt and pan direction of the lens will move with the movement of the handle up and down, left and right.

Lock Mode

The lens will keep in one direction no matter how handle moves.

使用方法(简体中文)

电池安装：（如图 1 所示）

首次使用时，请务必给电池充满电，拧开手柄，装入3节26350锂电池后拧紧。
注：请按照电池极性安装3节电池。切勿将不同电量的电池混用，否则将会损坏电池。

相机安装：（如图 2、3所示）

1、将快装板装在相机上，然后顺时针旋转锁紧旋钮a，再把快装板装入滑动底座，这时可以移动快装板，将相机的重心落在稳定器的中心上，然后顺时针旋转锁紧旋钮b。
注：取出快装板时请松开钮锁紧旋钮b后，需按住保险栓c，才能把快装板取出。快装板上独有的记忆锁紧块d设计，可以记下对应相机的平衡位置，以便下次可以直接装入使用。

平衡调节：（如图 4、5、6、7 所示）

1、根据相机的大小调节滑动底座:相机镜头水平朝前放置,拧松滑动底座底部的锁紧旋钮e,左右滑动相机至平衡,相机需要与相机支架保持约5mm距离。
2、俯仰轴的平衡调节:将相机镜头垂直朝上放置,拧松锁紧旋钮f(大约3圈),然后移动固定板位置使相机镜头静止时能与地面保持接近垂直状态,调整完毕后请务必将锁紧旋钮f拧紧。
3、横滚轴的平衡调节：相机镜头水平朝前放置，拧松锁紧旋钮g（大约3圈），然后调节横臂位置使横臂静止时能与地面保持接近水平状态，调整完毕后请务必将锁紧旋钮g拧紧。
4.横向轴的平衡调节：拧松锁紧旋钮h，然后调节竖臂位置使竖臂静止时能与地面保持接近水平状态，调整完毕后请务必将锁紧旋钮h拧紧，所有调节完毕。

高/低机位的切换：（如图 8、9所示）

当进行低机位拍摄或长时间的拍摄时，使用手提姿态更省力。
1、顺时针旋转松开两边的锁紧旋钮i，这时再顺时针旋转左右手柄约180度，逆时针旋转锁紧旋钮i锁紧，即完成手提姿态的转换。

转换为单手提状态：（如图 10、11、12 所示）

1、将单手提手柄装入转动臂支架，转动臂支架的三角形符号，需对到单手提手柄的直线对正即装入位置正确。然后再顺时针旋转旋钮 j 至锁紧，即完成切换。

快速收纳：（如图 13、14所示）

1、逆时针旋转松开旋钮 k，这时将保险栓拉动至 UNLOCK 端口，即可以对转动臂进行折叠。
2、配备的收纳箱方便你快速的装入机器，而且便于携带。

横滚拍摄：（如图 15 所示）

1、在指示灯为紫色的情况下，打开APP右上角的横滚开关，此时横滚跟随模式启动。
2、此模式下，云台的竖臂移动时云台会跟随移动。

全景拍摄：（如图 16 所示）

1、云台开机、调节云台使相机转到拍照取景位置；（需要连接好快门线）
2、APP连上云台
3、全景拍照参数设置：a.设置拍照张数。b.设置拍照角度跨度。c.确认开始拍照

动态延时：（如图 17 所示）

1、用脚架固定云台，云台开机；（需要连接好快门线）
2、APP连上云台:a.设置延时参数。b.描绘拍照轨迹。c.预览拍照轨迹。d.确认开始拍照。

注意：
1、曝光时间设为自动时，相机需要设置为M档，否则也能会因为对焦不上导致拍照失败；
2、曝光时间设置为自动时，相机需要设置为慢门模式。

云台参数匹配

将电源按钮拨至ON一侧，并保持5秒，此时云台蓝色指示灯开始闪烁，云台进入蓝牙待机状态。
开机后，通过拨动开机键〔 ON(Mode)/OFF 〕转换拍摄模式。

横向跟随模式

镜头随着手柄的左右转动而水平转动。

全跟随模式

镜头的俯仰与水平方向随着手柄的上下左右转动而转动。

全锁定模式

无论手柄怎样动，镜头只朝一个方向。

低功率電波輻射性電機管理辦法第12、14條
–––經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率，加大功率或變更原設計及功能。
–––低功率射頻電機之使用不得影響飛航安全及幹擾合法通信：經發現有幹擾現像時，應立即停止使用，並改善至無幹擾時方得繼續使用。
前項合法通信，指依電信法規定作業之無線電通信低功率射頻電機需忍受合法通信或工業、科學及醫療用電波輻射性電機設備之幹擾。

FCC INFORMATION

Note: This equipment has been tested and found to comply with the limits for a Class B digital devise, pursuit to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, there user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.
Increase the separation between the equipment and receiver.
Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
Consult the dealer or an experienced radio/TV technician for help.
Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
1 This device may not cause harmful interference, and 2 this device must accept any interference received, including interference that may cause undesired operation.

Bluetooth Version   V4.1 (BLE mode)

Frequency Range: 2402-2480MHz

参数 Specifications

云台 Gimbal	
续航时间 Working time	13小时 13 h
工作电压 Working Voltage	最小 9V Minimum 9V 标准 11.1V Standard 11.1V 最大 12V Maximum: 12V
工作电流 Working Electric Flow	220mA（重心平衡状态） 220mA (center of gravity is under balance status)
工作温度 Working Temperature:	−10° ~ 45°
产品尺寸(W*D*H) Product Size (W*D*H)	高机位：295*470*290(mm) Holding upright:295*470*290(mm) 手提：370*470*400(mm) Handholding:370*470*400(mm)
机体重量 Product Weight	2430g（不包含电池） 2430g（excluding battery）
俯仰轴机械活动范围 Tilt Axis Mechanical Moving Range	320° 有限转动 320 degree unlimited rotation
横滚轴机械活动范围 Roll Axis Mechanical Moving Range	320° 有限转动 320 degree unlimited rotation
水平轴机械活动范围 Pan Axis Mechanical Moving Range	630° 有限转动 630 degree unlimited rotation
静止姿态跟踪误差 Follow Tolerance at Static Status	最小 ±0.02 Minimum ± 0.02 最大 ±0.05 Maximum ± 0.05
运动姿态跟踪误差 Follow Tolerance at Motion Status	最小 ±0.05 Minimum ± 0.05 最大 ±0.2 Maximum ± 0.2
最大负载重量 The Maximum Payload	3800g（8.38 lb）
电池 Battery	
电池类型 Battery Type	锂离子电池 Lithium Battery
电池型号 Battery Model	SP26350
电池容量 Battery Capacity	2000mAh
充电时长 Charging Time	3h（电压输入5V/2A） 3h (voltage input 5V/2A)

百诺保留随时变更设计及说明书内资料权利，恕不另行通知。

注意事项：

使用此产品时，请不要超过规定的最大承重（详细参数请参考产品吊卡或者百诺官网。）

使用此产品时，为了避免意外损坏设备，在安装设备之前，请务必确认产品的各个锁紧系统处于安全状态。

请勿在零下10度或高于零上45度的温度下使用本产品。

在潮湿，泥沙，风尘等环境中使用过后，一定要把藏有泥沙的部分清除干净，可使用无水酒精，消毒酒精处理。

请勿长时间将产品放置在太阳下，避免长时间将产品放置在高温下，例如靠近汽车玻璃数小时。

为了人身安全，使用本产品时，请勿靠近高电压区域，或与强效化学接触。

保修范围

您所使用的百诺产品是经过精密加工，多项严密质量检测，所有功能严格测试才完整包装出厂的。所有材料或者工艺方面的瑕疵，可以在您所购买的区域免费维修或者更换。所有人为原因造成的产品损坏不在保修范围内，例如：错误操作，严重摔落，或者电池漏电液体损坏。
质量保修可以联系您所在地的经销商，海外代理商详细信息可登陆www.benro.com查询。

USER NOTICE

Do not exceed the maximum specified load capacity (see specifications on the package label or visit www.benro.com).

Always ensure the gimbals locks are tightly engaged before mount any gear on your gimbals.

Do not use any Tripod below temperatures of 14°F or above +113°F (−10°C / +45°C).

Always clean and dry any gimbals after has been exposed to wet, dusty, sandy or salty conditions. Your gimbals are not recommended for use in water. If required, clean the gimbals using a soft cloth with some no water alcohol.

Do not leave any Tripod in the sun for prolonged periods and avoid high temperature exposure.

For your safety, don't let your BENRO gear come in contact with any electrical power source.

LIMITED WARRANTY COVERAGE

Your Benro product has been carefully manufactured, has passed many quality assurance checks and has been thoroughly tested before shipment. It is warranted in the country from which you purchased it based on the date of purchase to the original owner. The warranty does not apply to damages caused by mishandling, dropping, or leaking batteries, nor modification or servicing performed by others.
Please contact your local Benro dealer for further information and details about your warranty. To find the Benro distributor in your country, please check the distributor information at Benro official website www.benro.com.

Specifications and design are subject to change without notice.