

Godox 神牛

WITSTRO⁺ AD360

威客 *Powerful & Portable Flash*
机顶外拍两用闪光灯



深圳市神牛摄影器材有限公司

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82.AAD36000-01 VA

Instruction Manual
说 明 手 册

Chinese English Bilingual | 中英文双语

FOREWORD

Before using this product

Please read this user manual carefully in order to ensure your safety and the proper operation of this product. Keep for future reference.

Thank you for purchasing a GODOX product.

WITSTRO AD360 flash system is an AD360 flash with a bare tube, external power pack, wireless manual power control, and a range of dedicated light shaping accessories. AD360 is 5 to 7 times powerful as typical hotshoe flashes with the size and weight alike. It offers studio quality light for outdoor and live shooting. The AD360 offers:

- **Studio quality light:** up to 360Ws, GN 80 (m ISO 100, with AD-S2 standard reflector). Approx. 28mm flash coverage when operating on a camera with the standard reflector. One AD360 can overpower the sun.
- **External battery pack:** PB960 (lithium, 11.1V/4500mAh), 0.05-4.5s recycling and 450 full power flashes.
- **Lightweight and portable** even with power and accessories
- **Wireless control** on power levels and triggering (with FT-16 trigger)
- **Wide-range accessories:** softbox, beauty dish, snoots, color gels, etc. All lighting accessories fit for barebulb flashes from most brands.
- Power adjusts from full power to 1/128 in 1/3 stop increments
- Stable color temperature at 5600±200K over the entire power range
- Multi flash, Focus-assist beam on/off & Hi-Speed sync triggering


The powerful and portable AD360 meets the demands of freelance commercial photographers, photojournalists, wedding and beach portraiture shooters, event and backpack photographers, photograph enthusiasts, etc. It is compatible with market-available cameras from Canon, Nikon, Pentax, and Olympus, etc and fits for almost any flash trigger.

FOR YOUR SAFETY

- ▲ Always keep this product from rain or dampness to avoid fire or electric shock.
- ▲ This product contains high-voltage electronic parts. Touching the high-voltage circuit inside it may result in electric shock. Do not disassemble. Should repairs become necessary, this product must be sent to an authorized maintenance center.
- ▲ Stop using this product if it breaks open due to extrusion, falling or strong hit. Otherwise, electric shock may occur if you touch the electronic parts inside it.
- ▲ Do not fire the flash directly into the eyes (especially those of babies) within short distances. Otherwise visual impairment may occur. When taking pictures for babies, keep the flash unit at least 1 meter (3.3 feet) away from them. Using bounce flash to reduce light intensity is also recommended.

- ▲ Do not use the flash unit in the presence of flammable gases, chemicals and other similar materials. In certain circumstances, these materials may be sensitive to the strong light emitting from this flash unit and fire or electromagnetic interference may result.
- ▲ Do not leave or store the flash unit if the ambient temperature reads over 50°C (e.g. in automobile). Otherwise the electronic parts may be damaged.
- ▲ Be cautious when using the AD360 on your camera. AD360 is slightly heavy so that an AD360 on your camera may damage the camera hotshoe.

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Name of Parts

• Body



- 01. Accessory Mount
- 02. Accessory Locking Ring
- 03. Flash Tube
- 04. Tube Socket
- 05. Umbrella Mounting Hole
- 06. Release Button
- 07. Power Socket

- 08. Wireless Control Port
- 09. Sync Cord Jack
- 10. PC Sync Socket
- 11. MF-Assist Beam
- 12. Light Sensor
- 13. Control Panel
- 14. Hotshoe Stand

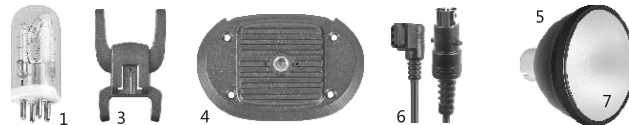
• Control Panel



- 15. LCD display
- 16. MF-Assist Beam Button
- 17. BUZZ Button
- 18. MODE Selection Button
- 19. SET Button
- 20. ON/OFF Power Switch
- 21. Test Button/ Flash Ready Indicator
- 22. Select Dial

• Included Accessories

- (1) Flash tube*1 (2) Protecting bag*1 (3) Mini stand*1 (4) Off-camera adapter*1
- (5) Reflector*1 (6) Power cable*1 (7) Reflector diffuser*2 (8) Instruction manual*1



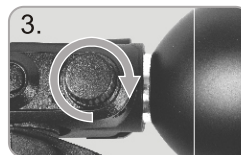
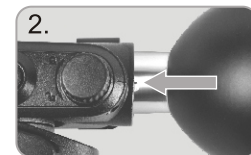
• Separately Sold Accessories

The product can be used in combination with the following accessories sold separately, so as to achieve best photography effects:


FT-16 Remote Control, Softbox, Beauty Dish, Fold up umbrella, Snoots, Light stand, etc.



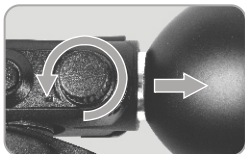
Installing Reflector (Other Accessories)



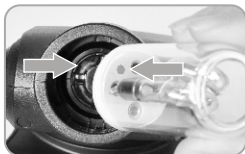
1. Rotate Accessory Locking Ring (2) counter-clockwise until it is loosened.
2. Insert the reflector into the Accessory Mount (1).
3. Rotate Accessory Locking Ring (2) clockwise to lock it up. Do not over-tighten.

 The flash unit is not powered by itself, but draws power from Godox power pack PB960 (sold separately).

Attaching Flash Tube



1. Remove the reflector or other accessories from the flash head.

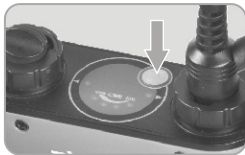


2. Match the red dot on the base of the flash tube with the red dot in the Tube Socket (4). Push the flash tube in until it is securely seated into the socket.

Connecting to a Power Pack



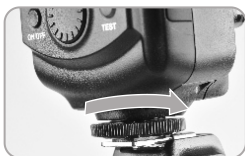
1. Before connecting, make sure that the power pack is turned off.
2. Plug one end of Power Cable into Power Socket (7) of the flash unit, and insert the other end into the output socket of the power pack.



3. Turn on the power pack. Normally the flash unit will be fully charged and ready to work.

! The flash unit is not powered by itself, but draws power from Godox power pack PB960 (sold separately).
For the instructions of the power pack, see the related user manual.

Connecting the Flash to a Camera



1. Loosen the locking ring on the mounting foot.
2. Slip the mounting foot of the flash unit into the camera hotshoe.
3. Secure the flash unit by rotating the locking ring the direction of the row.

Replacing the Off-Camera Adapter

The off-camera adapter is useful when using the product as an off-camera flash. There is a 1/4" mounting hole at the bottom of the off-camera adapter. After replacing the adapter, the flash can be used mounting on GODOX AD-S13 portable light boom, AD-S16 floor light stand, and almost any other light stand. To install the off-camera adapter,



1. Use a screwdriver (not included) to remove the four screws at the bottom of this product. Then take out the bottom part carefully as illustrated.



2. Install the off-camera adapter at the bottom of this product.
3. Tighten all the screws.



Using the Flash

1. Power Management

ON/OFF Power Switch (20) controls the on/off of the flash unit. Turn off the power pack if the flash unit will not be used for an extended period.

2. Flash Output

Flash output can be varied from 1/128th power to 1/1 full power in 1/3 stop increments. To obtain a correct flash exposure, use a hand-held flash meter to determine the required flash output.

Adjust the power output by rotating Select Dial (22). The following table makes it easier to see how the stop changes in terms of f/stop when you increase or decrease the flash output:

Figures displayed when reducing flash output level→

1/1	1/1-0.3	1/1-0.7	1/2	1/2-0.3	1/2-0.7	1/4	...	OF
	1/2+0.7	1/2+0.3		1/4+0.7	1/4+0.3		...	

←Figures displayed when increasing flash output level



When "OF" is shown on the LCD display, it means no flash output and flash firing is turned off.

3. M Mode: Manual Mode

Press MODE Selection Button (18) to enter M mode. In this mode, you can set the flash unit onto your camera hot shoe or your trigger hot shoe for firing. Before shooting, adjust the power output of the AD360. When the camera's shutter is pressed, the flash will fire. Slave triggering mode is not available in M mode.

4. S1 Mode: S1 Slave Triggering Mode

Press Mode Selection Button (18) to enter S1 mode. In this mode, the flash unit can function as a slave flash for creating multiple lighting effects. It is respectively applicable to manual flash environment.

In S1 mode, the flash unit will fire synchronously when the master flash fires, the same effect as that by the use of radio triggers.

5. S2 Mode: S2 Slave Triggering Mode

Press Mode Selection Button (18) to enter S2 mode. In this mode, the flash unit can function as a slave flash for creating multiple lighting effects. It is applicable when using a TTL master flash.

In S2 mode, the flash unit will ignore a single "preflash" from the master flash and will only fire in response to the second, actual flash from the master.

6. RPT Mode: Stroboscopic Flash

Press Mode Selection Button (18) to enter RPT mode (Multi/Stroboscopic flash). With stroboscopic flash, a rapid series of flashes is fired. It can be used to capture multiple images of a moving subject in a single photograph.

You can set the firing frequency (number of flashes per sec. expressed as Hz), the number of flashes, and the flash output.

For setting procedures, see the following:

- Press the Mode Selection Button (18) so that "RPT" is displayed.
- Press Set Button (19) to select the item to be set. The item blinks.
- Rotate Select Dial (22) to set a desired number.

Calculating the Shutter Speed

During stroboscopic flash, the shutter remains open until the firing stops. Use the following formula to calculate the shutter speed required to capture the full sequence of flashes:

$$\text{Number of flashes / Firing frequency} = \text{Shutter speed}$$

For example, if the number of flashes is 10 and the firing frequency is 5 Hz, the shutter speed should be at least 2 sec.

Note:

- Stroboscopic flash is most effective with a highly reflective subject against a dark background.
- Using a tripod, a remote switch, and an external power source is recommended.
- A flash output of 1/1 or 1/2 cannot be set for stroboscopic flash.
- Stroboscopic flash can be used with "buLb".



To avoid overheating and deteriorating the flash head, do not use stroboscopic flash more than 10 times in succession.

Maximum Stroboscopic Flashes:

Flash Output \ Hz	1	2	3	4	5	6	7
1/1	1	1	1	1	1	1	1
1/2	1	1	1	1	1	1	1
1/4	30	2	2	2	2	2	1
1/8	50	4	2	2	2	2	2
1/16	70	70	7	4	3	3	3
1/32	80	80	80	16	8	6	5
1/64	99	99	99	99	99	99	25
1/128	99	99	99	99	99	99	99

Flash Output \ Hz	8	9	10-11	12-13	13-15	15-19	20-99
1/1	1	1	1	1	1	1	1
1/2	1	1	1	1	1	1	1
1/4	1	1	1	1	1	1	1
1/8	2	2	2	2	2	2	2
1/16	2	2	2	2	2	2	2
1/32	5	4	4	3	3	3	3
1/64	15	10	6	6	5	5	5
1/128	99	99	99	99	99	36	20

7. Hi-Speed Sync Triggering

To enter Hi mode, press both Mode Selection Button (18) and Set Button (19).

Press Mode Selection Button (18) again to exit Hi mode.

In Hi hi-speed sync triggering mode, you can use a hi-speed sync trigger to have your flash unit synchronize with all shutter speeds of cameras(max. 1/8000 second, up to your camera). This is convenient when you want to use aperture- priority for fill-flash portraits.



Note:

- Hi-speed sync triggering mode is effective only when the flash unit is used together with hi-speed sync trigger, e.g., Godox Cells II transceiver.

- Hi-speed sync triggering mode is not available when the flash unit is mounted onto the camera hotshoe.



To avoid overheating or deteriorating the flash head, the over-temperature protection function will be activated automatically after 10 continuous high-speed flashes and the recycle time becomes 10s longer.

Number of flashes that will activate over-temperature protection in high-speed sync triggering mode:

Power Output Level	Number of Flashes (Approx.)
1/1	10
1/2	15
1/4	20
1/8	30


8. MF-Assist Beam

Under poorly-lit or low-contrast conditions, you can press MF-Assist Beam Button (16) to turn on the MF-assist beam in order to make it easier to autofocus.

When the MF-assist beam is lit,  is shown on the LCD display.

9. Buzz Function

The buzz function can be controlled by pressing BUZZ Button (17).


When the buzzer is turned on,  is shown on the LCD display. The buzzer provides an indication that the AD360 flash unit has fully recycled.

10. Wireless Control Function

- The flash unit is built in with a Wireless Control Port (8) so that you can wirelessly adjust the power level of the flash and control the on-or-off of your flash, focus assist lamp and buzzer, as well as trigger the flash.

- To control the flash wirelessly, you need a Godox FT series remote control set (on-camera and on-flash). Insert its receive end into the Wireless Control Port (8) on the flash and insert the transmit end into the camera hot shoe. Settings made on the

hotshoe-mounted transmit and receive ends will be wirelessly communicated to the flash. Then you can press the camera shutter-release button to trigger the flash. You can also hold the transmit end at hand to control your off-camera AD360.

- For full instructions on the use of FT series remote control, see its user manual.
- When the flash unit receives wireless signals,  is shown on the LCD display.

11. Sync Triggering

The Sync Cord Jack (9) is a $\Phi 3.5$ mm plug. Insert a trigger plug here and the flash will be fired synchronously with the camera shutter.


12. PC Sync Triggering

Insert one end of a PC sync cable into the PC Sync Socket (10) of the flash unit and the other end into the PC Sync Socket on the camera. The flash unit will fire when the camera's shutter-release button is pressed.



Protection Function

Over-Temperature Protection

- To avoid overheating and deteriorating the flash head, do not fire more than 75 continuous flashes in fast succession at 1/1 full power. After 75 continuous flashes, allow a rest time of at least 10 minutes.
- If you fire more than 75 continuous flashes and then fire more flashes in short intervals, the inner over-temperature protection function may be activated and make the recycling time about 10 to 15 seconds. If this occurs, allow a rest time of about 10 minutes, and the flash unit will then return to normal.
- When the over-temperature protection is started,  is shown on the LCD display.

Number of flashes that will activate over-temperature protection:

Power Output Level	Number of Flashes (Approx.)
1/1	75
1/2	100
1/4	200
1/8	300
1/16, 1/32	400
1/64, 1/128	500

Technical Data

Model	AD360
Max. Power	360Ws
Guide No. (m ISO 100)	80 (m ISO 100, with standard reflector) Approx. 28mm flash coverage when operating on a camera with the standard reflector
Vertical Rotation Angle	-15° to 90°
Horizontal Rotation Angle	0 to 270°
Power Supply	GODOX PB960 lithium power pack
Full Power Flashes	450 (with PB960 power pack)
Recycle Time	Approx. 0.05-4.5s (with PB960 power pack)
Color Temperature	5600±200K
Flash Duration	1/300s-1/10000s
Dimension	75*95*220mm (flash tube & reflector not included)
Net Weight	780g (flash tube & reflector not included)

Maintenance

- Shut down the device immediately should abnormal operation be detected.
- Avoid sudden impacts and the lamp should be dedusted regularly.
- It is normal for the flash tube to be warm when in use. Avoid continuous flashes if unnecessary.
- Maintenance of the flash must be performed by our authorized maintenance department which can provide original accessories. The flash-tube is user-replaceable. Replacement tubes can be obtained from the manufacturer.
- This product, except consumables e.g. flash tube, is supported with a one-year warranty.
- Unauthorized service will void the warranty.
- If the product had failures or was wetted, do not use it until it is repaired by professionals.
- Disconnect the power when cleaning the unit or when changing the flashtube.
- Changes made to the specifications or designs may not be reflected in this manual.

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WITSTRO⁺ AD360
威客 Powerful & Portable Flash
机顶外拍两用闪光灯



Instruction Manual
说明手册

Chinese English Bilingual | 中英文双语

前言

在使用本产品之前：

请先仔细阅读本手册，以确保您能安全使用。

请保存好本手册以备将来查询参考。

感谢您购买神牛产品。

威客闪光系统是由一个“裸灯”威客闪光灯、外接电源盒、无线功率遥控触发器、各种光线附件组成的便携闪光解决方案。AD360威客闪光灯，机身与普通机顶灯相仿，但功率却增加了4-6倍，单支AD360甚至可压太阳。外露灯管和标准反光罩为户外拍摄和实景拍摄提供了良好的光质。各种品牌相机(佳能、尼康、宾得、奥林巴斯等)和触发器皆可使用。AD360是离机闪光灯中的绝对主力，便携与高效光质兼具，实为自由商业摄影师、新闻记者、发烧友、摄影爱好者、婚纱摄影摄影师等的理想光源。产品有以下亮点：

- **影棚光质：**功率高达360Ws，闪光指数GN80 (m ISO 100，使用AD-S2标准反光罩)。机顶使用时，标准反光罩的闪光涵盖范围大约为28mm。
- **小巧便携：**灯管插拔式，携带无忧。同时携带电源盒及配件，也非常便携轻松
- **专业电源：**外接锂电池盒 (PB960:1.1V/4500mAh)，0.05-4.5s回电，全光450次闪光
- **无线操控：**使用专配遥控器，可无线控制闪光灯功率大小等，并同步触发引闪
- **附件齐全：**卡口兼容昆腾、新霸等闪光灯，10种以上光效附件组合轻巧便携，丰富实用
- **调光精准：**功率调节范围大 (1/1-1/128)，22级精确微调，光效把握更随心
- **色温恒定：**色温全程保持在5600±200K范围内
- **高级功能：**支持高速频闪，手动辅助对焦，高速遥控器同步触发等

安全须知

- ▲ 请勿让本产品淋雨或受潮，以免发生火灾或触电。
- ▲ 本产品内部有高压元件，切勿自行拆解或维修。如果接触产品内部的高压电路，可能会发生触电。需要修理时，请送往指定地点进行专业维修。
- ▲ 在使用过程中，如果本产品由于跌落、受到挤压或遭受强烈冲击而造成外壳破裂的，请勿继续使用，以免因接触到内部电子元件而受到电击伤害。
- ▲ 请勿在近距离将闪光灯头正对人眼闪光(特别是婴儿的眼睛)，否则可能会在短时间内造成视力障碍。在使用闪光灯拍摄婴儿时，建议闪光灯距离婴儿至少1米以上，也可以使用反射闪光来减少闪光可能对视力造成的伤害。
- ▲ 请勿在化学品、可燃性气体或其他特殊物质附近使用闪光灯，这些物质在特殊情况下可能对闪光灯发出的瞬间强光敏感，有可能导致火灾或电磁干扰。在这些场合下，请注意相关警告标识。
- ▲ 请勿将本产品放置在超过50摄氏度的环境下，否则可能对元器件造成损坏。
- ▲ 本产品不能防水，在雨天及潮湿环境下请注意防水。
- ▲ 由于AD360较重，慎重在相机上使用。否则可能对相机的热靴造成损害。

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- 21 • 同步插孔触发
- 21 • PC端口同步触发
- 21 保护功能
- 22 规格参数
- 22 维护保养

部件名称

机身



- | | | |
|------------|------------|-----------|
| 01. 附件卡口 | 06. 灯头释放按钮 | 11. 对焦灯 |
| 02. 卡口固定旋钮 | 07. 电源插座 | 12. 光控接收器 |
| 03. 闪光灯管 | 08. 无线控制插座 | 13. 控制面板 |
| 04. 闪光灯插座 | 09. 同步插孔 | 14. 热靴 |
| 05. 伞座安装孔 | 10. PC插孔 | |

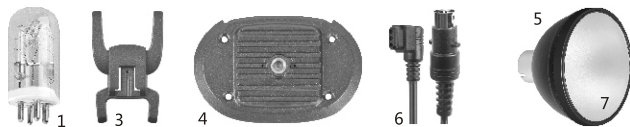
控制面板



- | |
|--------------------|
| 15. LCD显示屏 |
| 16. MF辅助对焦灯按钮 |
| 17. BUZZ蜂鸣按钮 |
| 18. MODE模式选择按钮 |
| 19. SET设置按钮 |
| 20. ON/OFF电源开关 |
| 21. TEST试闪按钮/回电指示灯 |
| 22. 调节旋钮 |

所配附件

- (1) 灯管*1 (2) 保护袋*1 (3) 微型底座*1 (4) 离机底座*1 (5) 反光罩*1 (6) 电源线*1 (7) 柔光片*2 (8) 说明书*1

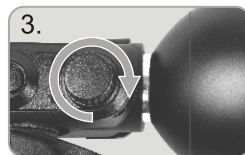
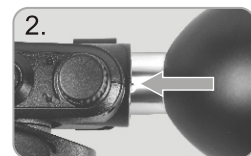


可选购附件

可搭配本公司以下摄影附件使用, 以获得最佳的拍摄效果和使用体验:
FT-16遥控器、柔光箱、雷达罩、折叠柔光伞、束光筒、灯架等。



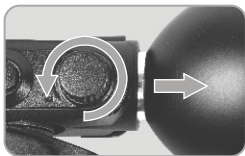
如何装卸反光罩(或附件)



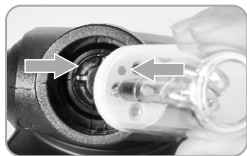
1. 卡口固定旋钮(2)逆时针旋转扭松。
2. 反光罩插入附件卡口(1)。
3. 卡口固定旋钮(2)顺时针旋转扭紧。

⚠ 由于AD360自身无法供电, 所以必须选购神牛电源盒PB960。

如何装卸闪光灯管



1、卸下反光罩或者其他附件。

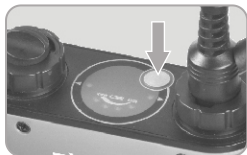


2、将闪光灯管的红点标志对准闪光灯插座(4)的红点标志，插入闪光灯。

如何跟电源盒连接



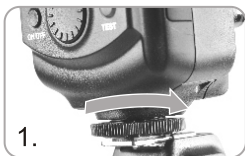
1、连接前，电源盒必须处于关闭状态。
2、电源线一端插入AD360的电源插座(7)，另一端插入电源盒的输出插座。



3、按下电源盒的电源按键，AD360开始工作。

! 由于AD360自身无法供电，所以必须选购神牛电源盒PB960。具体的电源盒使用方法，请查阅相关说明书。

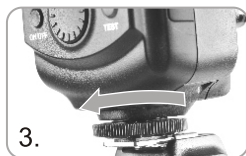
把闪光灯安装到相机上



1.



2.



3.

- 1、旋松固定座上的旋钮。
- 2、滑动闪光灯固定座使其完全插入相机的热靴插座。
- 3、将固定座上的旋钮旋紧直至闪光灯完全固定。

如何更换闪光灯离机底座

标配的离机底座配有1/4"支架安装孔，可以搭配威客附件AD-S13手持伸缩杆，AD-S16地灯架，各式灯架，方便离机闪光使用，不需要使用其他闪光灯转接座。



1、用螺丝刀(本产品不配)将AD360底部的四个螺丝拧松，小心取下机身底部的部件。



- 2、将离机底座安装在AD360底部。
- 3、用螺丝刀固定好螺丝，底座更换完毕。



使用闪光灯

1. 电源管理

ON/OFF电源开关(20)控制AD360的打开和关闭。长期不使用时请关闭电源盒。

2. 功率选择

您可以在1/128功率至1/1全功率间以1/3档为增量设置闪光输出。为获得正确的闪光曝光，请使用手持的闪光测光表确定所需的闪光输出。

旋转调节旋钮(22)可以调节闪光输出，调节规则如下：

减小闪光输出指数→

1/1	1/1-0.3	1/1-0.7	1/2	1/2-0.3	1/2-0.7	1/4	...	OF
	1/2+0.7	1/2+0.3		1/4+0.7	1/4+0.3		...	

←增加闪光输出指数



当显示屏显示“OF”时，表示闪光无输出，即不能引闪。

3. M普通模式

通过按MODE模式选择按钮(18)，可以使闪光灯进入M模式。M模式下，闪光灯可以安装到相机或触发器热靴上进行引闪。拍摄时，您只需要设定闪光输出，调整相机并按下快门，闪光灯会在相机同步信号下进行闪光。此模式下，光控功能关闭。

4. S1光控模式

通过按MODE模式选择按钮(18)，可以使闪光灯进入S1模式。S1模式下，闪光灯可作为副灯使用，创造多种照明效果，适用于手动闪光环境。它会与主闪光灯的第一次闪光同步触发闪光，效果与使用无线引闪器一致。

5. S2光控模式

通过按MODE模式选择按钮(18)，可以使闪光灯进入S2模式。S2模式下，可以做副灯使用，适用于TTL闪光环境。具有防预闪功能，使用带一次预闪功能的相机能用光控实现同步拍摄。它会与主闪光灯的第二次闪光同步触发闪光，即2次光控引闪。

6. RPT频闪模式

通过按MODE模式选择按钮(18)，可以使闪光灯进入RPT模式(又称Multi模式)。RPT模式下，使用频闪闪光，可以发出一系列快速的闪光。它可以在一张照片上拍摄移动物体的多个图像。

您可以设置闪光频率(每秒的闪光次数，以Hz表示)、闪光次数和闪光输出。

设置步骤：

- 按下MODE模式选择按钮(18)以显示“RPT”。
- 按下SET设置按钮(19)选择调节项目(闪烁)。
- 旋转调节旋钮(22)调整数值。

计算快门速度：

在频闪闪光过程中，到闪光停止为止快门应保持开启状态。使用下面的公式计算快门速度，然后用相机进行设置。

$$\text{闪光次数} / \text{闪光频率} = \text{快门速度}$$

例如，如果闪光次数是10，闪光频率是5 Hz，快门速度则至少为2秒。

注：

- 反光很强的被摄体在暗背景前使用频闪闪光更加有效。
- 推荐使用三脚架、遥控开关和外置电源。
- 闪光输出为1/1或1/2时不能设置频闪闪光。
- 频闪闪光时也可以使用“bulb”。



为防止闪光灯过热并损坏，请勿执行连续10次以上的频闪闪光连拍。

最大频闪闪光次数：

功率 \ Hz	1	2	3	4	5	6	7
1/1	1	1	1	1	1	1	1
1/2	1	1	1	1	1	1	1
1/4	30	2	2	2	2	2	1
1/8	50	4	2	2	2	2	2
1/16	70	70	7	4	3	3	3
1/32	80	80	80	16	8	6	5
1/64	99	99	99	99	99	99	25
1/128	99	99	99	99	99	99	99

功率 \ Hz	8	9	10-11	12-13	13-15	15-19	20-99
1/1	1	1	1	1	1	1	1
1/2	1	1	1	1	1	1	1
1/4	1	1	1	1	1	1	1
1/8	2	2	2	2	2	2	2
1/16	2	2	2	2	2	2	2
1/32	5	4	4	3	3	3	3
1/64	15	10	6	6	5	5	5
1/128	99	99	99	99	99	36	20

7. H 高速同步模式

同时按MODE模式选择按钮(18)和SET设置按钮(19)可以使闪光灯进入H模式。如果想跳出H高速同步模式请再次按下MODE模式选择按钮(18)。

在H高速同步模式下，使用高速同步遥控器，您可以实现闪光灯与相机所有快门速度的高速同步，最高可达1/8000秒(由相机决定)。开启高速同步模式，在使用光圈优先对人像进行填充闪光时特别方便。

注：

- 必须配合高速同步遥控器(比如神牛收发一体遥控器CELLS II)，高速同步功能才可实现。
- AD360闪光灯插在相机热靴上无法实现高速同步功能。




为防止闪光灯过热并损坏，连续执行10次高速同步闪光后，系统会自动进入热保护，回电时间会比正常延10秒。

高速同步模式下，激活热保护功能的连续闪光次数：

功率	次数(大约值)
1/1	10
1/2	15
1/4	20
1/8	30

8. 对焦灯控制

在低照度或低对比度等相机无法自动对焦情况下，通过按MF辅助对焦按钮(16)，可以点亮对焦灯，协助相机进行对焦。

对焦灯点亮时，显示屏上会显示  符号。

9. 蜂鸣控制


本机带有蜂鸣功能，可通过按BUZZ蜂鸣按钮(17)来控制。

蜂鸣器处于打开状态时，显示屏上会显示  符号。

10. 无线控制功能

• 闪光灯内置无线控制插座(8)，配合神牛FT系列遥控器使用，您可以实现对闪光灯的无线控制。

• 将神牛FT系列遥控器的接收端插入无线控制插座(8)，手持遥控器发射端，即可远程控制闪光灯的功率开关和大小、辅助对焦灯开关、蜂鸣器开关、闪光灯触发等。您也可以将发射端置于相机热靴上，通过相机快门来进行同步引闪。

• AD360接收到无线信号时，显示屏上会显示  符号。

• 更多遥控器的使用方法，请查阅FT系列遥控器的说明书。

11. 同步插孔触发

同步插孔(9)规格为Φ3.5mm，此处可插入同步线或者触发器触发插头对闪光灯进行同步引闪。

12. PC端口同步触发

用连闪线将相机与AD360的PC插孔(10)连接，可实现闪光灯与快门同步触发闪光。

保护功能

热保护：

• 为防止闪光灯头过热并损坏，请勿在1/1功率时进行超过75次的快速连续闪光。75次连续闪光后，要让闪光灯至少冷却10分钟。

• 如您在进行超过75次连续闪光后马上继续进行更多次闪光，内部的防过热功能可能会被激活，使充电时间变为10至15秒。如果发生这种现象，请让闪光灯冷却约10分钟，闪光灯便会恢复正常。

热保护启动后，显示屏上会显示  符号。

激活热保护功能的连续闪光次数：

功率	次数(大约值)
1/1	75
1/2	100
1/4	200
1/8	300
1/16, 1/32	400
1/64, 1/128	500

规格参数

型号	AD360
闪光能量	360Ws
闪光指数(m ISO 100)	80(m ISO 100, 使用标准反光罩)。机顶使用时，标准反光罩的闪光涵盖范围大约为28mm。
上下旋转角度	-15°至90°
左右旋转角度	0至270°
电源	神牛PB960锂电池盒
全功率闪光次数	450次(使用电源盒PB960)
回电时间	约0.05-4.5秒(使用电源盒PB960)
色温	5600±200k
闪光持续时间	1/300s - 1/10000s
体积	75*95*220mm(不含灯罩)
净重	780g(不含灯管和反光罩)

维护保养

- 闪光灯在工作时，如发现异常，应立即关掉电源，查明原因。
- 灯体应避免震动，平时注意表面除尘。
- 灯体稍有发热为正常现象。无特别需要时，勿连续引闪。
- 除灯管消耗品可由用户用原厂配置的灯管自行拆卸更换外，闪光灯的所有维修概由本厂指定可供原厂配件之维修部负责。
- 1年保修，由于灯管为消耗品，不在1年保修范围。
- 经发现，擅自检修此闪光灯的，将取消闪光灯之一年保修期，维修需要收取相关费用。
- 清洁本产品或更换灯管时，请切断闪光灯电源。
- 如果本品出现故障或者被水淋湿，唯有在专业人员维修后可继续使用。
- 如有外观变化或技术更改，恕不另行通知。