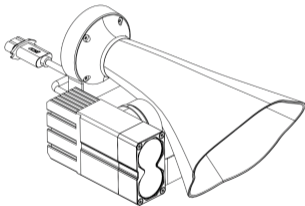


# LP12 探照广播一体机说明书

用户说明书 (V2.3)

2024.4



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## 一、免责声明与警告

感谢您购买成至智能产品。本文所提及的内容关系到您的安全以及合法权益与责任。使用本产品之前，请仔细阅读本文以确保已对产品进行正确的设置。不遵循和不按照本文的说明与警告来操作可能会给您和周围的人带来伤害，损坏本产品或其它周围的物品。本文档及所有相关的文档最终解释权归成至智能所有。如有更新，恕不另行通知。请访问 [www.czi.com.cn](http://www.czi.com.cn) 官方网站以获取最新的产品信息。

### 警告事项

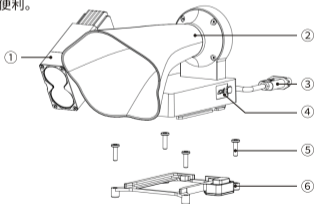
LP12 探照广播一体机属于精密设备，机体需要极高的密封性以防尘防水。如遇硬件问题，请返厂联系售后服务，切勿自行拆卸维修，否则将失去保修、维修资格。

### 注意事项

- 1、近距离或者室内使用喊话功能会对人耳听力造成永久性伤害！请谨慎使用！
- 2、探照灯内含精密光学设备，请勿自行拆卸！光照强度高，请勿直视出光口！

## 二、LP12 探照广播一体机介绍

成至LP12 探照广播一体机是一款专门为大疆经纬M30行业无人机设计的探照喊话二合一负载设备。以流体美学的设计理念，在挑战性能极限的同时，兼顾艺术品味，更可有效降低风阻，提升无人机飞行作业的续航能力。LP12是至今为止效率最高的成至照明及扩音产品，将GL系列云台探照灯的成像光学技术与MP系列数字语音广播系统的LRAD远距扬声器技术融为一体，且体积重量极其轻巧。仅重288克，有效照明距离150米，有效扬声距离300米，能够满足安防巡逻与山林搜救等任务场景的实战需求。通过与DJI Pilot APP 深度融合，可快速调用喊话器与灯光所有功能，并同时兼容成至APP悬浮窗，让操作功能更加便利。



1. 探照灯 2. 喊话器 3. 供电通讯线  
4. Type-C口 5. M3螺丝 6. 快拆支架

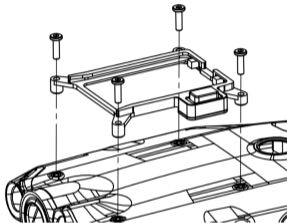
## 技术参数

型号	LP12			
电气接口	DJI PSDK			
重量/g	288g(不带机场版快拆支架);306g(带机场版快拆支架)			
尺寸/mm	L153*W109*H84mm			
探照灯功率/W	常规模式30w; 爆闪模式40w			
扬声器功率/W	15			
供电电压/V	24			
光通量/lm	2122 ± 3%			
探照灯FOV°	13°			
探照距离/m	150	130	100	50
光斑直径/m	34	29.6	22.8	11.4
探照面积/m <sup>2</sup>	917	688	407	102
中心光照度/Lux	1.7	2.5	6.3	25
			(空气湿度95%)	(空气湿度95%)
云台可控转动范围	俯仰	-120°~+45°		
峰值声压/dB	122			
有效广播距离	200m@76dB; 350m@69dB			
喊话方式	实时喊话			
	录音上传			
	音频文件播放			
	TTS (地区方言、多国语言)			
	背景音			
音频格式	mp3/wav/m4a/flac/aac			
App支持	DJI Pilot / DJI Pilot 2			
工作温度	-20°C~+50°C			

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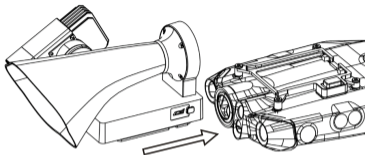
### 三、LP12 探照广播一体机安装教程

1、在DJI经纬M30上安装快拆支架。使用H2.0六角螺丝刀以及M3×10螺丝，将快拆支架安装在M30飞行器上。

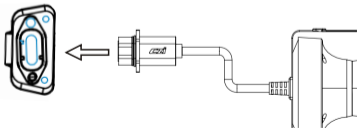


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2、将LP12探照广播一体机，沿着快拆架滑轨，滑动至滑轨尽头，并摇动LP12底部确保安装到位。



3、将LP12的供电通讯线，与经纬M30飞行器上的PSDK插口连接。（注意：请勿带电操作）



## 四、DJI Pilot APP 使用教程

1、点击DJI Pilot进入主界面。界面右边显示出LP12 PSDK字样，说明负载识别成功，可进行下一步操作，点击进入飞行界面。



2、进入到飞行界面，点击屏幕右下角“PSDK”按钮，会显示负载部分控件。



- ① 云台上下微调  ② 探照灯模式选择 
- ③ 云台同步跟随  ④ 状态信息列表 
- ⑤ 实时喊话/录音喊话 (需先在⑦选择喊话模式) 
- ⑥ 长文本播放  ⑦ 喊话模式选择 

### 3、探照灯开关及模式选择



### 4、选择喊话模式

#### 4.1录音广播

选择“录音广播”后点击麦克风图标



点击说话



录音过程页面



录音完后, 点击“喊话”可在产品播放录音, 支持本地试听 (遥控器上发声)、重录、保存录音文件



点击“保存”后可在列表中查看



## 4.2 实时喊话

选择“实时喊话”后点击麦克风图标



点击说话



## 实时喊话过程



实时喊话结束后会出现跟录音广播一样的页面，点击“喊话”会重新进入实时喊话的页面。由于是实时喊话，所以不支持本地试听、重录、保存文件。



## 5、TTS长文本 转语音的使用 可输入1000字符的文本



## 播放中



## 保存后可在文本列表查看



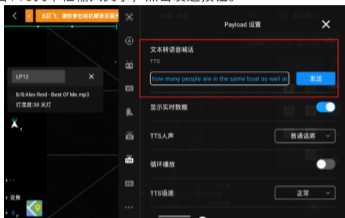


选择语种，在第三方负载PSDK中选择，屏幕右上角菜单选项->“PSDK”

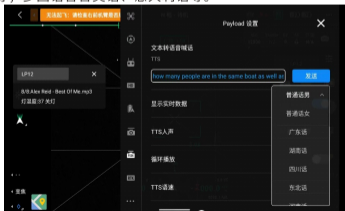
注意：文本输入与发音人的语言要一致



6、点击第三方负载按钮PSDK。文本转语音喊话功能，点击TTS文本框输入文字，点击发送按钮。



7、TTS人声选择。地区方言含广东话、湖南话、东北话等；多国语言含英语、意大利语等。



## 8、音频文件播放。



## 9、灯光操作界面。

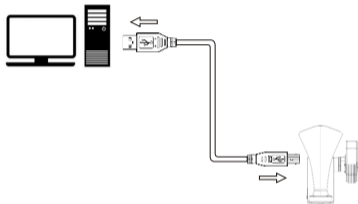


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## 五、Type-C口使用说明

### 5.1 音频文件拷贝

1、使用Type-C数据线连接LP12探照广播一体机与电脑USB口。

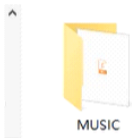


2、连接后，电脑会新增储存设备U盘。



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3、双击U盘进入界面。里面存在MUSIC文件夹。



4、双击MUSIC文件夹。拷贝音频文件至MUSIC文件夹内部。  
(支持的音频文件格式：mp3/wav/m4a/flac/aac)

此电脑 > U 盘 (F:) > MUSIC

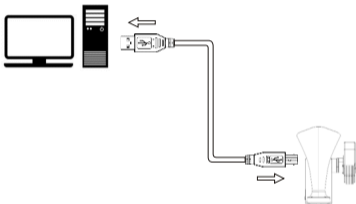


5、音频文件拷贝成功，安全退出U盘。

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## 六、固件升级

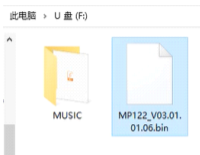
1、使用 Type-C 数据线连接 LP12 探照广播一体机与电脑 USB 口。



2、连接后，电脑会新增储存设备U盘。

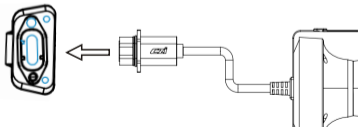


3、双击U盘进入界面，拷贝升级固件到U盘根目录下。



4、固件拷贝成功，安全退出U盘。

5、将LP12的供电通讯线，与经纬M30飞行器上的PSDK接口连接，启动飞行器。固件自动升级成功。



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## I. Disclaimer and Warning

Thank you for purchasing czi products. The contents of this document concern your safety and legal rights and responsibilities. Before using this product, please read this document carefully to ensure that you have set up the product properly. Failure to follow and comply with the instructions and warnings in this document may result in injury to you and others around you, damage to the product, or other surrounding items. This document and all related documents are subject to final interpretation by Chengzhi Intelligence. Updates are subject to change without notice. Please visit the official website at [www.czi.com.cn](http://www.czi.com.cn) for the most up-to-date product information.

### Warning

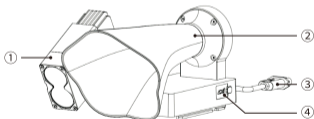
The LP12 is a precision equipment, the body is of sealing to prevent dust and water. In case of hardware problems, please contact the after-sales service at the manufacturer, pls do not disassemble and repair by yourself, otherwise you will lose the warranty and repair eligibility.

### Caution

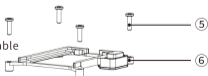
1. Using the device broadcasting function at close range or indoors can cause permanent damage to the human ear! Please use caution!
2. the searchlight contains precise optical equipment, please do not disassemble by yourself! High intensity of light out, please do not look directly at the light outlet!

## II. Introduction of LP12

czy LP12 searchlight & broadcasting system is a two-in-one payload specially designed for the DJI M30. LP12 is with a streamlined aesthetic design concept. It challenges the limits of performance while maintaining artistic taste and effectively reducing wind resistance to enhance the endurance of the drone's flight operations. The LP12 is the most efficient lighting and sound broadcasting product up to now of czy, combining the imaging optics of the GL Series gimbal searchlight with the LRAD long-range sound broadcasting technology of the MP Series digital voice broadcast system in an extremely lightweight integration. It weighs only 288 grams, with an effective illumination distance of 150 meters and an effective sound broadcasting distance of 300 meters, which can meet the operational needs of law enforcement patrol and forest search and rescue scenarios. By deeply integrating with DJI Pilot APP, all functions of sound broadcasting and light illumination can be called quickly, making the operation more convenient.



1. Searchlight
2. Speaker
3. Power/communication cable
4. Type-C port
5. M3 screws
6. Quick mount/dismount bracket



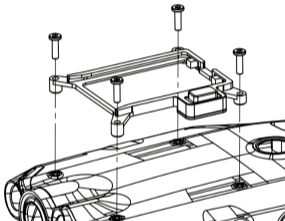
## technical parameter

<b>Model</b>	<b>LP12</b>			
Electrical interface	DJI OSDK			
Weight	288g(without quick mount bracket for DJI Dock) 306g(with quick mount bracket for DJI Dock)			
Dimensions	L153*W109*H84mm			
Searchlight power	Regular mode:30w Ultra bright mode&Flashing mode:40w			
Speaker power	15W			
Power supply voltage	24V			
Luminous flux	2700lm±3%			
Searchlight FOV	13°			
Illumination distance	150m	130m	100m	50m
Spot diameter	34m	29.6m	22.8m	11.4m
Illuminated area	917m <sup>2</sup>	688m <sup>2</sup>	407m <sup>2</sup>	102m <sup>2</sup>
Central illuminance	1.7Lux	2.5Lux	6.3Lux	25Lux
				(air humidity 95%)
Gimbal movement range	Pitch -120°~+45°			
Maximum sound pressure	122dB			
Effective broadcasting distance/m	200m@76db; 350m@69db			
Broadcasting method	Live broadcasting			
	Upload the recording files			
	Play audio file			
	Text To Speech (regional dialect and multi-language)			
	Background sound			
Audio formats	mp3/wav/m4a/flac/aac			
App support	DJI Pilot / DJI Pilot 2			
Operating temperature	-20°C~+50°C			

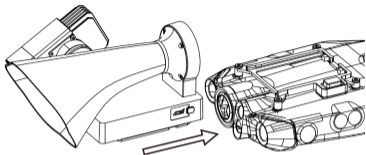
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### III. Installation tutorial of LP12

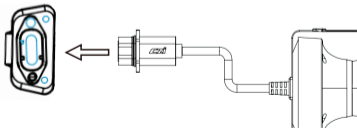
1. Install the quick mount/dismount bracket to DJI M30. Use H2.0 hexagonal screwdriver and M3×10 screws to mount the bracket on the M30.



2. Slide the LP12 on quick mount bracket along the rails to the end and shake the bottom of the LP12 to ensure it is in place and securely locked.



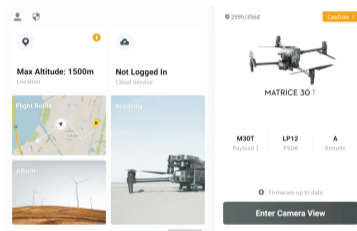
3. to put the LP12 power/communication cable to the MSDK interface. **(Note: do not operate with M30 is on)**



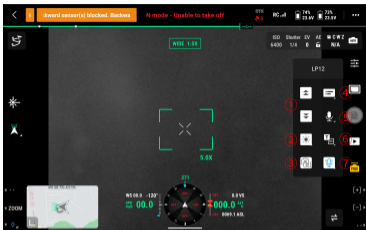
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## IV. DJI Pilot APP tutorial

1. click DJI Pilot enter into main interface. On the right showing LP12 PSDK, indicating payload recognized. Next operation, click flight interface.



2. entering flight interface, click right bottom “PSDK” , showing payload control.



① Gimbal Pitching Tuning



② Gimbal Searchlight Mode Option



③ Gimbal Synchronization Follow



④ Status Info List



⑤ Live Broadcast/Recorded Broadcast  
(Broadcast Mode ⑦ Option required)



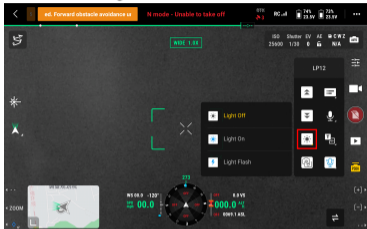
⑥ TTS



⑦ Broadcast Mode Option



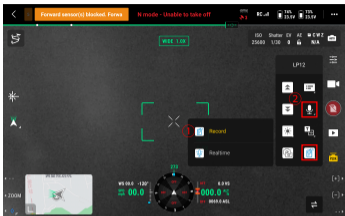
### 3. Gimbal Searchlight Switch and Mode Select



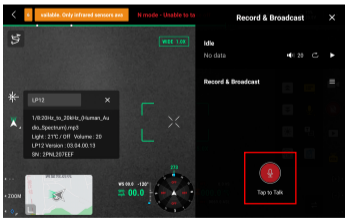
### 4. Select Broadcast Mode

#### 4.1 Recorded Broadcast

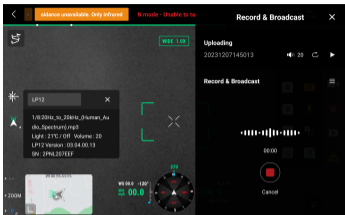
Select "Recorded Broadcast" then click the Mic Icon



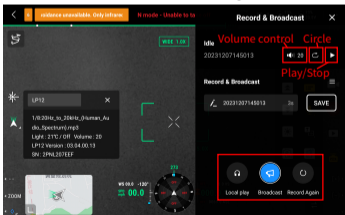
## Click to Speak



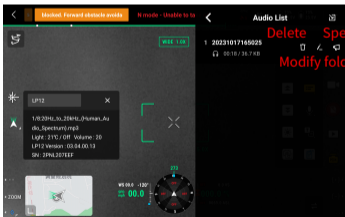
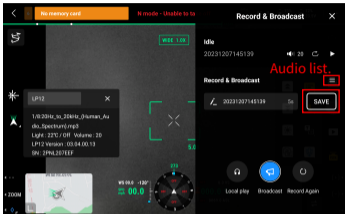
## Record Process Page



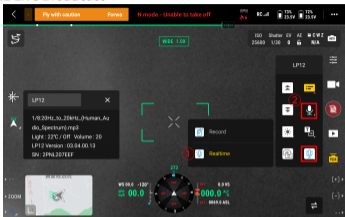
After recording, click "Broadcast" to play the recording in the product, support for local audition (on remote controller), re-record, save the recording file.



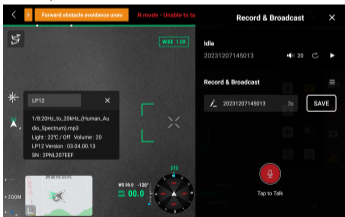
Click "Save" then check in the list.



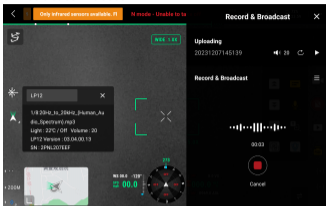
## 4.2 Live Broadcast



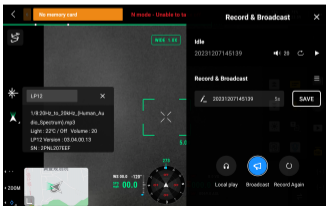
### Click to Speak



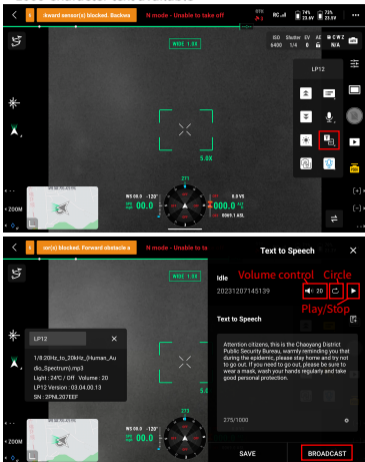
## Live Broadcast Process



After the Live Broadcast finished, the same page will appear as the Recorded Broadcast, click "Broadcast" to re-enter the Live Broadcast page. Because it is live broadcast, so it doesn't support local audition, re-record and save files.



## 5.Manual of TTS 1000-character text available

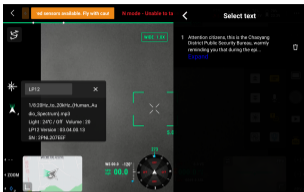


## Playing

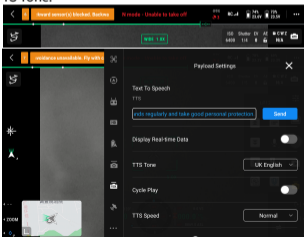
The screenshot shows the 'Text to Speech' application in a 'Broadcasting' state. The top status bar indicates 'ward sensor(s) blocked. Forward : N mode - Unable to sa'. The main interface is split into two panels. The left panel displays a map with a green bounding box around a location, a 'WIDE 1.88' label, and a 'LP12' control window. The control window lists: '1/820Hz\_to\_20kHz\_(human\_Au dia\_Spectrum).mp3', 'TTS:playing', 'Light : 24°C / Off', 'Volume : 20', and 'LP12 Version : 03.04.03.13'. The right panel shows the text being broadcast: 'Attention citizens, this is ...'. Below the text is a volume control set to 20 and a 'Text to Speech' icon. At the bottom right, there are 'SAVE' and 'BROADCAST' buttons.

## Viewable in text list after saving

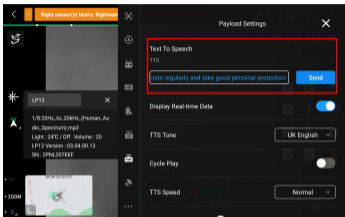
This screenshot shows the 'Text to Speech' application after the broadcast has been saved. The top status bar now reads 'son(s) blocked. Forward obstacle a'. The left panel is identical to the previous screenshot. The right panel is now in an 'Idle' state, displaying the ID '20231207145139'. The text 'Text listing' is highlighted in red, and a red box is drawn around the 'Text to Speech' icon. The 'SAVE' button at the bottom left is also highlighted with a red box. The 'BROADCAST' button remains at the bottom right.



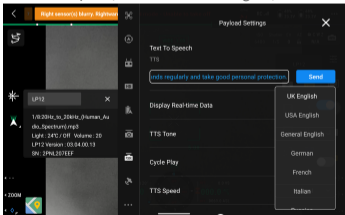
Choose the language, select it in the third-party load PSDK, menu option in the upper right corner of the screen -> "PSDK"  
 Note: The text input should be consistent with the language of the TTS Tone.



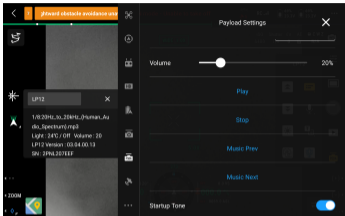
6. Click the third-party load button PSDK. TTS function, click the TTS text box to enter text, click the Send button.



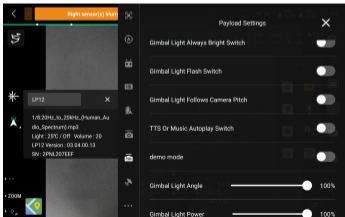
7. TTS Tone Option, Voice list contain English, Italian ect.

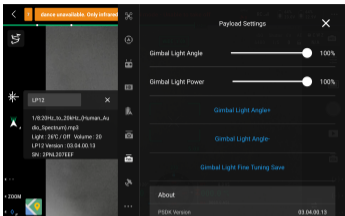


## 8. Audio file playback.



## 9. Lighting operation interface.



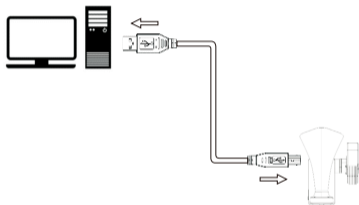


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## V. Micro USB port instruction

### 5.1 Audio file copy

1. use Type-C cable to link up LP12 to computer.

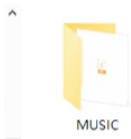


2. Connected, U drive will be showing on computer.



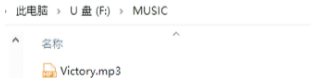
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3. double click U drive, check Music folder.



4. double click Music file folder, copy audio file into Music file folder.

(Supported audio file formats: mp3/wav/m4a/flac/aac)

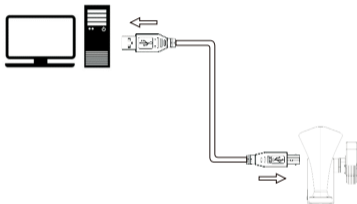


5. audio file copied to Music file folder successfully.  
Quick U drive from computer.

---

## VI. Firmware upgrade

1. use Type-C cable link up LP12 to computer USB.

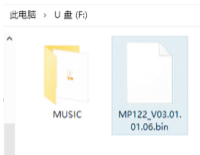


2. After connection, U drive showing on computer.



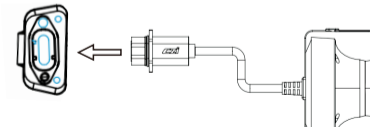
---

3. double click U drive, copy firmware file into U drive.



4. Firmware copied, quit U drive.

5. put power/communication cable of LP12 to connect M30 MSDK interface,turn on M30. LP12 firmware upgrade successfully.



了解成至 LP12 探照广播一体机最新情况或资讯，请关注成至智能官网：[www.czi.com.cn](http://www.czi.com.cn)

如遇到设备无法正常工作时，请及时联系当地代理商或厂家。

Pls log on to czi official website [www.czi.com.cn](http://www.czi.com.cn) for more LP12 updates and information.

If LP12 not working, pls contact your dealer and us directly.

成至技术支持

[www.czi.com.cn](http://www.czi.com.cn)

服务热线：400-008-8306

如您对说明书有任何疑问或者建议

请通过以下电子邮箱联系我们：

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ChengZhi Technical Support

[www.czi.com.cn](http://www.czi.com.cn)

Service hotline:

400-008-8306

If you have any question or suggestion  
to the user manual

Pls contact us via below email

[czzn@czi.com.cn](mailto:czzn@czi.com.cn)

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