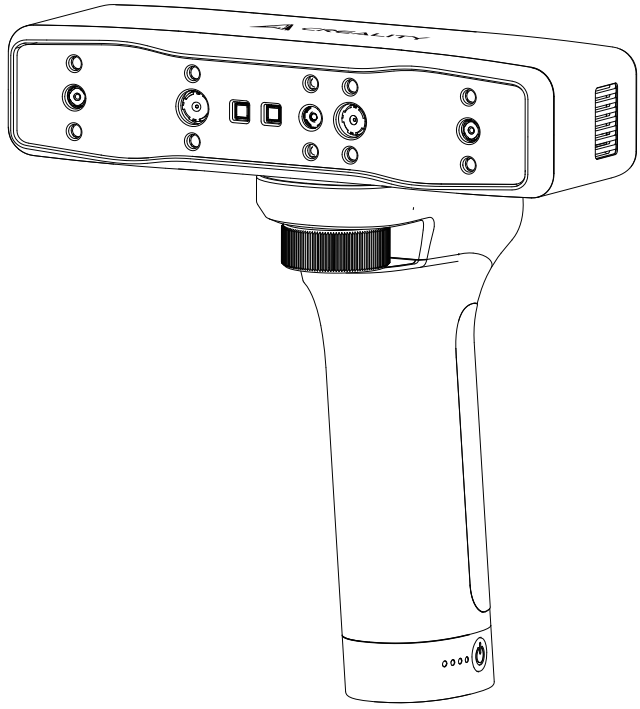
产品名称：**Creality Otter Lite 扫描仪快速指南**
单页尺寸：210X140MM
封面材质：210G铜版纸，双面过哑胶
内页材质：128G铜版纸，双面过哑胶
装订工艺：无线胶装
印刷工艺：四色印刷

红色为出血线

CREALITY



Creality Otter Lite

3D Scanner

No Wires, No Limits

Quick Guide V1.0

01 PRODUCT INTRODUCTION

Creality Otter Lite is a high-precision, handheld, all-in-one 3D scanner compatible with scanning small, medium and large objects, with a maximum accuracy of 0.05mm. From small screws to large human bodies and large automotive parts ($20mm^3$~$2000mm^3$) , it can effortlessly scan objects of various size. The ability to adapt objects of various sizes is achieved by its innovative four-eye stereoscopic vision design. This includes a set of large focal length binoculars and a set of short focus length binoculars. The former is used to capture the details of small objects at close range; the latter has a larger FOV and is used to scan medium and large objects, to ensure stable tracking with minimal loss.

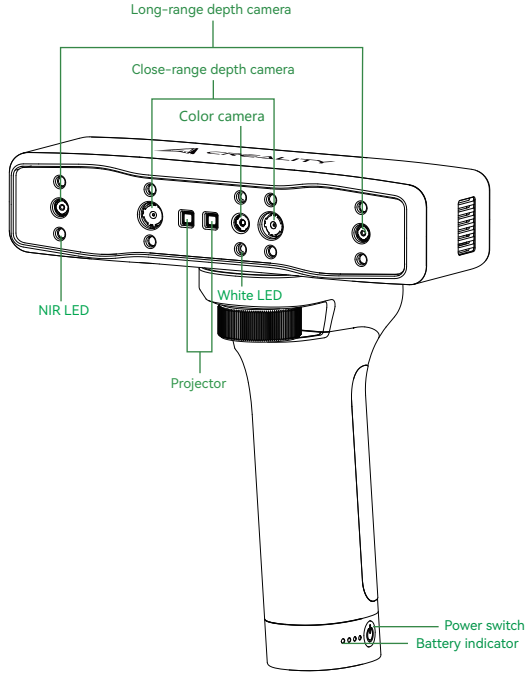
This scanner is equipped with a depth computing specialized chip independently developed by us, which ensures smooth scanning with a maximum frame rate of up to 30fps. Using unique single-frame 3D imaging technology, it has excellent anti-shake performance. Advanced DOE structured light projection technology enables 3D scanning even outdoors(≤30,000 lux). With professional-grade texture fill light, it can smoothly complete full-color scans even in low light environments, and give objects exquisite and realistic textures.

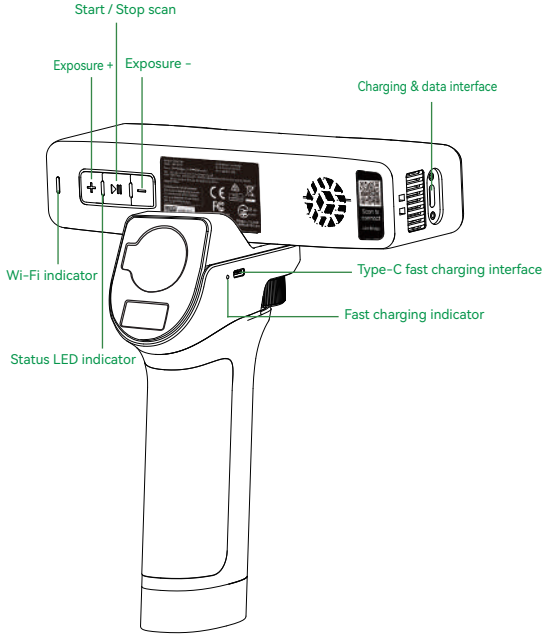
In addition, Otter Lite has a built-in wireless Wi-Fi module, and when used with the battery handle Lite Bridge, scanning can be freed from the constraints of cables . When scanning wirelessly, a mobile phone can be used as the scanner screen, making the scanning process easier and more convenient.

⚠ Since the 3D scanner is a high-precision device, please handle it with care and store it properly. Avoid collisions or drops to prevent a decrease in accuracy or damage.

02 PRODUCT INFORMATION

2.1 3D Scanner Overview





2.2 3D Scanner Button Description

Button	Scanner Feedback
▶||	Press once to start scanning; press again to pause scanning; long press for ≥ 2 seconds to end scanning.
+	IR camera exposure time increased by 10%
—	IR camera exposure time reduced by 10%

2.3 Lite Bridge Button Description

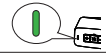
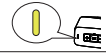
Button	Scanner Feedback
⏻	Press once to turn on the power; press for more than 2 seconds to turn off the power.
▬	The Type-C charging port can be used to charge the Lite Bridge and supports up to 20W fast charging.

Battery Indicator	Indicator Light Feedback
	All four lights are on, indicating that the current power level is between 75% and 100%.
	3 lights on means the current power level is between 50% and 74%
	Two lights on means the current power level is between 25% and 49%.
	One light on means the current power level is 5% -24%
	When the first light flashes, it means the current power is less than 5%. It is recommended to charge the scanner as soon as possible .
Fast Charging Indicator Light	**Indicator Light Feedback**
	The blue light will be on only when the Lite Bridge enters the fast charging state. It will be off if it does not enter the fast charging state.

2.4 Indicator Strip

Button Indicator Light	Status or Meaning	Reference Color
Green	The device is operating normally, the scanning distance is appropriate, or the device firmware upgrade is successful.	
Red and flashing	The device is in an abnormal state	
Yellow and flashing	The device is in upgrade state	
Orange Red	Scanning distance is too close	
Orange color	Scanning distance is short	
Light Blue	Longer scanning distance	
Dark Blue	Scanning distance is too far	

*Note: When the distance indicator starts flashing during scanning, it means that the scanning tracking is lost and the scanner needs to return to the scanned area to restore the scanning stitching relationship.

Wi-Fi Indicator	Status or Meaning	Reference Color
Blue	When the device is starting up normally, the blue light will stay on; when the device is finished starting up, the blue light will flash .	
Green	When the Wifi connection is successful and communication with the software is achieved, the green light will be on .	
Red	When Wi-Fi is abnormal or the upgrade is abnormal, the red light will be on .	
Yellow	When the OTA upgrade is in progress, the yellow light is on .	

*Note: When the device is in standby mode, the indicator light will enter a breathing state to save power.

03 PRODUCT SPECIFICATIONS

3.1 3D Scanner Product Parameters

Product name	Creality Otter Lite
Model	CRS10COL
Scanning mode	NIR(infrared binocular structured light)
Accuracy	0.05mm@100mm[1]
Resolution	0.1-2mm
Scanning frame rate	Up to 30fps
Min.scan volume	20mm x 20mm x 20mm
Single capture range	Close range mode 100mm*62mm@120mm 160mm*130mm@250mm Long range mode 352mm*254mm@300mm 788mm*509mm@600mm 1460mm*1017mm@1200mm
Working distance	120mm-1200mm
Color mapping	Yes
Alignment mode	Marker/geometry/texture
Output format	OBJ/STL/PLY
IMU	Yes
Marker recognition enhancement	8 Infrared LEDs
Color supplemental light	2 White LEDs
Laser safety	Class I (eye safe)
Weight	301g
Size	173mm*39mm*56mm
Calibration board	High precision calibration board
Wireless scanning	Yes
Protocols	Wi-Fi 6, downward compatibility
Wi-Fi bands	5GHz/5180-5240MHz/5190-5230MHz/5210MHz/5260-5320MHz 5270-5310MHz/5290MHz/5500-5700MHz/5510-5670MHz/5530-5610MHz
Maximum Transmit Power	16.65dBm
Data transfer rate	Up to 30fps
System support	Windows/macOS
Data interface	Type-C/USB3.0/USB2.0
Input power	USB3.0 5V 3A WiFi 12V 2A
Operating temperature	-10°C to 40°C
Operating humidity	10-90%RH

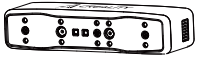
[1] Accuracy is evaluated in a laboratory environment and actual results may be affected by the operating environment, such as temperature, vibration, and other factors.

3.2 Lite Bridge Parameters

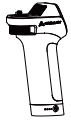
Product name	Lite Bridge
Model	CRP15LB
Battery type	Lithium battery
Battery energy (rated)	24.82Wh
Battery capacity (rated)	3400mAh (2 cells)
Fast charge power	20W MAX[1]
Fast charge protocol	PD3.0/QC3.0/UFCS/SCP/AFC
Charger port	Type-C
Smart phone holder	Magnetic
Power switch	Mechanical
size	168mm*93mm*46mm
weight	286g
Operating temperature	-10°C to 40°C
Operating humidity	10-90%RH

[1] The actual charging power is affected by the controller battery level, the environment and controller battery temperature, as well as the external charging cable and charging head.

04 PACKING LIST



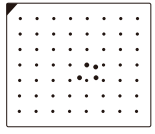
Creality Otter Lite 3Dscanner * 1



Lite Bridge * 1

USB3.0 data cable (USB-C / USB-A 2m) * 1

USB2.0 power cable & Lite Bridge charging cable (USB-C/USB-A 1.5m) *1

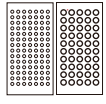


High-precision calibration board *1

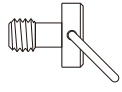
Turntable * 1

Scanning test object (OWL) *1

USB-C adaptor *2



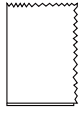
Reflective markers (Diameter: 6mm*10, Diameter: 3mm*10)



Screw *1

Magnetic phone holder * 1

Quick guide & Certification & Warranty card * 1



Cleaning cloth * 1

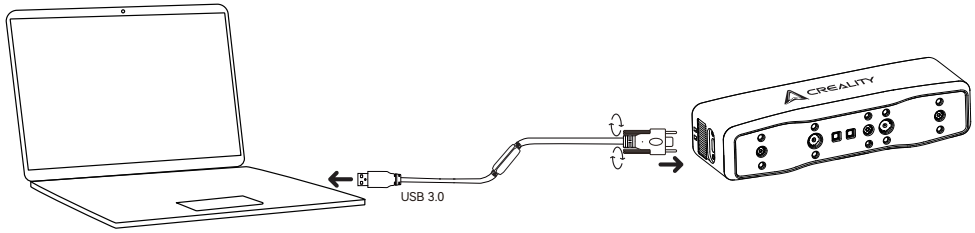
Lanyard *1

Portable case *1

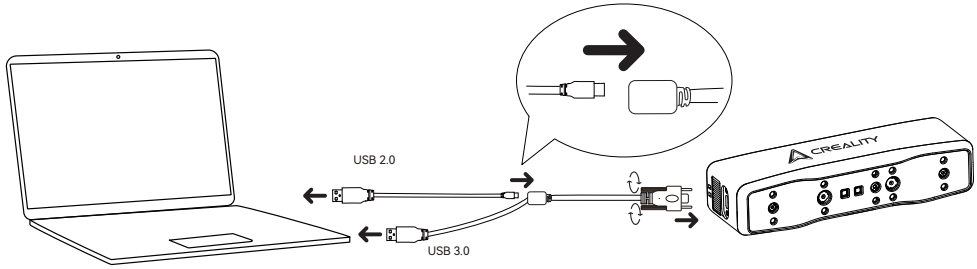
05 DEVICE CONNECTION

5.1 Wired connection

Method 1: Connect to the computer's USB 3.0 port using the USB 3.0 data cable.



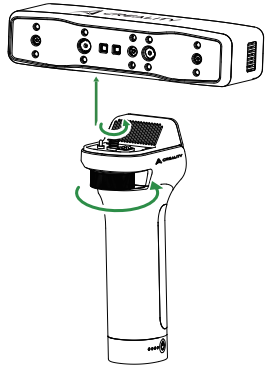
Method 2: If the computer only has USB2.0 port or insufficient power supply from the USB3.0 port, use the USB2.0 power cable for auxiliary power.
Connect the USB2.0 cable to the middle port to the USB3.0(as shown in the figure), and the other side of the port can be simultaneously connected to another port on the computer or used with a 5V charger to provide auxiliary power to the scanner .



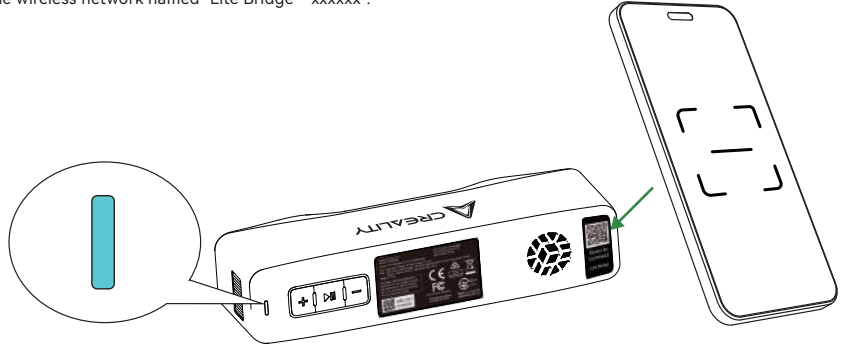
5.2 Wireless Scan Connection

5.2.1 Scan directly with your phone

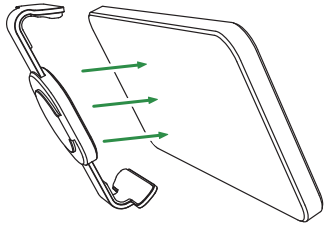
1. Install the Creality Scan App on your phone.
2. Install the Otter Lite scanner onto the Lite Bridge as shown below.

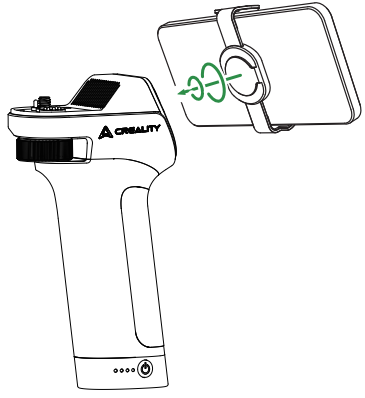


3. Short press the power switch on the Lite Bridge, wait for the Wi-Fi indicator on the scanner to start flashing blue, use your phone to scan the QR code on the Otter Lite to connect to Wi-Fi, or complete the Wi-Fi connection by searching for the wireless network named "Lite Bridge - xxxxxx".



4. Clip the magnetic phone holder onto the phone, and then attach it to the handle as shown in the picture.

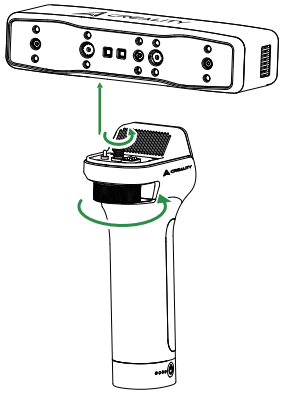




5. Launch Creality Scan on your phone to start wireless scanning(For recommended performence of smartphone, please visit: https://wiki.creality.com/zh/3d-scanner/tutorials/general/performance)

5.2.2 Scan with a computer and use your phone as a screen

1. Install the Otter Lite scanner onto the Lite Bridge as shown below.



2. Connect your computer to a Wi-Fi network named "Lite Bridge - xxxxxx", open the Creality Scan software on the computer, click the Wireless Display button on the scanning interface to obtain the wireless screen projection QR code, and scan the QR code with a mobile browser to synchronize the scanned image on the computer to the mobile phone, as shown in the figure below.

3. Clip the magnetic phone holder onto your phone, then attach it to the handle as shown in the picture to start wireless scanning.

06 SOFTWARE SYSTEM OPERATION

6.1 Ceality Scan Software System Requirements

System requirements		
	System requiremens: Windows 10/11 (64bit) Configuration requirements Recommended configuration: CPU i7-Gen7 and above, Nvidia or AMD graphic card, 16GB RAM or higher; Minimum configuration: CPU i5-Gen8 and above, 8GB RAM or higher.	
	Recommended configuration macOS: 11.7.7 and above(Big Sur/Monterey/Ventura) CPU: Apple M1/M2/M3/M4 series processors; RAM: 16GB or higher; Minimum configuration macOS: 10.15.7 and above (Catalina/Big Sur/Monterey/Ventura) CPU: Intel processor (i5-Gen8 CPU and above); RAM: 8GB or higher.	

6.2 Download and install Creality Scan software

Scanner software download address: https://www.crealitycloud.com/downloads/software/creality-scan

Go to the official Creality Scan software download page and find the appropriate software version to download.

Note: After you have completed the software installation on your MAC, please authorize the 3D scanner to read and write files so that you can optimize the point cloud and generate a model when using the software.

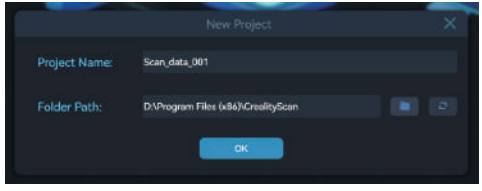
07 FIRST SCAN

7.1 Create a new scan project

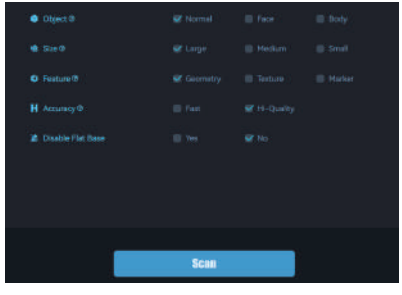
1. Connect the device and open the installed Creality Scan software.

2. In Creality Scan, Click "New Project", as shown below:

3. Enter the project name in the pop-up bar, select the folder path, and then click the "OK" button, as shown below:

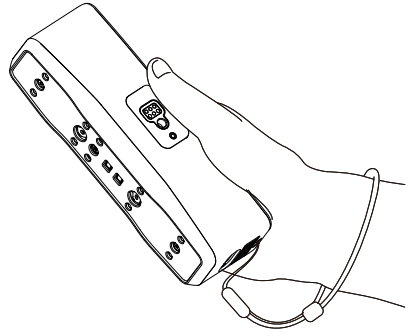


4. Enter the "Project Name", select the "Folder Path", and select the scanning mode and related configuration items according to the characteristics of the scan object. Finally, click the "Scan" button to enter the scan preview interface, as shown below:

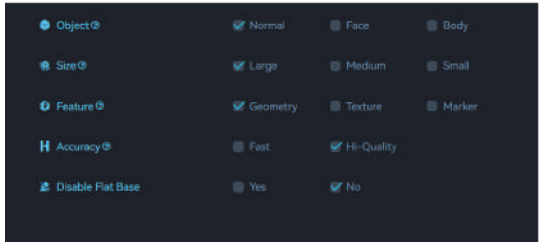


7.2 Scanning steps (taking the test piece as an example)

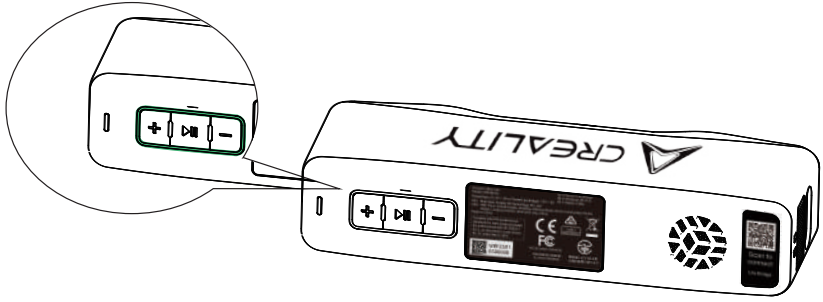
1. Note: During handheld scanning , to prevent the scanner from slipping out of your hand and causing damage to the scanner , you can fix one end of the free lanyard to the scanner and put the other end around your wrist, as shown in the figure.



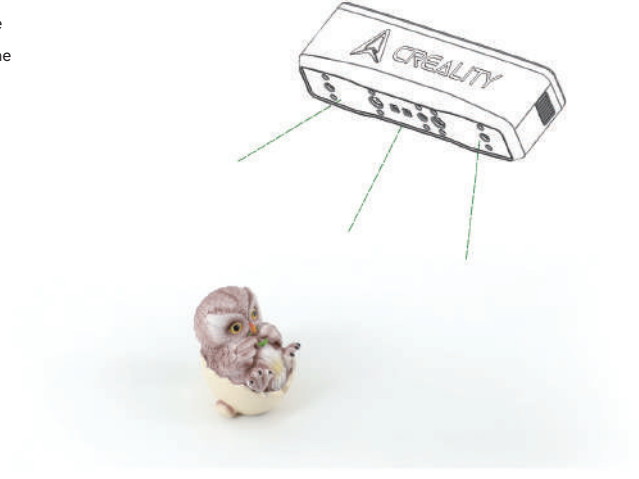
2. Launch the installed Creality Scan software can scan the test piece (owl) included in the package for the first scanning experience. The scanning parameters are configured as shown in the figure below:



3. Ensure that the scanning environment is clean and open, and adjust the scanner and the scanned test piece to an appropriate distance. That is, when the scanner indicator light is green, or the distance indicator bar on the software interface is at the optimal (green) position, it indicates that the scanning distance is optimal.



4. Short press ▶|| on the scanner , or click "Start Scan" on the software interface to start scanning. Move the scanner slowly and try to keep the test piece in the center of the software preview window. Continue scanning until the model color turns green .



5. When a part of the scan is completed, you can click ▶|| to pause, change the model angle and click Continue Scan. The scan will be completed if it takes more than 2 seconds or you click "Complete Scan" on the software.

6. Data processing: Perform data processing (one-click processing/step-by-step processing) in the Creality Scan software to obtain a complete 3D model (the point pitch is recommended to be set to 0.1mm). The effect is as follows:

3D model

Color mapping

Note: To view tutorials on scanning and processing different objects, please scan the QR code below.

08 FAQ

● How to get better model details?

① During the scanning process, adjust the exposure time of the IR camera to achieve moderate exposure. Overexposure is red, and underexposure is blue.

② Try to maintain the optimal scanning distance. Generally, the closer the scanner is to the object, the better the details will be without losing tracking.

③ When optimizing point clouds, you need to set a smaller point distance: for example, when the object size is small, the point distance can be set to 0.1mm.

④ When constructing a mesh, the number of facets in the model should be set large enough.

For more scanning tips, please visit: https://wiki.creality.com/zh/3d-scanner/otterlite

● How do I scan the bottom of an object?

① Creaity Scan provides the function of multi-project stitching, which can obtain a complete model of the object through multiple scanning and stitching;

② First scan the visible part to get a partial model, pause the scan, then flip the object over and continue the tracking scan by rescanning the previously scanned part to get the complete model .

● Under what circumstances is it necessary to connect the USB2.0 power cable?

When the computer cannot connect to the scanner due to insufficient power supply, you can use this charging cable to connect an external charger to power the scanner;

When the scanner is connected to the computer's USB 3.0 port and has sufficient power supply, and is not connected through an expansion dock, there is generally no need to connect an additional charging cable.

● When should I use marker mode or texture mode?

When the geometric features of the object surface are not rich, you can stick the reflective markers included in the package on the object and scan it in marker mode. When the object surface has rich texture, you can directly scan it in texture mode.

● When is calibration required?

when the instrument is not used for a long period of time (e.g. a week) or before high-precision scanning is required .

Note: The 3D scanner is a high-precision device. Please store it properly and handle it with care. Do not bump or drop it to avoid loss of accuracy or damage.

● Can the calibration plates be used interchangeably?

Each calibration plate is unique and corresponds to each scanner. They cannot be used interchangeably. When using it for the first time, you need to scan the QR code on the back of the calibration plate to bind it, otherwise it will affect the calibration accuracy.

● What precautions should be taken when storing calibration plates?

After each use, please carefully put the calibration plate back into the bag and keep it properly. Do not contaminate, scratch, or squeeze the calibration plate with heavy objects to avoid loss or damage of the calibration plate.

● How to perform calibration?

Connect the scanner to the computer, open the Creality Scan software, enter the [Device] interface, click [Calibration] and follow the animation prompts to calibrate.

● How to charge LiteBridge?

Use a USB2.0 data cable with a charger below 20W to charge. Normally, 80% of the charge is completed in 1 hour. Please avoid charging in an environment above 40 degrees, which will trigger the charging protection mechanism of LiteBridge and stop charging until the temperature drops below 40 degrees.

09 TROUBLESHOOTING

● **Windows cannot connect to the scanner;**

If you are using a desktop computer, it is recommended to connect it to the USB 3.0 port on the back of the host (USB 3.0 and above ports are usually blue / red) ;

Confirm to use Windows 10/11 64-bit system;

Scanner software Creality The Scan installation path must be in English.

● **What should I do if the Creality Scan on Windows system can not preview point cloud?**

Use the provided charging cable to connect an external charger to ensure that the scanner is powered normally;

Open Windows Device Manager and check if there is a " Creality Otter Lite... " related camera in " Cameras " ;

Open Windows Settings - Privacy - Camera , confirm whether the system camera permission is turned on, and confirm whether the desktop application has permission to access the camera.

● **What should I do if the Creality Scan on Mac system can not preview point cloud?**

Use the provided charging cable to connect an external charger to ensure that the scanner is powered normally;

The scanner is updated to the latest firmware version;

Use a separate adapter (the scanner comes with a USB - A to USB -C adapter) , and try not to use a multi-function, multi-device USB adapter ;

Creality Scan is installed directly in the computer application directory. Do not install it in a subdirectory under the application directory.

● **In Windows system, what should I do if the USB3.0 interface is identified as USB2.0?**

You can try to quickly reinsert the USB cable, or connect the USB 3.0 port first, and then connect it to the USB C port of the scanner .

For more questions, please visit: https://wiki.creality.com/en/3d-scanner/otterlite

Facebook Community
Discussion , sharing ,
and troubleshooting

Creality Wiki
The step-by-step guide
to help you get started

Shenzhen Creality 3D Technology Co., Ltd.

Official website: www.creality.com

Tel: +86 755 3396 5666 Customer Service: CS@creality.com

Company address: 18F, JinXiuHongDu Building, Meilong Blvd., Longhua Dist., Shenzhen, China 518131

CLASS 1
LASER PRODUCT
CAN ICES (B) / NMB (B)

FCC compliance statement

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.

changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not 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, the 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.

ISED compliance statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) L'appareil ne doit pas produire de brouillage;

(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC SAR statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The portable device is designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (USA). These requirements set a SAR limit of 3.6W/kg averaged per ten gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the limbs.

CE SAR

This equipment complies with Directive 2014/53/EU radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The portable device is designed to meet the requirements for exposure to radio waves established by European Union market(France). These requirements set a SAR limit of 4W/kg averaged over ten gram of tissue. The highest SAR value 3.6W/kg reported under this standard during product certification for use when properly worn on the limbs.

ISED SAR statement

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The portable device is designed to meet the requirements for exposure to radio waves established by the ISED. These requirements set a SAR limit of 3.6W/kg averaged per ten gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the limbs.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. L'utilisateur final doit suivre les instructions spécifiques pour satisfaire les normes. Cet émetteur ne doit pas être co-implanté ou fonctionner en conjonction avec toute autre antenne ou transmetteur.

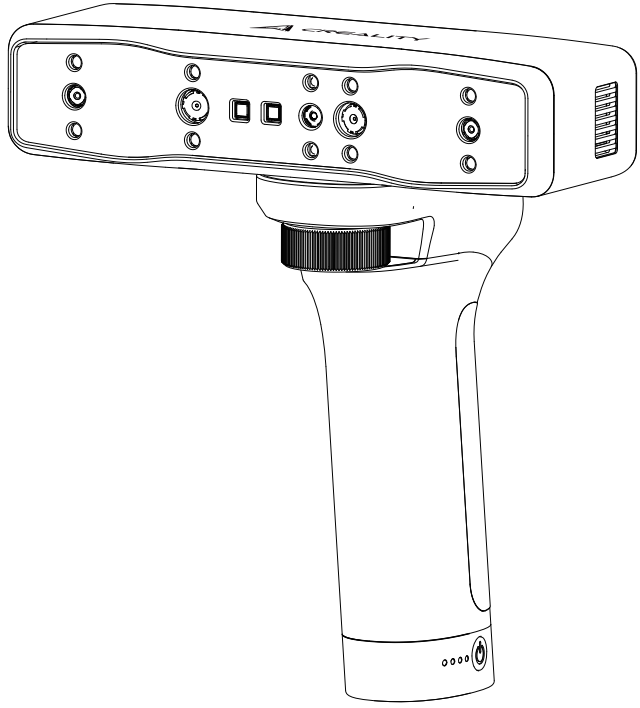
Le dispositif portatif est conçu pour répondre aux exigences d'exposition aux ondes radio établie par le développement énergétique DURABLE. Ces exigences fixent une limite de DAS de 4 W/kg en moyenne pour dix grammes de tissu. Lors de la certification du produit, la valeur SAR la plus élevée rapportée conformément à cette norme lorsqu'elle est correctement portée sur les membres.

The user manual for LE-LAN devices shall contain instructions related to the restrictions mentioned in the above sections, namely that:

a. the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

b. les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour uneutilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

CREALITY



Creality Otter Lite

3D 扫描仪

No Wires, No Limits

Quick Guide V1.0

01 产品简介

Creality Otter Lite是一款能同时兼容小物体与中大型物体扫描的高精度手持式3D扫描仪，最高精度0.05mm 。 小到螺丝，大到整个人体、大型汽车零部件（20mm^3~2000mm^3），都能轻松扫描。之所以具备适应各种尺寸物体的扫描能力，是因为采用了创新的四目立体视觉设计。其中，包含一组大焦距双目和一组短焦距双目。前者用于在近距离中捕获小型物体的细节；后者具有更大的FOV，用于扫描中大型物体，能稳定跟踪不易丢失。

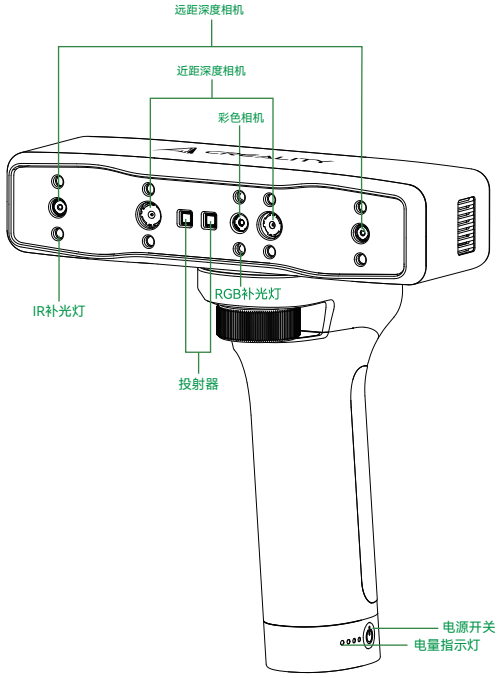
此款扫描仪搭载公司自主研发的深度计算专用芯片，扫描流畅，最高帧率可达30fps。采用独特的单帧3D成像技术，具备优良的防抖性能。先进的DOE结构光投射技术，让其在户外（≤30000 lux）也可实现3D扫描。借助专业级纹理补光灯，能帮助设备在暗光环境下轻松流畅地完成全彩扫描，为对象赋予细腻逼真的贴图。

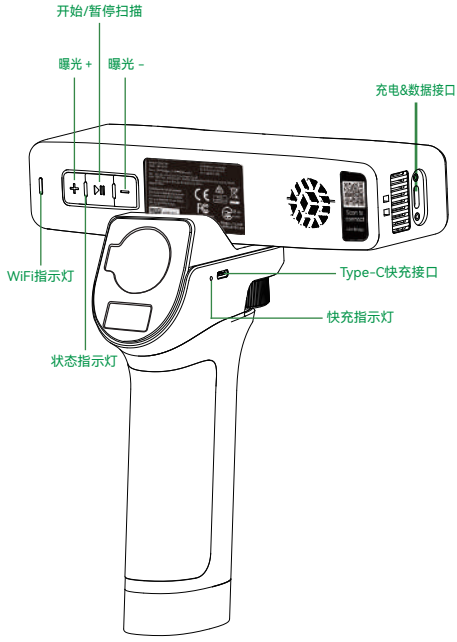
此外，Otter Lite内置无线Wi-Fi模块，搭配电池手柄Lite Bridge可使扫描摆脱线缆束缚。无线扫描时，可用手机替代扫描仪屏幕，使扫描过程更加轻松便捷。

⚠ 3D扫描仪为高精度设备，请轻拿轻放，妥善保存。请勿碰撞或跌落，以免造成精度下降或损坏。

02 产品信息

2.1设备简介





2.2 3D扫描仪按键说明

按键	扫描仪反馈
▶||	短按一次，开始扫描；再短按一次，暂停扫描；长按≥2S，结束扫描。
+	IR相机曝光时间增强10%
—	IR相机曝光时间减弱10%

2.3 电池手柄按键说明

按键	扫描仪反馈
⏻	短按一次，打开电源；长按2S以上，关闭电源。
▭	Type-C充电口，可以为电池手柄充电，支持最高20W快充。

手柄电量指示灯	指示灯反馈
	4个灯全亮表示当前电量在75%-100%
	亮3个灯表示当前电量在50%-74%
	亮2个灯表示当前电量在25%-49%
	亮1个灯表示当前电量5%-24%
	当第1个灯闪烁时表示当前电量 < 5%，建议尽快给扫描仪充电。
手柄快充指示灯	**指示灯反馈**
	只有当手柄进入快充状态时，常亮蓝灯；未进入快充状态，则处于熄灭状态。

2.4 指示灯带说明

按键指示灯	状态或含义	参考颜色
绿色	设备正常运行，扫描距离适中或设备固件升级成功	
红色并闪烁	设备处于异常状态	
黄色并闪烁	设备处于升级状态	
橙红色	扫描距离过近	
橙色	扫描距离较近	
浅蓝色	扫描距离较远	
深蓝色	扫描距离过远	

*注：当在扫描中，距离指示灯开始闪烁时，意味着扫描跟踪丢失，需要扫描仪重新回到已经扫描过的区域，恢复扫描拼接关系。

Wi-Fi指示灯	状态或含义	参考颜色
蓝色	当正常启动中时，长亮蓝灯；当设备启动完成，闪烁蓝灯。	
绿色	当Wifi连接成功且与软件实现通讯，长亮绿灯。	
红色	当WiFi异常或升级异常时，长亮红灯。	
黄色	当OTA升级过程中时，黄灯长亮。	

*当设备待机时，指示灯会进入呼吸状态，以节省电量。

03 产品参数

3.1 3D扫描仪产品参数

产品名称	Creality Otter Lite
型号	CRS10COL
工作模式	红外双目结构光
精度	0.05mm@100mm[1]
点距	0.1-2mm
扫描速度	最高30fps
最小扫描体积	20mm x 20mm x 20mm
最大幅面	近距模式 100mm*62mm@120mm 160mm*130mm@250mm 远距模式 352mm*254mm@300mm 788mm*509mm@600mm 1460mm*1017mm@1200mm
工作距离	120mm-1200mm
色彩贴图	支持
拼接模式	标志点/几何/纹理
数据格式	OBJ/STL/PLY
IMU	支持
标志点补光灯	8颗红外LED
RGB色彩补光灯	2颗白色LED
激光安全	Class I (eye safe)
产品重量	301g
产品尺寸	173mm*39mm*56mm
标定板	高精度玻璃标定板
无线扫描	支持
Wi-Fi协议	Wi-Fi6，向下兼容
Wi-Fi 频段	5GHz/5180-5240MHz/5190-5230MHz/5210MHz/5260-5320MHz 5270-5310MHz/5290MHz/5500-5700MHz/5510-5670MHz/5530-5610MHz
最大传输功率	16.65dBm
传输速率	最高30fps
系统支持	Windows/macOS
数据接口	Type-C/USB3.0/USB2.0
输入功率	USB3.0 5V 3A WiFi 12V 2A
工作温度	-10°C to 40°C
工作湿度	10-90%RH

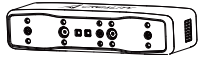
[1] 精度是在实验室环境中评估的，实际结果可能会受到操作环境的影响，如温度、振动和其他因素。

3.2 电池手柄产品参数

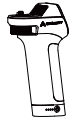
产品名称	Lite Bridge
型号	CRP15LB
电池类型	锂电池
电池能量（额定）	24.82Wh
电池容量（额定）	3400mAh (2 cells)
快充功率	20W MAX[1]
快充协议	PD3.0/QC3.0/UFCS/SCP/AFC
充电接口	Type-C
手机夹	磁吸式
电源开关按键	机械式
尺寸	168mm*93mm*46mm
重量	286g
工作温度	-10°C to 40°C
工作湿度	10-90%RH

[1] 实际充电功率受手柄电池电量、环境和手柄电池温度以及外部充电线和充电头影响

04 装箱清单



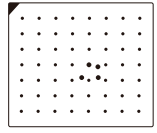
Creality Otter Lite 3D扫描仪 * 1



Lite Bridge (电池手柄) * 1

USB3.0数据线 (USB-C / USB-A 2m) * 1

USB2.0供电线 & Lite Bridge快充线
(USB-C / USB-A 1.5m) * 1

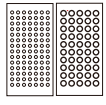


高精度标定板 * 1

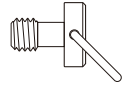
转盘 * 1

扫描测试件(猫头鹰) * 1

USB-C 转接头 *2



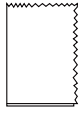
反光标志点 (D6mm * 10张，D3mm * 10张)



螺丝 * 1

磁吸手机夹* 1

快速操作指南 & 合格证 & 保修卡* 1



清洁布 * 1

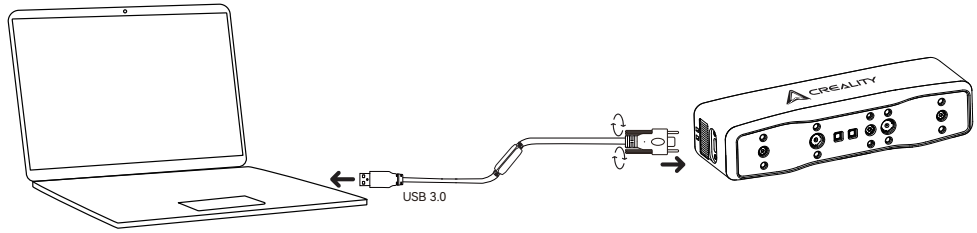
挂绳 * 1

便携包 * 1

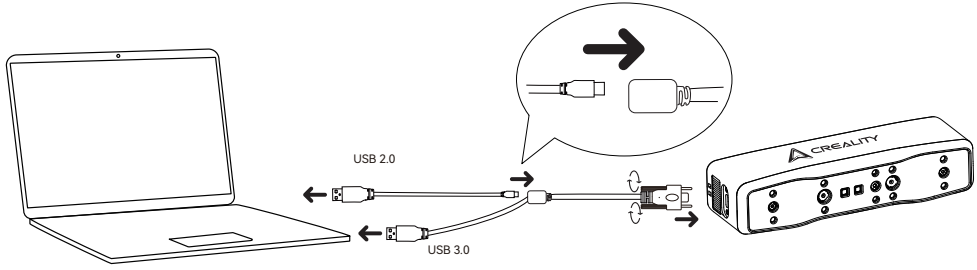
05 设备连接

5.1 有线连接

方式一：使用USB3.0数据线连接到电脑USB3.0接口



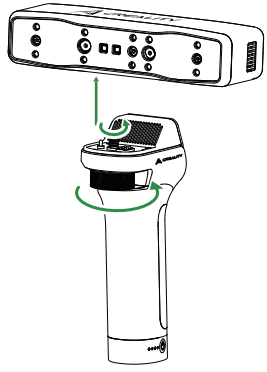
方式二：当电脑只有USB2.0接口或USB3.0接口供电不足时，需使用USB2.0供电线辅助供电。USB2.0的线连接至USB3.0数据线中间的接口（如图所示），端口另一侧可同步连接电脑的另一个端口或使用5V充电器为扫描仪辅助供电。



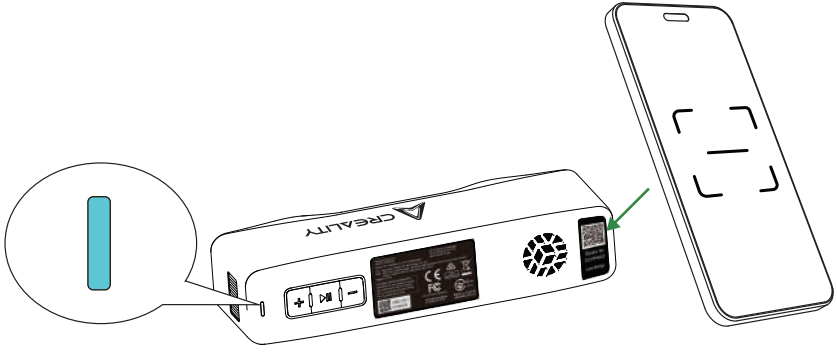
5.2 无线连接

5.2.1 直接用手机扫描

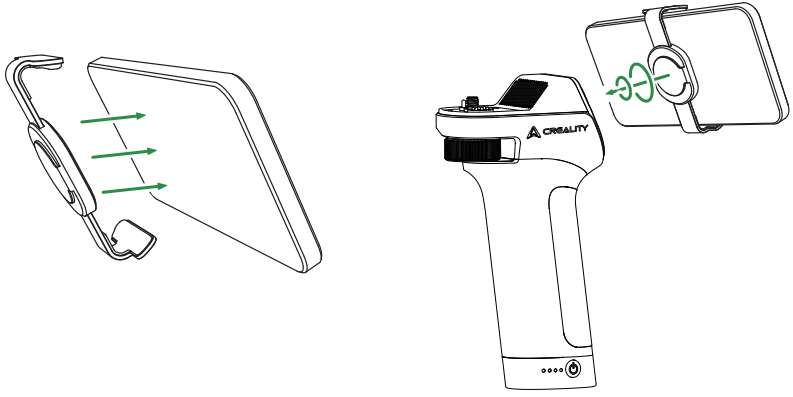
1. 在手机上安装Creality Scan App。
2. 将Otter Lite扫描仪按下图所示方式安装到Lite Bridge上。



3. 短按手柄电源开关，待扫描仪的Wi-Fi指示灯开始蓝灯闪烁，用手机扫描Otter Lite上的二维码连接Wi-Fi，
或者通过搜索名称为“Lite Bridge-xxxxxx”的无线网络完成Wi-Fi的连接。



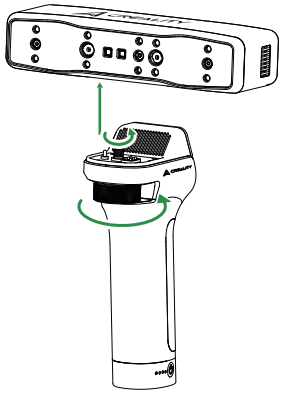
4. 将磁吸手机夹夹在手机上，然后按照图示方式吸附在手柄上



5. 在手机上打开Creality Scan，开始无线扫描（推荐手机配置请查看：
https://wiki.creality.com/zh/3d-scanner/tutorials/general/performance）。

5.2.2 用电脑扫描，手机作为屏幕

1. 将Otter Lite扫描仪按下图所示方式安装到Lite Bridge上。



2. 将电脑连接至名称为"Lite Bridge-xxxxxx"的Wi-Fi网络，并在电脑端打开Creality Scan软件，在扫描界面点击Wireless Display按钮获得无线投屏二维码，用手机浏览器扫描该二维码后即可将电脑端扫描画面同步到手机端，如下图所示。

3. 将磁吸手机夹夹在手机上，然后按照图示方式吸附在手柄上，即可开始无线扫描。

06 软件系统操作

6.1 Ceality Scan软件系统要求

系统要求		
	系统要求：Windows 10/11 (64bit) 配置要求 推荐配置：CPU i7-Gen7 及以上，Nvidia或AMD显卡，内存16GB及以上； 最低配置：CPU i5-Gen8及以上，内存8G及以上。	
	推荐配置 macOS：11.7.7及以上（Big Sur/Monterey/Ventura） CPU: 苹果M1/M2/M3/M4系列处理器；内存：16GB及以上 最低配置 macOS: 10.15.7 及以上 (Catalina/Big Sur/Monterey/Ventura) CPU: 英特尔处理器(i5-Gen8 CPU 及以上); 内存: 8GB 及以上	

6.2 Creality Scan软件下载及安装

扫描仪软件下载地址：https://www.crealitycloud.cn/downloads/software/creality-scan

进入官方Creality Scan软件下载网页，找到合适的软件版本进行下载。

注意：您在MAC上完成软件安装后，请授权三维扫描仪读写文件的权限，以便在使用该软件时优化点云并生成模型。

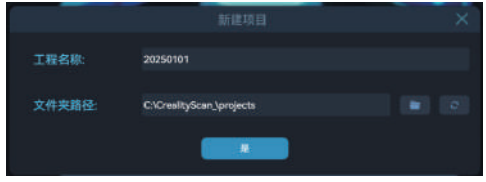
07 首次扫描

7.1 新建扫描项目

1. 连接好设备，打开安装好的Creality Scan软件。

2. 在Creality Scan软件中点击【新建项目】，如下图:

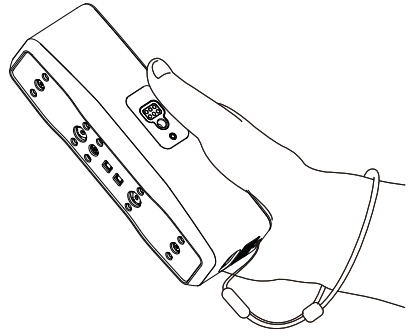
3. 在弹出栏输入工程名称，并选择文件夹路径，然后点击【是】按钮，如下图:



4. 输入“工程名称”，选择“文件夹路径”，并根据扫描对象的特征选择扫描模式以及相关配置项。最后点击【扫描】按钮，进入扫描预览界面，如下图:

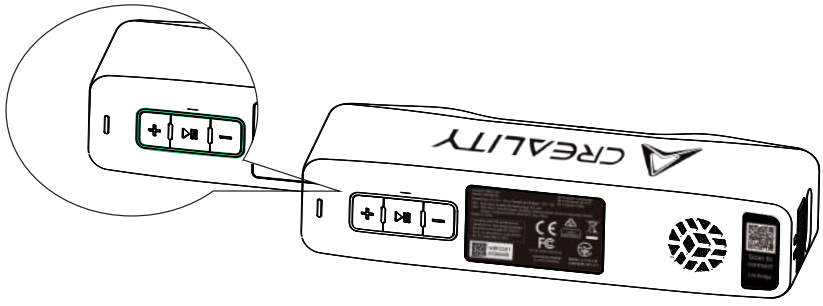
7.2 扫描步骤（测试件为例）

1. 注意，在手持扫描过程中，为防止扫描仪从手中滑落，导致扫描仪损坏，可将赠送的挂绳如图所示一端固定在扫描仪上，另一端套在手腕上，如图所示。

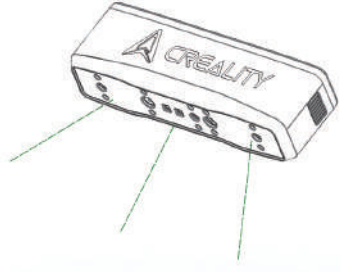


2. 打开安装好的Creality Scan软件，可扫描随包附带的测试件（猫头鹰）进行首次扫描体验，扫描参数参考下图配置。

3. 保证扫描环境干净空旷，调整扫描仪和扫描测试件到合适距离，即扫描仪指示灯为绿色时，或软件界面距离指示条处于最佳（绿色）时，表示此时处于最佳扫描距离。



4. 在扫描仪上短按 ▶|| 按键，或在软件界面点击“开始扫描”以启动扫描，缓慢移动扫描仪并尽量保证测试件在软件预览窗口中间，持续扫描直至模型颜色变为绿色。



5. 当一部分扫描完成时，可点击暂停，更换模型角度后点继续扫描。扫描完成后可在扫描仪上长按▶||超过2S，或在软件界面点击"完成扫描"，即可完成扫描。

6. 数据处理：在Creality Scan软件进行数据处理（一键处理/分步处理）即可得到完整的3D模型（点距建议设为0.1mm），效果如下图：

3D模型

贴图效果

注：如需查看不同物体扫描及数据处理教程，请扫描如下二维码。

08 常见问题

● 如何得到更好的模型细节?

① 扫描过程中，调节IR相机曝光时间，使得曝光适中。过曝为红色，曝光不足为蓝色。

② 尽量保持最佳扫描距离。在跟踪不丢失的情况下，通常扫描仪离物体越近细节越好。

③ 在点云优化时，需要设置较小的点距：例，当物体尺寸较小时，点距可以设到0.1mm。

④ 构网时，模型的面片数要设的足够大。

了解更多扫描技巧，请访问：https://wiki.creality.com/zh/3d-scanner/otterlite

● 如何扫描物体的底部?

① Creaity Scan提供了多工程拼接的功能，可以通过多次扫描、拼接的方式，得到物体的完整模型;

② 先扫描可见部分得到部分模型，暂停扫描，然后翻转物体，通过重新扫描之前扫描过的部分继续追踪扫描，以得到完整的模型 。

● 什么情况下需要接USB2.0供电线?

当电脑因供电不足连接不上扫描仪时，可以用此充电线外接充电器给扫描仪供电;

当扫描仪连接至电脑USB3.0接口时，且供电充足，没有通过扩展坞，一般不需要额外接充电线的。

● 什么情况需要用标记点模式或纹理模式?

当物体表面几何特征不丰富时，可以在物体粘贴随包附带的反光标记点，用标记点模式进行扫描。当物体表面纹理丰富时，可以直接用纹理模式进行扫描。

● 什么情况下需要标定?

当长时间不用（比如一周），或需要进行高精度扫描前完成标定。

注：3D扫描仪为高精度设备，请妥善保存，轻拿轻放，请勿碰撞或跌落，以免造成精度下降或损坏。

● 标定板可以互相换着使用吗?

每块标定板唯一并对应每台扫描仪，不能随意互换使用，第一次使用时，需要先扫描一次标定板背面的二维码进行绑定，否则会影响标定精度。

● 标定板储存有什么注意事项?

每次使用完标定板后，请小心放回箱包内妥善保管好，切勿污染，划伤，重物挤压标定板，避免标定板遗失或损坏。

● 如何进行标定?

连接扫描仪至电脑，打开Creality Scan软件进入【设备】界面，点击【标定】并按照动画提示进行标定即可。

● Lite Bridge如何充电?

使用USB2.0数据线搭配20W以下的充电头进行充电，通常情况下，充电1小时即可充电完成80%。请避免在40度以上的环境中进行充电，会触发Lite Bridge的充电保护机制，停止充电，直至温度降低在40度以下才会恢复充电。

09 故障排除

● Win系统电脑连接不到扫描仪；

如果使用台式机，建议连接到主机背面的USB 3.0接口上(USB3.0及以上接口通常为蓝色/红色)；

确认使用Windows 10/11 64bit的系统；

扫描仪软件Creality Scan安装路径必须为全英文的路径下。

● 在Win系统上的应用中看不到预览视频流怎么办；

用赠送的充电线外接一个充电器，确保扫描仪供电正常；

打开Windows设备管理器，在"Cameras"中查看是否有"Creality Otter Lite..."相关相机；

打开Windows设置-隐私-相机，确认系统相机权限是否已打开，确认桌面应用是否有权限可以访问相机。

● 在Mac系统的应用上看不到预览视频怎么办?

用赠送的充电线外接一个充电器，确保扫描仪供电正常；

扫描仪更新到最新固件版本；

使用独立的转接头（扫描仪随包附带USB-A转USB-C的转接头），请尽量不要使用多功能多设备的USB转接器；

将Creality Scan直接安装在电脑应用程序目录下，请不要安装在应用程序目录下的子目录内。

● 在Win系统中，使用 USB3.0 接口被识别为USB2.0该怎么处理?

可尝试重新快速地插入USB线，或者先连接USB3.0接口，再接入扫描仪的USBC接口。

其他更多问题请参考https://wiki.creality.com/zh/3d-scanner/otterlite

Facebook Community
讨论，分享和故障排除

Creality Wiki
手把手教程

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CLASS 1 LASER PRODUCT
CAN ICES (B) / NMB (B)

WARRANTY

Name: _____ Telephone: _____

Address: _____ E-mail: _____

Serial Number: _____ Order Number: _____

Channel: Platform ☐ Offline ☐ Repair ☐ Change ☐ Return ☐

Date of purchase Day Mon. Year

Malfunction And Damage Depiction Or Return And Change Reasons\Suggestions: _____

_____

Repair Records: _____

_____

Before returning the product and filling in a warranty, please contact after-sale person for going through after-sale formality. And attach this warranty card along with the returned machine.
Note: Client need filling in basic info. and return reasons. Repair records shall retain for technicians.

产品保修卡

客户名称：_____ 联系电话：_____

收件地址：_____ 电子邮箱：_____

机器制造编码：_____ 订单编号：_____

购买渠道：电商平台 ☐ 线下 ☐ 返修 ☐ 换货 ☐ 退货 ☐

购买日期： 年 月 日

故障描述或退、换货原因和建议：_____

_____

维修情况记录：_____

_____

产品寄回前请先联系售后专员，为正常进行售后处理，请务必填写此卡，并随机器寄回。
温馨提示：基本信息及返厂原因为客户必填项，维修情况记录部分为维修人员填写项

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