

iReal 2E: ★★★★★

Thanks to its large field of view (scanning area of 580*550 mm) and a 720-mm depth of field (scanning distance from 280 mm to 1000 mm), iReal 2E offers people true freedom to 3D scan.

Friendly UI design helps users to post-process scanned data easily, and the scanning experience is further improved by versatile features such as a smart colormap and compatible resolutions set.

Conclusion – Infrared VCSEL Technology is More Friendly to Users

Generally, professional handheld 3D scanners are those designed with structured light. These kinds of 3D scanners use structured light-pattern decoding technology, a method of optical measurement based on the principle of triangulation. It projects aperiodic and random digital patterns onto the objects' surface and the pattern is distorted by the surface.

Due to the randomness of the digital pattern, the height information of any point on the surface can be uniquely determined by the tiny area of the pattern image, so that the 3D information of the surface of the object can be accurately measured.

There are two common light sources for structured-light 3D scanners: LED and VCSEL. LED light performs better in capturing details as the pattern projected with LED is clearer than that of VCSEL.

However, there are several disadvantages about this technology:

- LED light 3D scanner with smaller scanning area and depth of field may cause difficulty in data alignment;
- Scanning powder is required for most of the reflective and dark surfaces due to their poor material adaptability;
- Hard to scan hair;



- Difficult to scan under direct sunlight;
- LED light is uncomfortable for the scanned person.

Products with different technical principles have their own advantages and disadvantages. Three-dimensional designers can choose the most appropriate 3D scanners for themselves.

If you are planning to scan the whole human body, body parts, or medium and large-sized objects, iReal 2E with invisible and infrared VCSEL light is your choice.

Its invisible light is safe for eyes and it can offer comfortable scanning experiences. Besides, it is cost-effective, highly adaptive, and easy to operate. iReal 2E could bring you a more friendly 3D digital experience and it's your first choice in professional handheld color 3D scanners.



About iReal 2E

iReal 2E maximizes the performance in depth of field, scanning area, algorithm, texture reproduction, and detail capturing, specially designed for medium to large-sized objects and human body 3D scanning.

iReal 2E adopts the infrared VCSEL structured light technology to bring you the safest and most comfortable 3D scanning experience. Without attaching markers, a quick texture capturing and geometry acquisition can be achieved. Its hybrid alignment modes can meet various scanning situations.

iReal 3D is a sub-brand of Scantech, a company that specializes in developing, manufacturing, and selling portable 3D scanners. iReal 3D offers clients more professional 3D digital solutions to meet various requirements in different fields including but not limited to 3D printing, digital cultural relics, digital sculpture, art and design, medical rehabilitation, body art, clothing customization, mechanical reverse engineering, VR, AR, education and science and research.

By focusing on developing professional 3D scanners and taking advantage of 3D digital tools like 3D printing and 3D software, iReal is dedicated to creating endless possibilities for 3D digital applications.

For more information, please visit www.ireal3dscan.com