Artec Micro II Quick Start Guide

Artec 3D

Version 1.3



Welcome

Congratulations! You are now the proud owner of this compact, automated desktop 3D scanner for digitizing small parts with metrology-grade accuracy.

As you begin using your scanner, we would love to hear about your experiences with it. Whether you want to share a case study or demonstrate new ways in which you work, or if you need any guidance along the way, we are always ready to listen. Please feel free to get in touch with us at support@artec3d.com!

For the Artec Micro II User Manual and other Artec manuals, scan the QR code or visit: https://docs.artec3d.com/.



用户手册 사용자 매뉴얼 ユーザーマニュアル

Manuale d'uso

Manual de usuario

Manuel de l'Utilisateur

Benutzerhandbuch

While every effort has been made to ensure the accuracy and completeness of the information in this user manual, Artec 3D assumes no responsibility or liability for any errors, omissions, or inaccuracies. The contents are provided "as is" and is subject to change without prior notice.

Ensure that the product is used in accordance with the latest version of this document on the manufacturer's website.

↑ CAUTION

This scanner is intended for use by adults only who have read and fully understood the user manual. Users must assess and accept all associated risks before operating the device. Improper use of the battery can lead to damage to the device, personal injury, loss of scanned items, harm to other equipment, or financial losses.

To ensure safe and effective operation and to minimize these risks, it's crucially important to carefully read and understand both this Quick Start Guide and the User Manual before beginning any work. Always follow all safety instructions and guidelines provided. If you have any questions or if any part of the user documentation is unclear, please do not hesitate to reach out to our support team for assistance.

Safety instructions Transport and installation

- The scanner may only be transported if it has been properly packed and secured.
- When handling the scanner, ensure that the scanner does not bend, especially after transportation.
- The scanner is designed to be set up at an ergonomic height. (Observe the employee protection regulations in your country).
- When laying the cables, ensure that they do not pose a tripping hazard. Always lay
 the cables along walls. Under no circumstances may the cables be routed so that
 they are under tension or sagging.
- The location of the scanner must be chosen so that there are no vibrations during scanning operation, i.e. the load capacity of the chosen base (workbench, table, etc.) must be at least twice the value listed in the Technical Specifications and must absorb all vibrations.
- The ambient light must be taken into account when setting up the device. There must not be any change in the ambient light during the scan operation, such as might occur due to shadows from trees or blinds. Neon lights or direct sunlight should also be avoided.
- The scanner must not be operated in damp rooms.
- No liquids should come into contact with the scanner. Do not place any vessels with liquid on the scanner.

Installation and operation

- The operating and maintenance personnel must be instructed regularly on the operation of the system and on potential hazards. They are required to read the operation manual.
- Before each start-up, make sure that there are no parts in the swivel range of the bracket, as it performs a reference run when switched on.
- Keep children away from the scanner. Only trained personnel may work with the scanner.
- Micro II scanner may only be operated when it is in perfect and clean condition.
- Power supply and feeder cables must not be damaged or crushed by other objects.
- Malfunctions or damage must be reported to the operator immediately.
- Removing, modifying, bypassing or circumventing any protective, safety or monitoring devices is prohibited.
- Be aware of possible crushing hazards when operating the scanner inserts.
- If Micro II scanner is not in use for a longer period of time, disconnect it from the power supply.
- Do not place any objects or tools on the scanner.
- Ensure that the area around the scanner remains clear and organized. All objects and containers not required for the workflow must be removed from the area of the scanner.
- Climbing on the scanner, as well as sitting or standing on the scanner are prohibited.

Installation and operation



The swivel bracket will move when the scanner is switched on. Do not reach into the danger area as finger injuries may occur.



The swivel bracket moves during scanning. Do not reach into the danger area as finger injuries may occur.



Micro II is equipped with a compact LED projector. Avoid staring directly into the light source of the projector. Micro II is designed to minimize the risk of accidental exposure when the operator adheres to the provided instructions and safety precautions. However, accidental exposure can still cause discomfort, irritation, or even injury. If you experience any discomfort. after accidental exposure, please consult your healthcare provider.

Improper maintenance, modifications, and repairs

The subsequent installation of additional devices from other manufacturers is not permitted, nor is the modification of protective devices without consulting Artec 3D.

Repairs to the scanner may only be performed by authorized Artec 3D Service Centers.

Safety sticker

Safety instructions are attached to the scanner, which draw attention to possible dangers, and residual dangers.

The instructions on the safety sticker on the scanner must be followed under all circumstances. If the safety labels become faded or damaged during the life of the scanner, they must be replaced immediately with new stickers. They must be checked at regular intervals to ensure they are complete and legible. As soon as the signs are not immediately recognizable or comprehensible at first glance, Artec Micro II must be taken out of operation until the new signs are installed.

The pictograms for warnings, prohibitions and requirements on the scanner and their meaning:

Symbol Meaning



Crushing hazard: This pictogram is located in the area of the swivel bracket and warns of a possible crushing hazard between the scanner and the swivel bracket.

Photosensitivity/Epilepsy seizures



Read this notice before using the 3D scanner.

A small percentage of individuals may experience epileptic seizures or blackouts when exposed to certain visual stimuli, such as the structured light patterns and flashing lights emitted by 3D scanners. This risk applies even to those with no prior history of epilepsy or seizures.

If you or any of your family members have a history of epilepsy or seizures, it is strongly recommended to consult a physician before using a 3D scanner that utilizes structured light or flashing patterns.

Immediately discontinue use and seek medical attention if you or anyone under your care experiences any of the following symptoms: dizziness, altered vision, eye or muscle twitching, involuntary movements, loss of awareness, disorientation, or convulsions.

To minimize the risk of photosensitive epileptic seizures, follow these precautions: limit exposure to the scanner's light patterns, ensure the environment is well-lit, and take regular breaks if you feel fatigued or experience discomfort during scanning.

Regulatory information



The European Union

This product is in compliance with applicable EU regulations and **CE mark** is properly affixed to the scanner.

The applicable EU Directives are outlined in the CE declaration of conformity.

EMC Directive 2014/30/EU

Low Voltage Directive 2014/35/EU

RoHS Directive 2011/65/EU

Attention: Micro II is a **Class A** equipment according to the CISPR 11 Standard: Industrial scientific and medical equipment - Radio-frequency disturbance characteristics.



Disposal of Electrical and Electronic Equipment in Private Households

In the European Union, Norway, Iceland and Liechtenstein: This symbol on the product, in the manual, in the warranty, or on the packaging indicates that this product must not be treated as household waste. Instead, it should be taken to an appropriate collection point for the recycling of electrical and electronic equipment.



The U.S.

FCC Rules and Regulations.

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.

Other certifications and compliance information may be updated by Artec 3D from time to time. Please refer to **Artec 3D Support Team** (support@artec3d.com) for more information.



Micro II is a Class A equipment according to the ICES-001 — Industrial, Scientific and Medical (ISM) Equipment.



The Regulatory Compliance Mark (RCM) shows that a product complies with the relevant requirements in Australia and New Zealand.

Manufacturer

ARTEC EUROPE S.à r.l., 4 Rue Lou Hemmer, L-1748 Senningerberg, Luxembourg

Factory address

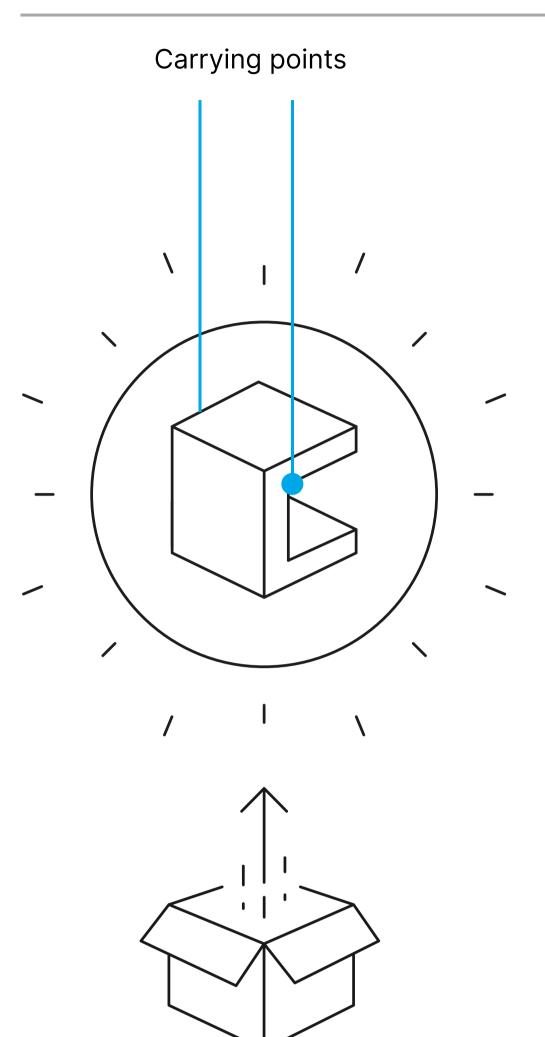
Grasslau 30, 5500 Bischofshofen, Austria

UK representative

ARTEC 3D (UK) LTD, 71-75 Shelton Street, Covent Garden, London, WC2H 9JQ, United Kingdom

Unboxing / Scope of delivery

Unpack the scanner carefully from the packaging and check if everything is included.



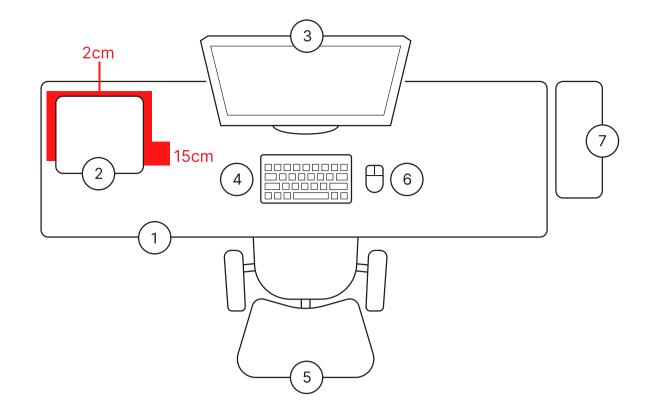
Scope of delivery:

- 1x Artec Micro II Scanner
- 1x Power Supply
- 1x USB Cable
- 1x Calibration plate
- 1x Object holder
- 1x Impression holder
- 1x Automated impression axis
- 1x Object Holder with blu tack
- 1x Box

△ CAUTION

- Please keep the scanner's packaging for any return (repair, exchange etc). This will help prevent transportation damage.
- Do not use the Leo charger for Artec Micro II, as they are not compatible with each other.

Setup example / Connection



- 1. Desk
- 2. Micro II scanner
- 3. Computer screen
- 4. Keyboard
- 5. Desk chair
- 6. Computer mouse
- 7. PC/Laptop

Scanner

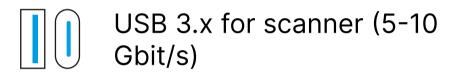
On/Off switch

 \odot

Power connection (24V)

USB 3.0

PC



USB for keyboard/mouse

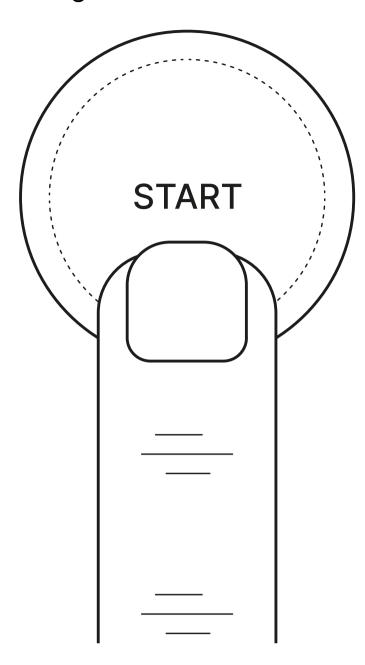
Ethernet/LAN for internet

↑ CAUTION

- Ensure the power supply is connected to a voltage source within 100-240VAC and a frequency of 50-60Hz. Always check that the voltage and frequency match the specified range to prevent electrical hazards.
- Please only use our provided USB cables. If you choose to use your own cables, please ensure they support a data throughput rate of 5-10 Gbit/s.
- Please place the scanner on a safe and stable surface, where it won't be accidentally pushed away or damaged by other objects or people. Don't block the vent exhausts.
- Keep adequate distance between scanner and other objects, sources of heat, persons to maintain safety during the scanner work.
- Avoid placing any objects on the top of the scanner. Any objects inside the working area are allowed only duly affixed on the holder and only within the approved dimensions.
- Ensure that the object is properly fixed and won't cause damage during the scanning process.
- Do not place your hands inside the working area while the scanner is operating to prevent any personal injury and damage to the mechanism and objects. Make sure the scanner is not performing any work or switched off before accessing the working area.

Startup

After the scanner has been set up and connected to the PC correctly, you can start using the device.



1. Start PC

Wait until the PC has fully booted up to turn on the scanner.

2. Start scanner

Turn on the scanner first, and then open the scanning software.

3. Calibrate scanner

We recommend calibrating Artec Micro II in the following cases:

- After transportation
- After long storage (e.g. calibrate the scanner once a month)
- When connecting to a new computer/laptop
- If the environmental conditions have changed
- If the quality of a 3D model is not as reliable or accurate as previous results.

⚠ CAUTION

- Guaranteed unrestricted functionality is only applicable to delivered systems. Third-party systems, which can cause errors, are not recommended.
- It is mandatory to carefully read the User Manual prior to any use of a scanner.

Handling / maintenance

Location

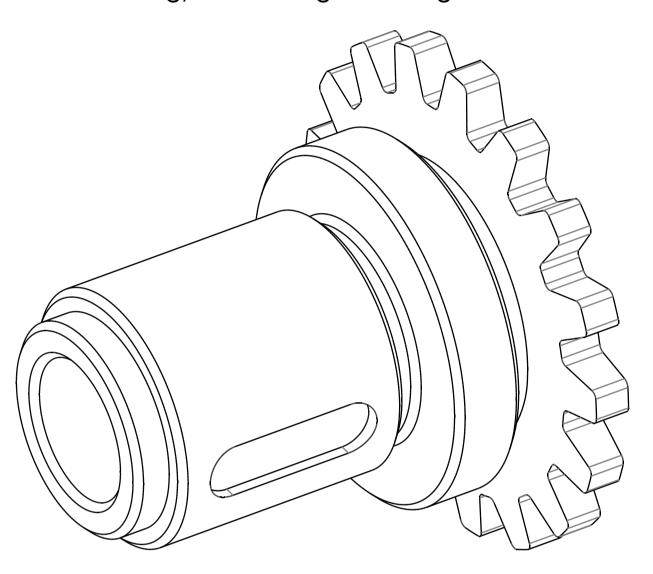
Avoid rapidly changing light conditions, direct sunlight or proximity to heat sources.

Turn off

Hold down the On/Off switch for at least 1 second. The scanning software will start faster when the scanner is in standby mode.

Usage

Refrain from engaging in any CPU/GPU intensive activities such as computer games, 3D rendering, etc. during scanning.



⚠ CAUTION

For further information on the handling and maintaining our scanner, please read the enclosed instruction manual carefully.

Handling / maintenance

Scanner does not start:

- If the scanner does not light up at startup, check the power supply and ensure the AC adapter is connected to the scanner.
- Contact <u>Artec 3D Support Team</u>

Scanner is not recognized on the PC:

- Use high-quality USB cables with a maximum length of 1.5m (except if active USB extensions from CADstar are used). Exchange the cable to complete a test.
- Do not bend USB cable.
- Check that the USB port compiles with the USB3.0 specification.
- Check that the driver status in the Device Manager is up-to-date.
- Check if the LEDs on the device are on.
- Restart the PC and the scanner.
- Contact Artec 3D Support Team.

Stripes are visible on the scan result:

- Watch out for changes in the light during a scan, as they can cause streaking. This is often caused by blinds that move during the scan or sunlight that changes due to trees or reflections on windows.
- Flickering light that can be emitted by sources such as neon tubes or LED lighting.
 You can record a slow-motion video with your smartphone to check for this. If flickering light is visible, eliminate the cause.

Holes are visible in the scan result:

- Recalibrate the scanner
- If there are any dark spots on the object to be scanned, apply our scan spray to the object.

If you got stuck our support is there for you

Should you ever have technical questions about our product, please contact our technical support. They will be at your disposal with their expertise.

You can download a detailed instruction manual from our documentation portal.

We would like to thank you again for choosing our product and wish you a lot of pleasure and productivity with it.

Artec 3D Support Team

