Artec Micro II Quick Start Guide

Artec 3D

Version 1.4



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

- Keep the scanner out of reach of children. Only trained or instructed adults may operate the device.
- Users must assess and accept all associated risks before operating the device. Improper use of the battery can lead to damage to the scanner, 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 Transportation and setup

- 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.
- Ensure that ventilation openings remain unobstructed during operation.
- 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.
- Keep liquids away from the scanner. Do not place containers with liquids on or near the device.

Installation and operation

- Artec Micro II may only be operated in perfect, clean condition, in a dry environment, and away from direct sunlight, heat sources, or rapidly changing light.
- Refrain from engaging in any CPU/GPU intensive activities such as computer games,
 3D rendering, etc. during scanning.
- 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.
- Power supply and feeder cables must not be damaged or crushed by other objects.
- Malfunctions or damage must be reported to the operator immediately.
- The swivel bracket moves when the scanner is switched on and during scanning. Do not reach into its range finger injuries or crushing hazards may occur.
- If Artec Micro II will not be used for a long period, disconnect it from the power supply.
- Keep the scanner and its surroundings clear: do not place objects, tools, or containers on or around the scanner.
- Maintain sufficient clearance around the scanner to prevent contact with heat sources, nearby objects, or people.
- Do not place any objects on top of the scanner.
- Climbing on the scanner, as well as sitting or standing on the scanner are prohibited.

Improper maintenance, modifications, and repairs

Do not install additional devices from other manufacturers. Removing, modifying, or bypassing protective, safety, or monitoring devices is prohibited unless authorized by Artec 3D.

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

Installation and operation



Artec Micro II is equipped with a compact LED projector. Avoid staring directly into the light source of the projector. Artec 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.

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.

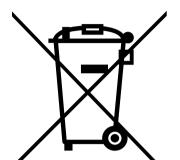
The applicable EU Directives are outlined in the CE declaration of conformity.

EMC Directive 2014/30/EU

Low Voltage Directive 2014/35/EU

RoHS Directive 2011/65/EU

Attention: Artec 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.



Artec 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

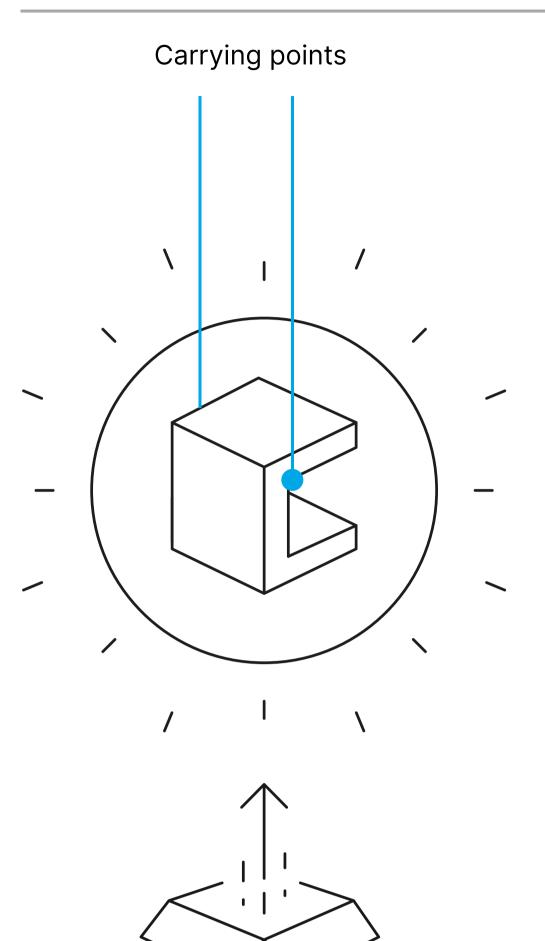
Grasslau 30, 5500 Bischofshofen, Austria

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:

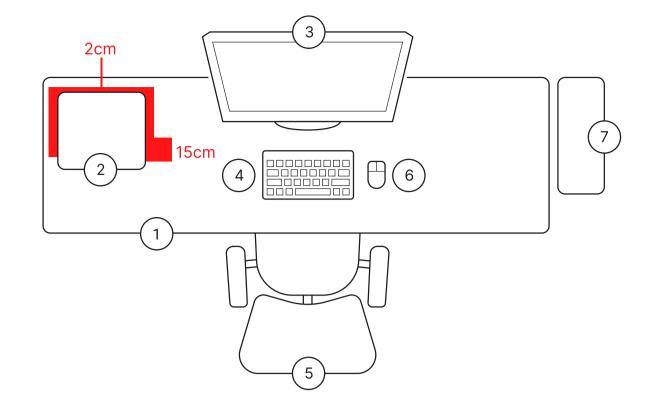
- 1x Artec Micro II Scanner
- • 1x Power Supply
- • 1x USB Cable
- • 1x Calibration plate
- • 1x Object holder
- • 1x Impression holder
- • 1x Object Holder with blu tack
- • 1x Box

△ 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.

Step #2

Setup example / Connection



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

Scanner

On/Off switch

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Power connection (24V)

USB 3.0

PC

USB 3.x for scanner (5-10 Gbit/s)

USB for keyboard/mouse

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Ethernet/LAN for internet

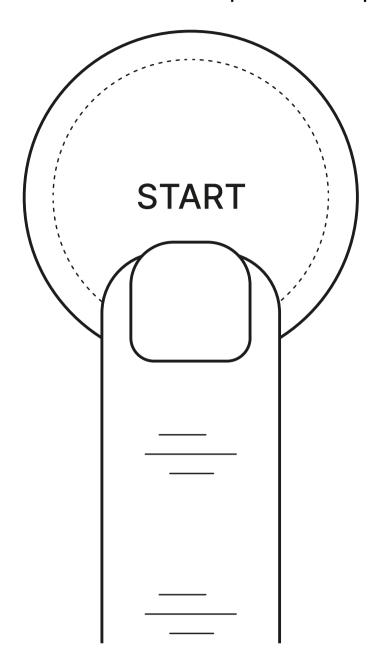
△ CAUTION

- 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.
- 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.

Startup

Artec Micro II requires Artec Studio 18 (and later) software which allows it to scan and process scanned data and should be purchased separately. Note that an Internet connection must be available to download and license the software.

Follow these steps to set up the scanner and start using it with your PC.



1. Start PC

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

2. Start scanner

- Turn on the scanner first by long-pressing the **Start** button. Do the same to turn off the scanner.
- Open Artec Studio → Scan panel
- Click the Scan with Artec Micro II button the scanner will begin initialization.

△ CAUTION

- Guaranteed unrestricted functionality is only applicable to delivered systems. Thirdparty systems, which can cause errors, are not recommended.
- 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.

Step #4

Calibration

After scanner initialization, Artec Studio will request calibration if you are connecting a new scanner or using the scanner with a new computer.

To calibrate scanner:

- 1. Click **Next** once scanner initialization is complete
- 2. Follow the instructions on the Micro II panel to place the calibration plate on the board
- 3. Click Calibrate to start calibration

Wait until calibration is complete.

△ CAUTION

For further information on the handling and maintaining our scanner, please read the Artec Micro II User Manual carefully.

Step #5

Scanning

After scanner calibration, you are good to start scanning. If you think something went wrong during calibration, you can always get back to calibration by clicking the Calibrate button in the Scan panel.

To start scanning:

- 1. Ensure the object is securely fixed and positioned so it will not cause damage during scanning, and that it is clearly visible in the scan preview.
- 2. Click **Scan** to start scanning

Once scanning is complete, the object will appear in the 3D window.

NOTICE

For further information on scanning settings and post-processing, see the Artec Studio User Manual available on the Documentation portal at https://docs.artec3d.com/.

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

