

# WHAT'S NEW IN ARTEC STUDIO 14



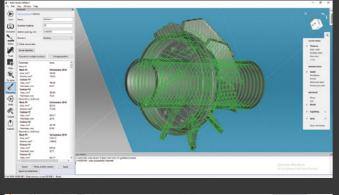
## UNSURPASSED POWER, BREATHTAKING EASE-OF-USE

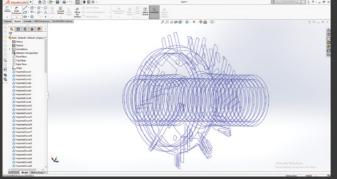
Once again, we've set the bar even higher for the newest version of Artec Studio. Be prepared to be amazed. From integration with our newest scanners to time-slashing speed boosts and brilliant new features designed to kick your productivity and expert results up to the stratosphere, not to mention enhanced the functionality that you've been asking for. We've listened. Now let's take a quick peek under the hood.

## **EXPANDED CAD/CAM FUNCTIONALITY**

In the past, exporting over to CAD/CAM applications would require a go-between application to add surfaces to your model. But now in Artec Studio 14, for some reverse engineering workflows this step has been slashed altogether!

### **Direct Export** to SOLIDWORKS and AutoCAD





For users exporting files over to SOLIDWORKS or other CAD/CAM applications, you can now fluidly export unlimited numbers of open and closed contours as CSV or DXF files. Allows you to reverse engineer simple shapes at wildfire speed using only Artec Studio and SOLIDWORKS or AutoCAD, avoiding the need for additional software to accomplish this step. A real timesaver and ideal for engineers, packaging makers and others.

## **IDEAL FOR QUALITY INSPECTION**

Users in need of peerless metrology-grade color 3D scanning solutions for quality assurance have reason to celebrate. With our industrial desktop 3D scanner Artec Micro and long-range, tripod-mounted laser scanner Artec Ray, you have all the tools at hand for precise, breathtaking digital capture of objects in Artec Studio. Ideal for quality inspection, reverse engineering, industrial design, and more.

#### Integration with Artec Micro

Since the last version of Artec Studio was released, a new member of the Artec scanner family has stepped onto the stage: Artec Micro, a brilliant desktop scanner designed for unrivalled, one-click quality inspection of small and tiny objects. With a staggering point accuracy of up to 10 microns, Micro excels at quality assurance and reverse engineering, as well as jewelry, design, and dental applications. Artec Studio 14 is integrated with Micro, so long-time users of the software can look forward to Studio's great features and unparalleled performance while scanning and post-processing with Micro.

#### **Target-Free Registration** for Artec Ray

A true milestone has been achieved! In Artec Studio 14, time-pressured users of our long-range 3D laser scanner Artec Ray now have the ability to perform stunningly-fast geometry-only Global Registration without needing to set up spheres or two 2D targets. Transcending others in its class in both submillimeter precision and angular accuracy, Ray delivers exceptional scans with a bare minimum of noise, which translates to reduced project times and outstanding results. Additionally, users have the option for hybrid registration via the use of geometry + 2D targets. Even with huge data sets, you'll be registering your scans faster than you ever dreamed.





## **ADVANCED 3D MODELING**

Year after year, when it comes to vibrant, full-spectrum capture of color, Artec scanners have been cruising at the exosphere. And now with these new features and enhancements, 3D modelers and CGI specialists can bring magic to life on the screen or in AR & VR applications in a fraction of the time previously needed.

#### Glare Removal. Saving you hours of work

What you're about to read will forever change your expectations of 3D scanning software. Every scanning technician knows that even a few splashes of glare can ruin the best of 3D models. But removing glare manually can eat up buckets of your valuable time. With the new Glare Removal feature, built on PBR (Physically Based Rendering), all that's history! Artec Studio 14 lets you adjust the level of glare removal, then click and go! After this, just sit back and watch as areas ruined by glare spring to life in reflection-free color. Because of its wickedly-smart algorithms, not only is it way faster than any human can do it by hand, but the results are also far more lifelike, since it's mathematically differentiating and selecting the very best microsurfaces to sample from. Then you can easily add dynamic glare in your 3D viewing program, so as you turn your 3D model, the glare changes accordingly. Ideal for 3D modeling, color 3D printing, CGI, VR and other applications.

#### Bridges

1

Mescure Multi Auti Texture

Fixing holes in your 3D scans can be a long and time-consuming process. Now Artec Studio 14 has made it a whole lot easier with the new Bridges feature, allowing you to organically mend and seal up holes and gaps in your scans better than ever before.





Working off the existing geometry of the scan, Bridges lets you zoom in from multiple perspectives, giving you a sparrow's eye view of the 3D landscape as you create custom edges, corners, dents, and bumps between the edges of your 3D object, even connecting up two separate geometrical parts! Then with a few clicks of the mouse, all your scan's gaps, cracks, and craters will be a thing of the past. Custom settings for curvature and smoothness.

### **Dynamic Auto Brightness**

During scanning, especially with all-too-common uneven lighting conditions and high contrasts, it's crucial to avoid overexposure of your object. With Artec Studio 14's new Dynamic Auto Brightness, the software's latest visual differentiation algorithms take care of all that for you. It automatically tailors the brightness to optimal levels both during preview and throughout the duration of the scan, setting the correct levels of brightness for both dark and light objects, even if you have differing lighting conditions in the same field of view. The end result is a perfectly exposed scan every time.

# TIME SAVING AND ERGONOMICS

When it comes to those helpful features and time-saving enhancements that make your workflow that much smoother, we've got you covered. Once you give these a try, you'll wonder what you ever did without them. There's something here for everyone, from hummingbird-fast speed rises, to one-click positioning, a more robust Autopilot, eye-opening animation, and that's just the beginning.

#### **One-click** auto-positioning

Now you're just a click away from setting the default position of your 3D object in Artec Studio 14. This way the object appears in precisely the position you choose, every time you open the file. Whether it's a 3D scan of a person that needs to be facing in a specific position, or a technical scan of a machine or part, where differentiating left from right is crucial, Artec Studio 14 has it covered.

#### **Enhanced Autopilot**

Fully automatic or semi? Now you have the choice! In Artec Studio 14, users of Leo, Eva, and Space Spider can now choose whether to include Auto-Align in the process or not. This optional feature can be a real time saver, allowing users to decide the best path forward for their specific projects.

#### **Streamlined Registration**

Cutting even more time off your scan processing workflow, the new enhanced registration workflow now skips the Fine Registration step altogether, resulting in faster registration without any sacrifice in quality. Users can still opt for Fine Registration if desired.

#### **Texture Mapping Speed**

Imagine an 800% boost in the speed of texture mapping, so when you click the stop button, your scan will be ready because it's already here! Artec Studio 14 has the guickest and sleekest texture mapping algorithms to date, which



### **Sound Notification**

Now, to help you save even more time while working with Artec Studio 14, after the completion of every long (>30 seconds) process, users will hear a pleasant sound notification. This handy feature frees you up to focus on other tasks, knowing that you'll be coming back exactly when it's time for the next step.

#### **Sequence** Animation



Watch as your scans smoothly click into place during sequences such as global registration. This is ideal for crystal-clear before and after perspectives of your objects, as well as seeing at a glance whether everything has transitioned properly.

## And more

Other super useful and much-asked-for changes awaiting you: Auto Export Naming, Variable Eraser Color, and straightforward Scanner Type Detection. All designed to make your work in Artec Studio 14 more efficient and user-friendly than ever.



#### Subscription or one-off purchase

1

3

Artec Studio is available to purchase as a yearly subscription, ensuring you are always up-to-date with the very latest version. Alternatively, you can buy a lifetime license of one single version of the software.

	to late
License	US \$1
Licenses	US \$3

For use with the following Artec 3D scanners: Artec Micro, Leo, Ray, Space Spider, Eva, Eva Lite, plus discontinued models (Spider, MH and MHT series AG, AC, W2 and T2)\*

# ARTEC **STUDIO 14**

Annual subscription est version

> 1,200 \$3,000

Artec Studio 14 Professional Lifetime

US \$2,900 US \$7,250

\*For full information on compatibility with discontinued scanners, please contact <a href="mailto:support@artec3d.com">support@artec3d.com</a>

## COMPARE ARTEC STUDIO

	AS14	AS13	AS12
EASY 3D SCANNING			
Auto-brightness	Dynamic	+	
Automated sensitivity for scanning black, shiny and fine objects	+	+	+
3D Radar mode	+	+	+
Texture and geometry tracking	+	+	+

#### FAST, POWERFUL 3D PROCESSING

Autopilot: automatic post-processing pipeline	Customizable	+	+
Support of large datasets	Up to 500 million polygons	Up to 500 million polygons	Up to 500 million polygons
Global registration: Object range	Up to 250% greater than AS12	Up to 250% greater than AS12	
Global registration: Speed	2X the speed of AS12	2X the speed of AS12	Up to 10 times faster than AS11
Global registration: Settings	Customizable for greater accuracy or speed	Customizable for greater accuracy or speed	
Fine registration	Streamlined & optional	Mandatory	Mandatory
Texture mapping	800% faster than AS13		
Smart base removal	+	+	+
Auto-Align: texture + geometry based	+	+	+
Fast mesh simplification	+	+	+
X-Ray mode	+	+	
Max error mode	Enhanced for easy scan data inspection	Enhanced for easy scan data inspection	+

#### DAZZLING VISUALS

Sequence animation	+		
Geometry rendering	High-detail	High-detail	Glossy
Texture rendering	High-detail	High-detail	Glossy
Optimized raw data rendering	+	+	
Smooth rendering of 3D models	Up to 500 million polygons	Up to 500 million polygons	

#### ADVANCED EDITING & 3D MODELING TOOLS

Auto glare removal	+		
Bridges	+		
Flexible plane selection	+	+	
Auto texture correction	+	+	+
Texture healing brush	+	+	+
Enhanced Defeature Tool, Eraser and Lasso	+	+	Basic

## AS14

ERGONOMICS			
Sound notification	+		
One-click Auto-Positioning	+	Basic	Basic
3D rotation cube	+	+	
3Dconnexion 3D mouse compatibility	+	+	+
Auto-export naming	+		
Scanner Type Detection	Streamlined	Manual	Manual
MEASUREMENT TOOLS			
Linear, geodesic, sections, distance maps, volume, annotations, CSV, DXF, XML export	+	+	Basic
Export mesh square and mesh volume	+	+	+
DIRECT SCAN TO CAD			
Export multiple open and closed contours directly to CAD	Polyline format for reverse engineering	Single line format	
Direct export to Design X	+	+	+
Direct export to SOLIDWORKS	SOLIDWORKS 2014—2019	SOLIDWORKS 2014—2018	SOLIDWORKS 2014—2017
IDEAL FOR QUALITY INSPECTION			
Scan & process data from Artec Ray high-accuracy long-range scanner	/ +	+	
Target-free registration for Artec Ray	+		
Scan & process data from Artec Micro metrology-grade desktop scanner	+		
EXPORT FORMATS			
Full range of export 3D formats		PTX, AOP, ASC, Disney PTEX, XYZRGB	OBJ, PLY, WRL, STL, AOP, ASC, Disney PTEX, E57, XYZRGB
HARDWARE SUPPORT			
3rd party sensor support	N/A	Ultimate Edition: Microsoft Kinect, ASUS XTion, PrimeSense, Intel RealSense F200, R200 & SR300, XYZprinting 3D scanner	Ultimate Edition: Microsoft Kinect, ASUS XTion, PrimeSense, Intel ReaSense F200, R200 & SR300, XYZprinting 3D scanner
Scanning on MacOS	Artec ScanApp <sup>beta</sup> or Boot Camp	Artec ScanApp <sup>beta</sup> or Boot Camp	Artec ScanApp <sup>beta</sup> or Boot Camp
VIDEO CARD COMPATIBILITY			
NVIDIA Quadro	+	+	+
NVIDIA GeForce 400 Series or higher	+	+	+
AMD	+	+	+

INVIDIA Quadro	+
NVIDIA GeForce 400 Series or higher	+
AMD	+
Intel Series 4600 and higher	+

+