



## AN INTRO TO ARTEC

# STUDIO 13



New and experienced users alike can easily achieve high accuracy 3D scans





**FAST PROCESSING SPEED** 



## MAKING ACCURATE 3D MODELS

## HAS NEVER BEEN SO STRAIGHTFORWARD



## **Autopilot**

An advanced smart mode which guides users through post-processing in a few easy steps, automatically selecting the most effective settings for your data and producing a high precision 3D model.



## High precision

Whether you choose Autopilot or manual mode, Artec Studio never compromises on precision.



## Optional advanced settings

Artec Studio has a full range of advanced settings, giving experienced users full control and flexibility.



## Direct export to CAD

Artec Studio features direct export to Design X and SOLIDWORKS, making the scan to CAD process even easier.



## 3D Radar for easy scanning

Color guided data visualization makes 3D scanning easy. Green tells you that you are holding the scanner at the optimal distance from the object, red means you are too close and blue, too far away. Simple!



## Create, edit and process even huge datasets

Artec Studio is so powerful that you can work with datasets of up to 500 million polygons. Perfect for scanning large objects and for making 3D models in maximum resolution.



## Scan even black and shiny objects

Artec Studio features the most advanced algorithms for capturing hard-to-scan surfaces such as hair or shiny, black objects.



## No need for markers

Artec's best in class color and geometry tracking means you don't need to stick targets on your object.

Just point and shoot!



### Scan with 3D sensors

Learn professional 3D scanning and processing skills using Artec Studio Ultimate and a compatible 3D sensor.



## Built with speed in mind

Powerful algorithms that process your data in seconds. Automated features to save you time.

EXPORT YOUR MODEL TO A WIDE RANGE OF POPULAR SOFTWARE











## **HOW TO MAKE A 3D MODEL**

## THE WORKFLOW EXPLAINED



Workflow 1

## **Autopilot**

For highly accurate results in a few easy, automated steps.

Scan your object and then enter Autopilot to process all your data automatically. Perfect for beginners to achieve professional, high precision results. A great time saver for advanced users.



Workflow 2

### Manual mode

For highly accurate results, with full control and flexibility during the process.

Scan your object and choose the post-processing settings yourself. Advanced users have a full range of powerful tools to manipulate their 3D data exactly as they like.



Workflow 3

## Build your 3D model as you scan

For instant results, with no post-processing.

Using Real-Time Fusion scanning mode, move the scanner around the object and see your model being built as you go. Perfect for scanning simple objects, such as limbs or torso, or for getting a quick preview.

"Autopilot: very user-friendly and easy!"

**Teddy Larsson,** AK Innovative CAD&CAM Solutions "The Autopilot tool is amazing.
I actually got better data on
a difficult part processing
through the auto-tool than
through manual processing!"

Kevin Shain, Laser Design, 3D scanning systems and 3D measurement services "Many of my clients need things within a very tight time-frame. I have found real-time fusion to be a godsend when I need to make sure everything is covered before the subject needs to be returned."

Cameron Berry, 3D scanning specialist, Ink Digital

## MORE ABOUT PROCESSING 3D DATA

## **AUTOPILOT MODE**

FAST, AUTOMATED POST-PROCESSING

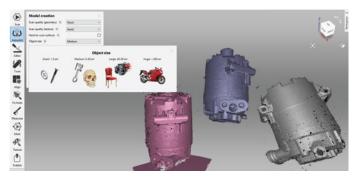
Whether you are new to 3D scanning and require step-by-step guidance in 3D data processing, or are an experienced user looking to speed up your workflow, Artec Studio's breakthrough automated processing features set a new horizon in 3D scanning.

- / Automatically applies the optimal post-processing algorithms for your object in order to achieve the best possible result
- / Full post-processing timeline, totally automatic
- / Perfect for beginners, a great time saver for advanced users

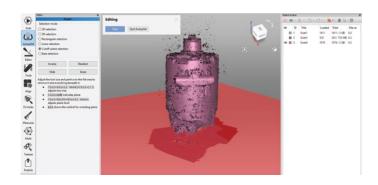
## USING THE AS AUTOPILOT,

RUN THROUGH 4 EASY STEPS TO AN ACCURATE, WATERTIGHT 3D MODEL

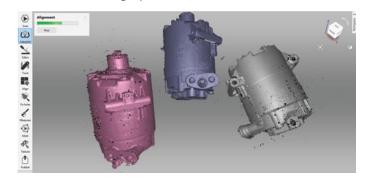
Step 1 Answer a few simple questions about your object and the type of 3D model you need



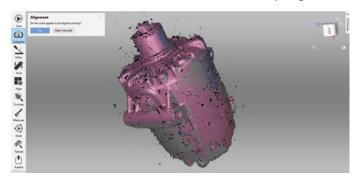
Step 2 Delete any unwanted scanned data



Step 3a Auto align your data in one click



Step 3b Confirm that all scans are correctly aligned



Step 4 Autopilot applies the best processing algorithms to your data



Result A high precision 3D model



## MANUAL MODE

## **CONTROLLED MANUAL PROCESSING**

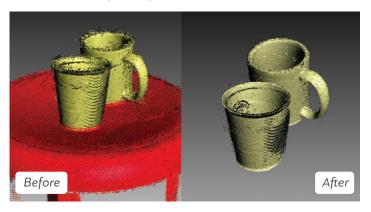
AT BREATHTAKING SPEED

Artec Studio 13 also features a full range of tools for you to process your 3D model manually, giving you full control over your data.

Included are many features which streamline your workflow, making it even faster to achieve the results you need.

#### Smart base removal

Automatically delete the base your object was scanned on. Detects even curved surfaces. No need to manually erase that table, stand, or floor!



## Simplify your mesh in a flash

Optimize the size of your 3D model file by reducing the number of polygons from millions to thousands while maintaining the high quality of the mesh.



## Fast, accurate scan alignment

Auto-align for quick, easy processing. Now 95% of objects can be auto-aligned with total accuracy at the click of a button.

## Smart geometry editing

Touch up your 3D model in a few quick clicks with Artec Studio's intuitive geometry editing tools.

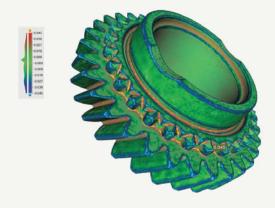
## Apply texture at lightning speed

Accurately map brilliant color to your object in no time.

# Rapid, automatized and precise texture editing

Use Artec Studio's advanced algorithms to automatically map texture where data is missing.

### **ANALYZE YOUR 3D MODEL**



- / Measure the surface and volume of your 3D model
- / Export linear, geodesic and sections measurements in DXF, CSV and XML
- / Annotate your 3D model
- / Compare scans and models with surface distance maps

# **EXPORT TO**YOUR PROFESSIONAL APPLICATION

#### Direct scan to CAD

Artec Studio has been successfully integrated with indispensable tools for engineers, product developers and designers to provide them the fastest and smoothest path from 3D scan to CAD. Now you can export your 3D model to 3D Systems Design X in just one click. And by installing the Geomagic for SOLIDWORKS plugin on your computer, there's nothing simpler than landing your 3D model in SOLIDWORKS, – just press the "Export to SOLIDWORKS" button in Artec Studio for a fast, seamless workflow.



## Publish your 3D model online

Upload to the internet and embed your 3D model on your site

## Popular 3D export formats

Export your 3D model into the format you need: OBJ, PLY, WRL, STL, PTX, BTX, AOP, ASCII, Disney PTEX, E57, XYZRGB

## WHAT ELSE DO I NEED TO KNOW

## **ABOUT ARTEC STUDIO?**

### **FULL-FEATURED GUI**

ARTEC STUDIO COMES WITH A FULL-FEATURED INTERFACE THAT ALLOWS YOU TO MANIPULATE YOUR 3D MODELS. INCLUDES:

- / Projects and built-in Undo/Redo
- / 3D editing tools (eraser, smoothing brush, transformation tools)
- / Advanced 3D processing algorithms, including: auto-align, hole filling, mesh smoothing, filtration, edge smoothing and much more

## LOCALIZATION FOR

12 LANGUAGES

Chinese Traditional, Chinese Simplified, Czech, English, French, German, Italian, Japanese, Polish, Russian, Korean and Spanish

# COMPARE ARTEC STUDIO

		Artec Studio version	
EASY 3D SCANNING	13	12	11
3D Radar mode	•		
Scan black, shiny, fine objects	Automated sensitivity for easy scanning and best results	Automated sensitivity for easy scanning and best results	Manual sensitivity control
Texture and geometry tracking	•	•	•
FAST, AUTOMATIC PROCESSING FEATURES			
Autopilot: automatic post-processing pipeline	•	•	•
Support of large datasets	Up to 500 million polygons	Up to 50 million polygons	Up to 50 million polygons
Global registration: Object range	Up to 250% greater than AS12		
Global registration: Speed	Up to 20 times faster than AS11	Up to 10 times faster than AS11	
Global registration: Settings	Customizable for greater accuracy or speed		
Fine registration	Up to 50% faster		
Base removal	Smart	Smart	Basic
Auto-Align: texture + geometry based	•	•	•
Fast mesh simplification	•	•	•
ADVANCED 3D PROCESSING. ABSOLUTE CONTROL.			
X-Ray mode	•		
Max Error mode	Enhanced for easy scan data inspection	•	•
DAZZLING VISUALS			
Geometry rendering	High detail	Glossy	Basic
Texture rendering	High detail	Glossy	Basic
Optimized raw data rendering	•		
Smooth rendering of 3D models	Up to 500 million polygons		
LARGE DATA MANAGEMENT			
Smart render for large data	•		
Smart memory management for smoother processing	•	•	•
Project compression tool	Ultra-compact	Ultra-compact	Basic
INTUITIVE EDITING TOOLS			
Inverse selection	•		
Plane rotation tool	•		
Auto texture correction	•	•	•
Texture healing brush	•	•	•
Defeature Tool, Eraser and Lasso	Improved	•	•
ERGONOMICS			
3D rotation cube	•		
3Dconnexion 3D mouse compatibility	•	•	•
UI design	New and improved	New	
Hints and hotkeys	•	•	•
MEASUREMENT TOOLS			
Linear, geodesic, sections, distance maps, volume, annotations, CSV, DXF, XML export	Upgraded measurement tools, including export of non-closed contours	•	•
Export mesh square and mesh volume	•	•	•
DIRECT SCAN TO CAD			
Direct export to Design X	•	•	•
	SOLIDWORKS 2014—2018	SOLIDWORKS 2014-2017	SOLIDWORKS 2014-2016
Direct export to SOLIDWORKS  EXPORT FORMATS	30LIDWORK3 2014—2018	30LIDWORK3 2014-2017	30LIDW 0KN3 2014-2010
Full range of export 3D formats	OBJ, PLY, WRL, STL, BTX, PTX,	OBJ, PLY, WRL, STL, AOP, ASCII,	OBJ, PLY, WRL, STL, AOP, ASCII,
ruii fange of export 3D formats	AOP, ASCII, Disney PTEX, E57, XYZRGB	Disney PTEX, E57, XYZRGB	Disney PTEX, E57, XYZRGB
HARDWARE SUPPORT			
3rd party sensor support		soft Kinect, ASUS XTion, PrimeSense, 200 & SR300, XYZprinting 3D scanne	
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	•	•	•
Intel Series 4600 and higher	•	•	•





Free trial version available

## Subscription or one-off purchase

Artec Studio is available to purchase as a yearly subscription, ensuring you are always up-to-date with the very latest version, or as a one-off lifetime purchase of a single version only.



## **Ultimate**

For use with Artec 3D scanners and 3rd party sensors:

Artec Leo, Ray, Eva, Eva Lite, Space Spider, Spider, plus discontinued models (MH and MHT series AG, AC, W2 and T2)\*

Microsoft Kinect for Windows V1 & V2, ASUS XTion, PrimeSense Carmine, Intel RealSense F200 (IVCAM), R200 (DS4) & SR300, XYZprinting 3D scanner

## Professional

For use with Artec 3D scanners:

Artec Leo, Ray, Eva, Eva Lite, Space Spider, Spider, plus discontinued models (MH and MHT series AG, AC, W2 and T2)\*

\*For information on compatibility with other series of discontinued scanners, please contact support@artec3d.com

	Artec Studio 13 Ultimate	Artec Studio 13 Professional	
	Annual	Annual	Lifetime
1 License	€800	€400	€1000
3 Licenses	€2000	€1000	€2500

www.artec3d.com AS13-001-3108-EU-ENG