

TechNote #1032

August 25th, 2017

For: General Release From: Jennifer Triana Certainty 3D, LLC

Riscan Pro E57 Export with the GeoSys Manager

Riscan Pro users accustomed to importing the point cloud data and imagery data into TopoDOT using the Project.RSP file will now need to export the project as an E57 format when using the GeoSys Manager instead.

The RSP file won't retain the projection information. This is especially true for projects registered with the targetless Registration 2.0 method.

The E57 format can be used in TopoDOT just like a RSP file would. Please refer to <u>Technote #1022</u> for more information on how to use the E57 format in TopoDOT.

This document outlines the correct way to export E57 format from Riscan Pro to the date of this Technote. E57 is a metric format so it needs to be exported in meters even if the project was created using feet or survey feet.

- 1. Pull down the Help menu on the top and select Wizard 'Export'.
- 2. Select ASTM E57 in the Export Format and browse for a location to store the file.

Export Wizard	23
Format Adjust export format	Page 1 of 2
Export format:	ASTM E57 🗸
Output file:	tersoll Rand Facility.RiSCAN\Test 3 in meters export pos1 n 2.E57 👻 🔒
Coordinate system:	NAD83 / NAD83 / New York Central
Axis units:	Easting[ftUS], Northing[ftUS], Height[ftUS]
Keep uncolored point	ts:
Exporting inaccurac	to E57 into a non geocentric coordiante reference system may lead to ies!
G Back	Next 🔿 OK Cancel

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- 3. If your Axis units are in any units other that meters, then select the coordinate system the data needs to be projected to and click on the wrench icon next to it.
- 4. Choose the select option under Coordinate Reference System

r	(Coordinate Reference System				
ĸ		Settings				
c	Coordinate Reference System:		NAD83 / NAD83 / New York Central 🔹			
L		Datum Transformation:	NAD83 / NAD83 / New York Central Select			
		ОК	Cancel Help			

5. Click on the edit icon next to the Record that was selected



6. Change the Coordinate Axis units to meters. This is a temporary change in order to export. You can change it back after it is exported. After changing click OK in all the previous windows.

😂 Coordinate Reference Sy	stem	🗢 Coordinate Reference Sy	rstem
Name / EPSG Code:	NAD83 / NAD83 / New York Central 0	Name / EPSG Code:	NAD83 / NAD83 / New York Central 0
Coordinate System Type:	Projection	Coordinate System Type:	Projection
Geodetic Datum:	★ NAD83	Geodetic Datum:	🗙 NAD83 🔹 📝 🙆
Map Projection:	NAD83 / New York Central	Map Projection:	NAD83 / New York Central 🔹 📝 🔍
Engineering Transformation:	🖸 (none) 🔹 📝 🔘	Engineering Transformation:	📉 (none) 🔻 🖉 🔘
Geoid Model:	📉 (none) 🗾 📝 🔘	Geoid Model:	(none)
Coordinate axis 1 name/unit:	Easting	Coordinate axis 1 name/unit:	Easting 🗸 🖌 Meter 🔹 🖉 💿
Coordinate axis 2 name/unit:	Northing VS survey foot -	Coordinate axis 2 name/unit:	Northing Veter V
Coordinate axis 3 name/unit:	Height	Coordinate axis 3 name/unit:	Height Veter V
Comments:		Comments:	
	OK Cancel		OK Cancel

7. Click Next on the Export Wizard, and select all files including scans and images

Export Wizard			×
Objects Choose objects to ex	¢port		Page 2 of 2
			504 item(s) selected
▲ Name	Location	Туре	A
170809_141	ScanPos064	Scan	
<u> </u>	ScanPos065	Scan	
A 170809_142	ScanPos066	Scan	
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170807 152	ScanPos001	Image	T
🖨 Back	Next 🖒		OK Cancel

8. TopoDOT will scale the data to the Design File Settings in your DGN. No need to set the TopoDOT units to meters, it will scale the data to whatever the drawing settings are because it knows that E57 is always in meters.

📕 Design File Settings	×
Category Active Angle Active Scale Angle Readout Axis Color Element Attributes Fence Cad	Modfy Working Unit Settings Linear Units Format: MU Master Unit: Survey Feet Sub Unit: Survey Inches Accuracy 0.123 Custom
lisometric Locks Snaps Stream Views Working Units	Advanced Settings Resolution: 10000 per Distance Meter Working Area: 9.0072E+008 Kilometers Solids Area: 1 Kilometers Solids Accuracy: 1E-008 Meters Edit
	Focus Item Description Select category to view.

9. Use Technote #1022 to map and load scan positions and images from the exported E57 file.

Please contact us if you have any questions at support@certainty3d.com

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