

Leica ScanStation Pxx Data Copy Tool

Introduction

The *Pxx Data Copy Tool* provides data download of several projects in one step or just a subset of a project from the *ScanStation Pxx* to a computer. Log files from the *ScanStation Pxx* can also be transferred to a computer. Setup reports, Traverse reports and Target measurement reports can be reviewed and exported to a pdf document. The data stored on the scanner and your local drive can easily be reviewed with the integrated HMI-style viewer. Data stored on your local drive can be exported to E57 file format, if data is flagged with the API Data Access Option license. The scale factor can be reset for projects or separate stations inside projects stored on your local drive.

Installation

Unzip the *PxxDataCopy_x.xx.xx.xxx.zip* and run the *Setup.exe* to install the *Pxx Data Copy Tool* on your computer. The install shield wizard will guide you through the installation of the program.

Preparation

Boot up the *ScanStation Pxx* and make sure the scanner is connected via data transfer cable (*GEV228*) to:

- direct network plug on your computer
- the company's network

The direct connection may take some seconds to be established and your computer will indicate a local area connection with limited connectivity.

Using Pxx Data Copy Tool

Double click the *PxxDataCopy.exe* from the installation folder or the application shortcut created on the desktop during installation to start the *Pxx Data Copy Tool*. The Copy Tool Program displays 5 buttons in the button bar.

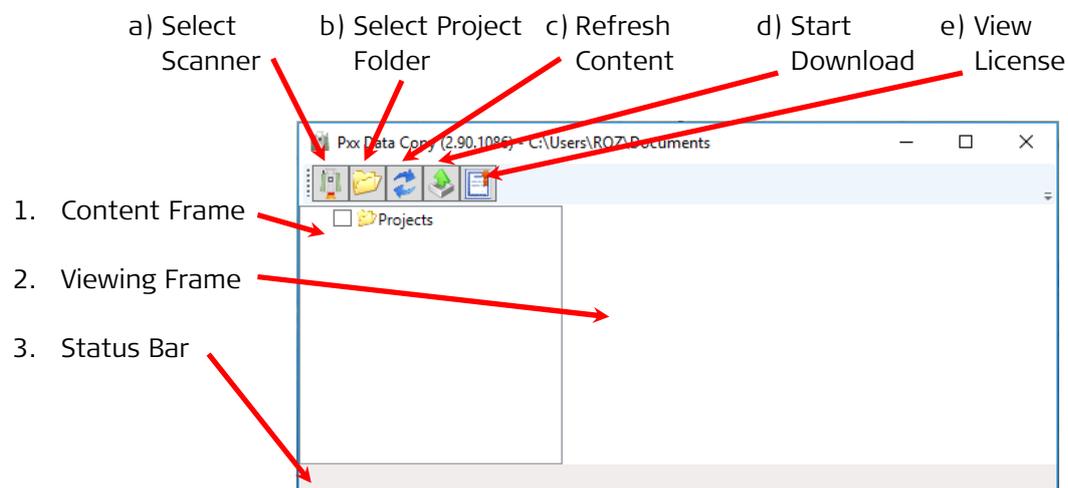


Figure 1: Pxx Data Copy Tool

- a) Click the *Select Scanner* button from the button bar to open a list which displays all available scanners within the network. Highlight the scanner's name and click "OK" to connect to the selected ScanStation Pxx.

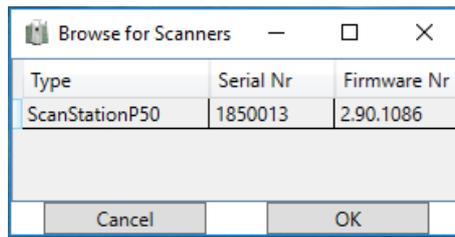


Figure 2: ScanStation Pxx Selection

The connection is successfully established when the *ScanStation's* serial number is displayed in the title bar next to the Data Copy Tool's version number. Additional button in the button bar is available:

- d1) Dump all projects from scanner to computer

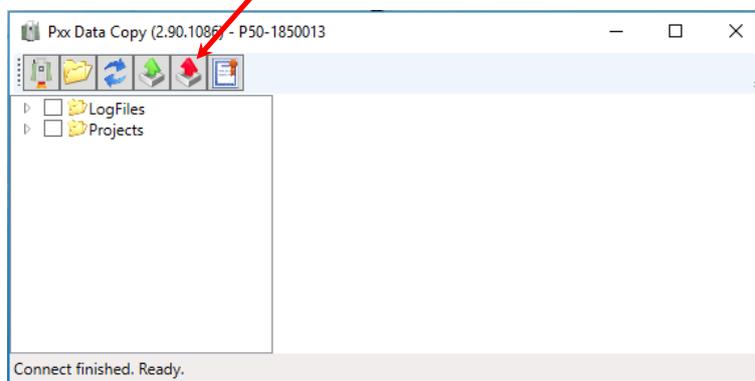


Figure 3: Connected Data Copy Tool

- b) Click the *Select Project Folder* button to load a project folder stored locally on your computer which contains at least one scanning project. The data can be reviewed within the *Viewing Frame (2)* by selecting either a scan, a target or an image.

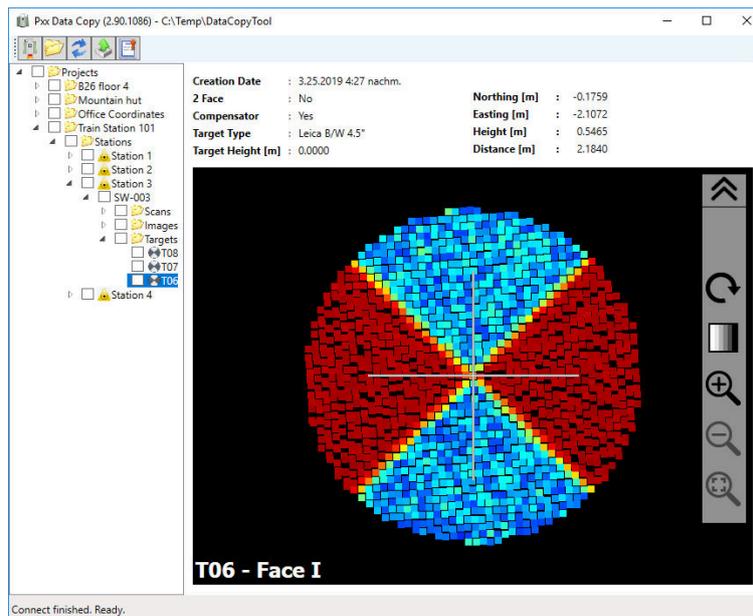


Figure 4: Review Project on local Computer

For projects stored locally on your computer *Pxx Data Copy Tool* provides the possibility to reset the used defined scale factor and exporting of the data to E57 file format.

To reset the scale factor right click on the project or individual station in *Content Frame (1)* and click *Reset Scale Factor* in the right click menu (Figure 5).

To export data to E57 format right click on the project or individual station in *Content Frame (1)* and click *Export data to E57 format* in the right click menu.

Note: Only data flagged with the API Data Access Option license can be exported to E57 format.

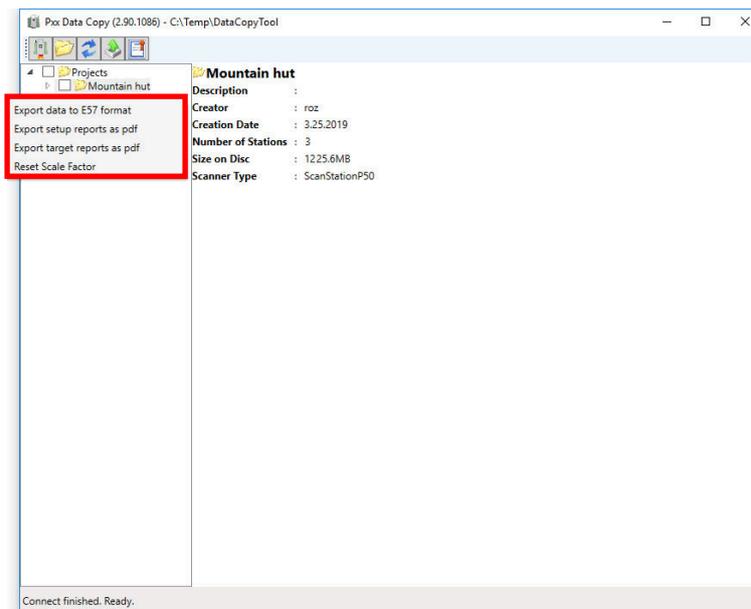


Figure 5: Right click menu for data stored on local computer.

c) The *Refresh Content* button is reloading the project structure from either the scanner or the locally stored data into the *Content Frame (1)*. This may be needed if the scanner is acquiring scans into a new created project during the *ScanStation Pxx* is still connected to your computer.

d) The *Pxx Data Copy Tool* provides downloads of project data and log files. Click the *Start Download* button to copy the selected data within the *Content Frame (1)* to a location of your choice. Within the upcoming window (Figure 6) the destination folder on the local device can be chosen.

Note: Projects which are opened from a local device cannot be copied to anywhere else.

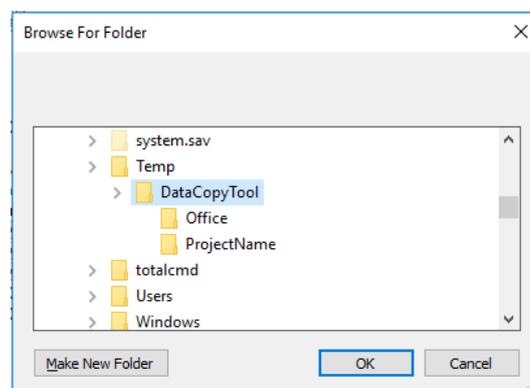


Figure 6: Location to Data Storage

During the download the *Status Bar (3)* is displaying a progress bar.



Figure 7: Status Bar (3)

When the Status Bar is showing *Ready* again then the download is successfully finished.

The *Pxx Data Copy Tool* provides viewing and exporting of Target measurement reports, Setup reports and Traverse reports.

Reports can be viewed inside *Viewing Frame (2)* by selecting either a scan world, a target or traverse from *Content Frame (1)*.

To export Target measurement reports or Setup reports to pdf document right click on a project, a station, a scanworld or an individual target/setup in *Content Frame (1)* and click *Export target/setup reports as pdf* in the right click export menu (Figure 8).

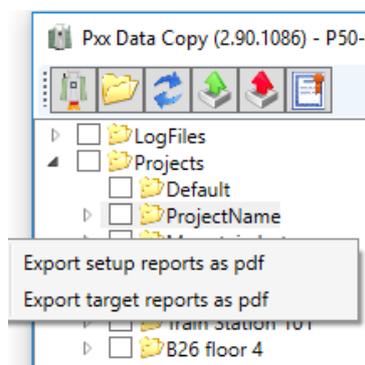


Figure 8: Export setup or target reports menu.

To export Traverse report right click on a traverse in *Content Frame (1)* and click *Export report as pdf* in right click export menu (Figure 9).

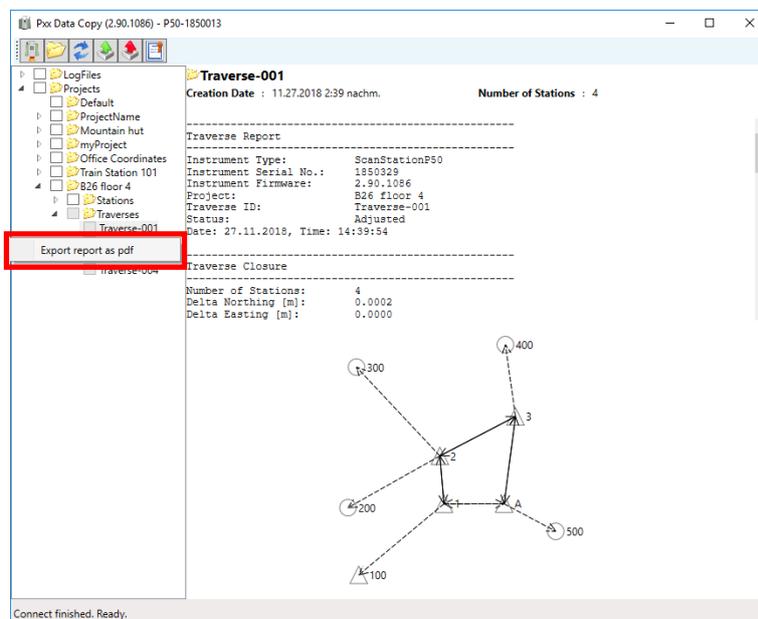


Figure 9: Export traverse report menu.

- d1) By pressing *Dump all projects from scanner to computer* button, whole content of the Data folder on scanner is copied to selected destination folder on the local computer. Destination folder can be chosen within the upcoming window (Figure 6).
- e) By pressing the *View License* button, the copyright information about installed free-ware software is displayed.

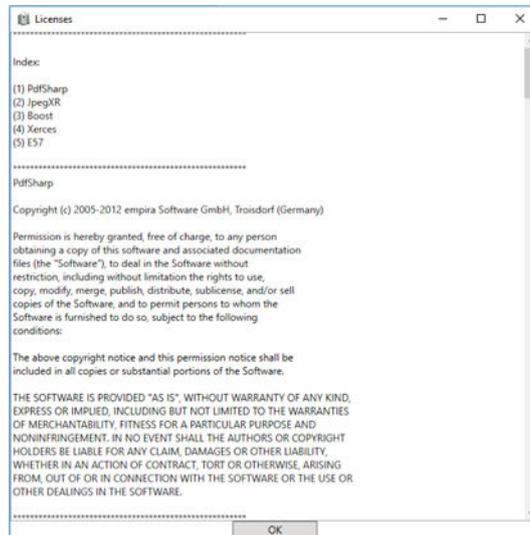


Figure 10: Licenses.

Lookup table generation in the Data Copy Tool

Lookup tables (LUT) are required when the ScanStation Pxx shall be remotely controlled by the Cyclone FIELD 360 app. They can be generated prior to the field job in the Data Copy Tool and automatically transferred to the connected scanner. Lookup tables are serial number dependent, thus must be created for each scanner separately.

Double click the *PxxDataCopy.exe* from the installation folder or the application shortcut created on the desktop during installation to start the *Pxx Data Copy Tool*.

1. Click the *Select Scanner* button from the button bar to open a list which displays all available scanners within the network. Highlight the scanner's name and click "OK" to connect to the selected ScanStation Pxx.
2. In the left panel right click on *Lookup Tables* and then select *Generate and Transfer to Scanner*.

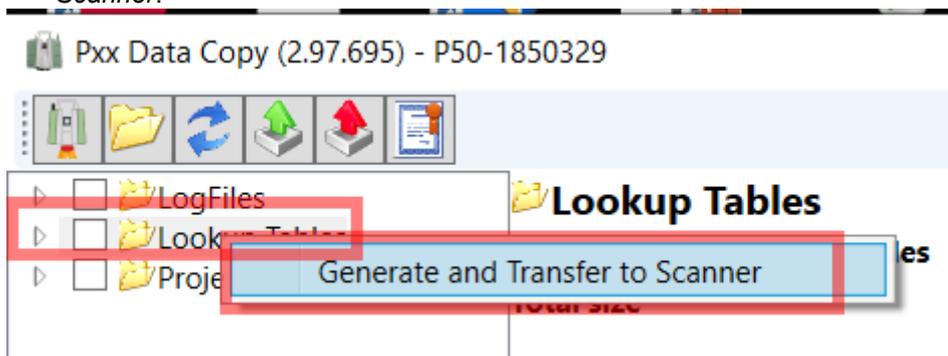


Figure 11: Generate and transfer LUTs to scanner

Leica Geosystems AG
 Heinrich-Wild-Strasse
 CH-9435 Heerbrugg
 Schweiz

3. Select a new folder to store the Lookup Tables on the computer.

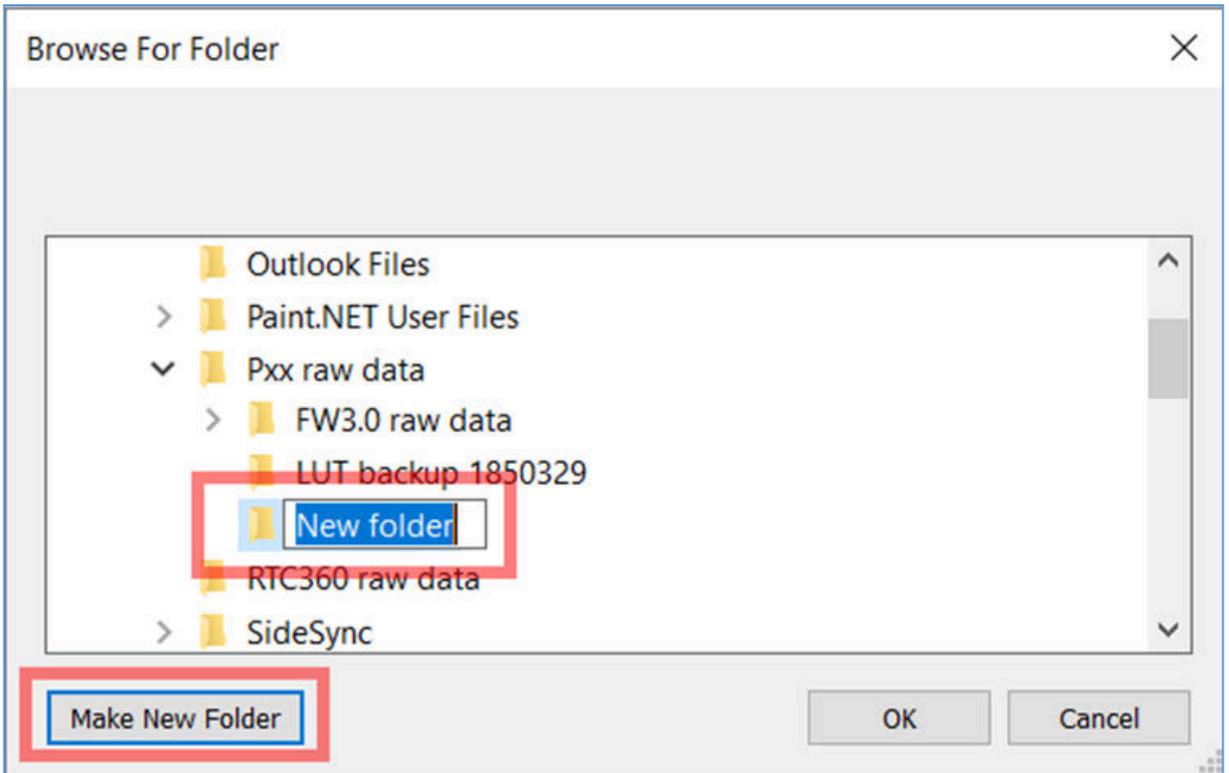


Figure 12: Create folder for LUTs

4. The LUT generation process will start. At the bottom of the Pxx Data Copy Tool a progress bar shows the current status. This can take up to 30min.



Figure 13: LUT generation on progress

5. Lookup Tables are automatically transferred to the scanner's harddrive.

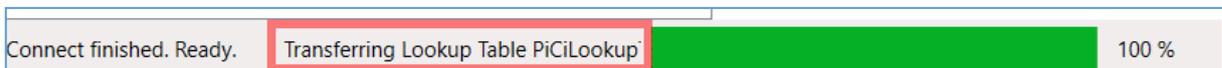


Figure 14: LUT transfer to scanner

6. |
6. In the Pxx Data Copy Tool press the Refresh button.

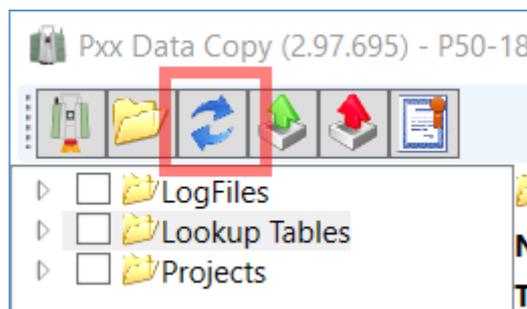


Figure 15: Refresh

7. In the *Pxx Data Copy Tool* all *Lookup Tables* of the scanner will be displayed and the scanner is ready for Cyclone FIELD360 remote control.

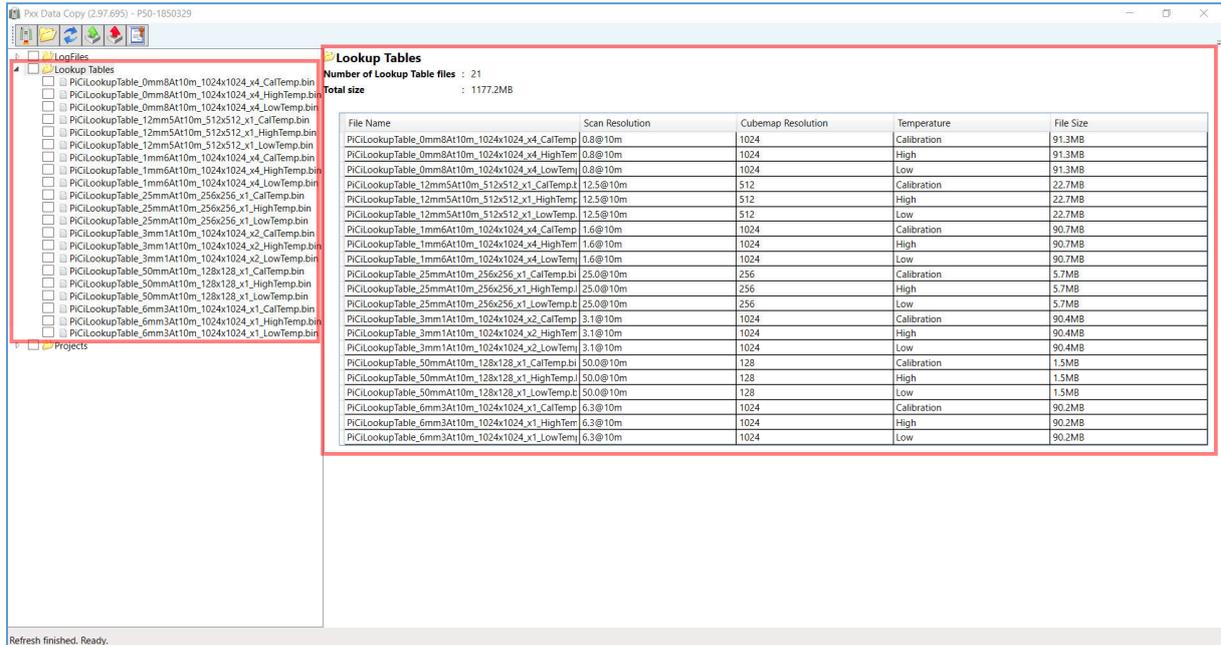


Figure 16: LUTs displayed in Data Copy Tool