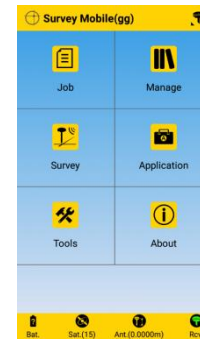# RELEASE NOTES

Spectra Precision Survey Mobile

Survey Mobile v2.3.0 Release Notes (Sept, 2018)

Spectra Precision Survey Mobile (SPSM) is an easy to learn and simple to use field software for surveyors who want to get their work done fast and efficiently. The user interface is designed to be simple and straightforward so surveyors can be productive immediately.

Hardware and Operating System

Item	Requirements
Handheld Operating System	Android V4.3 or above
Handheld Processor	Armeabi-v7a
Handheld Screen Size	4.2 inches or above
GNSS Receiver	SP80, SP60, R4s, SP20
Total Station	FOCUS 6, FOCUS 8, NIVO C/M, DTM/NPL-322, XF, XS

Features and Functions

Functions	Sub-Functions
Job	• New job • Save job

	- Open job - Close job - Delete job - Modify job
Coordinate System	- Standard coordinate system - Customized coordinate system - No datum no projection - Scale 1.0 - Broadcast RTCM
Site Calibration	- Site calibration - Single point calibration
Receiver Control	- Scan/Connect/Disconnect - Rover RTK configuration (Radio) - Base RTK configuration (Radio) - Rover RTK configuration (Network) - Base RTK configuration (Network) - Rover RTK configuration (Bluetooth) - Base RTK configuration (Bluetooth) - RTX configuration - Internal radio configuration - Receiver status - Receiver properties - Satellite configuration - Antenna configuration - Battery configuration
Total Station Control	- Scan/Connect/Disconnect - Total station status - Total station properties

	• Target configuration • Laser configuration • Battery configuration
GNSS Survey	• Point survey • Control point survey • Offset survey • Continuous survey • Fast survey • Static survey • Stop & Go survey
Optical Survey	• Station setup • Topo point survey • Offset survey • Measure rounds • Traverse survey
Stakeout	• Point stakeout • Line stakeout • Arc stakeout • Transition stakeout • Alignment stakeout • Fast static
Define	• Define point • Define line • Define arc • Define transition • Define alignment • Define traverse
Manage	• Settings • Coordinate system management

	• Data management • Device management • Rover/Base configuration management • Background map management
Import	• Import Survey Mobile point (txt, csv) • Import AutoCAD (dxf) • Import Trimble JobXML (jxl) • Import Trimble road design (rxl) • Import Survey Mobile coordinate system (scs)
Export	• Export point (txt, csv) • Export South CASS point (dat) • Export survey data (dxf) • Export Trimble JobXML (jxl) • Export Trimble road design (rxl) • Export coordinate system (scs) • Export static survey report (txt) • Export cross-section (txt)
COGO	• Area • Perimeter • Azimuth • Distance • Coordinate
Road	• Define road • Stakeout road • Road management • Cross-section survey • Cross-section management
Map	• Survey data (point, line, arc, transition)

	- DXF (point, line, polygon, circle, arc, transition)
	- Road horizontal alignment
	- Auto scroll
	- Zoom extends
	- Survey on map
	- Snap to
Language	- Chinese Simplified, English, French, German, Spanish, Italian, Portuguese Brazil, Russian, Polish, Japanese, Turkish, Greek
	- Language switch in application

New Features

No.	Description
1	Add SP20 support.
2	Add Broadcast RTCM
3	Select a file in a customized directory to import.
4	Select a customized directory to export.
5	Add a notification in survey and stakeout when single point calibration has been applied.
6	Add raw measurement data in JXL.
7	Add save for snap to points entered from survey.
8	Add distance unit selection in import point, DXF, export point, DAT, DXF, static survey report and cross-section
9	Add export points as "Blocks" in export DXF
10	Add snap to DXF.
11	Add searching a point in point list.

Enhancements

No.	Description
1	Enhance the coordinate system list loading speed when enter "Management-Coordinate system".

2	Replace negative value in stakeout with downward, backward, leftward, westward or southward.
3	Enhance survey page loading speed when lots of points in the job.
4	Replace "Upload" with "Load" in "Upload the geodetic files" and the icons.
5	Remove point duplicated validation for performance enhancement.
6	Add date time in point list.

Bug Fixes

No.	Description
1	Fix log sometimes create failed.
2	Fix export JXL failed after measuring a base site point.
3	Fix site calibration accuracy issue in a large area.
4	Fix RTX transformation failed when using a customized datum.
5	Fix export txt/csv with BOM.
6	Fix continuous survey very long time crash.
7	Fix start/stop RTK/RTX message error.

Known Issues and Limitations

No.	Description	Work around
1	Import DXF elements failed when current coordinate system using a regional Geoid	Please select a coordinate system without Geoid or with a global Geoid.
2	Map will become slow when point number is larger than 1000.	Click the "Extends" button and then zoom in to a smaller scale to view, which will be faster.
3	DXF file cannot be opened by AutoCAD when the points are exported by "Blocks"	Use SPSO to open DXF file.