

SurvStar 2025 Connecting Innovation, Elevating Experience



CONTENTS

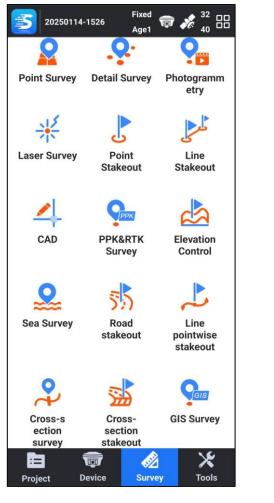




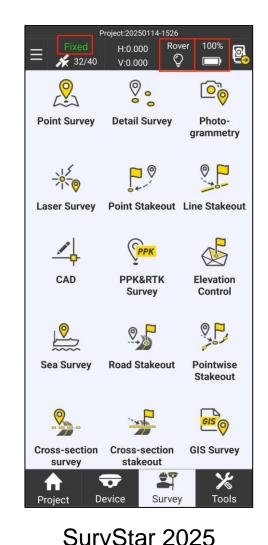
More Refined: 4 Main Improvement

Experience a Sleek, Intuitive Interface Designed for Seamless Interaction and Maximum Efficiency.

Refined Icon for a More Intuitive Experience —General View



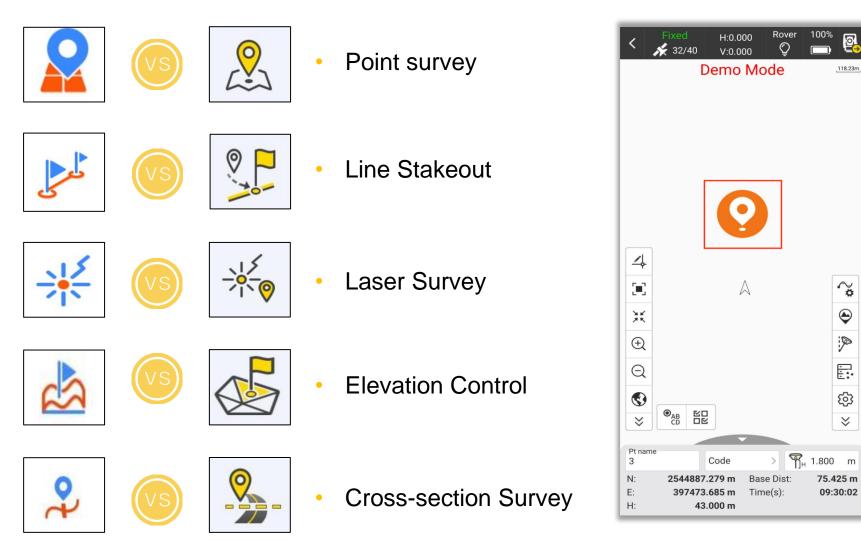
Previous Version



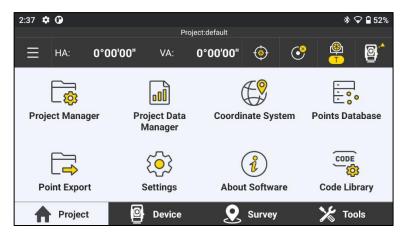
2025

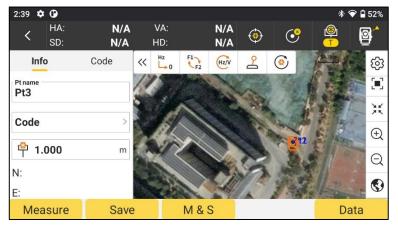
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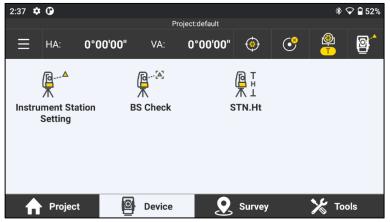
Refined Icon for a More Intuitive Experience -General View



Refined Icon for a More Intuitive Experience —Android/Robotic Total Station





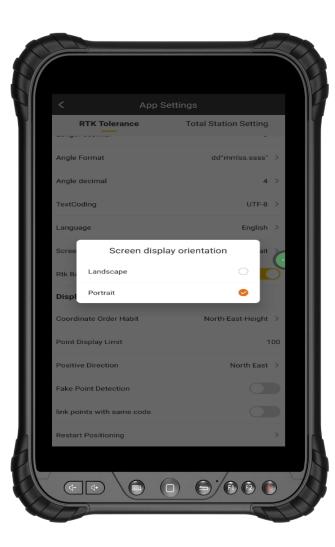






N1 on-board UI

Refined Icon for a More Intuitive Experience —Android Tablet

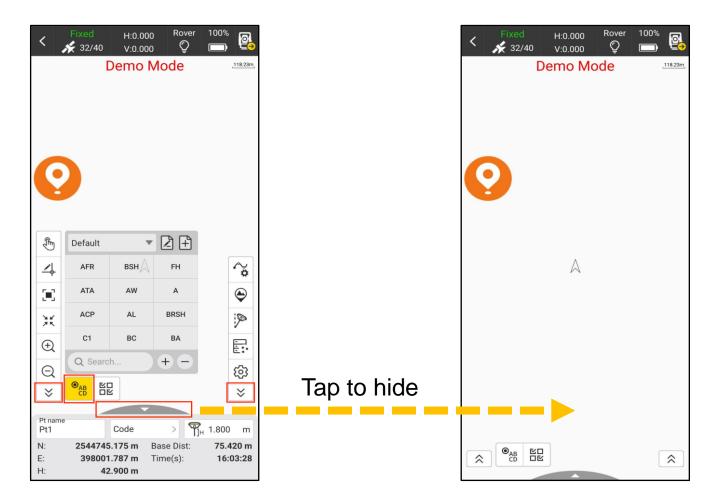


Landscape/Portrait view on Android tablet,

a more creative experience for plotting and CAD (coming soon)

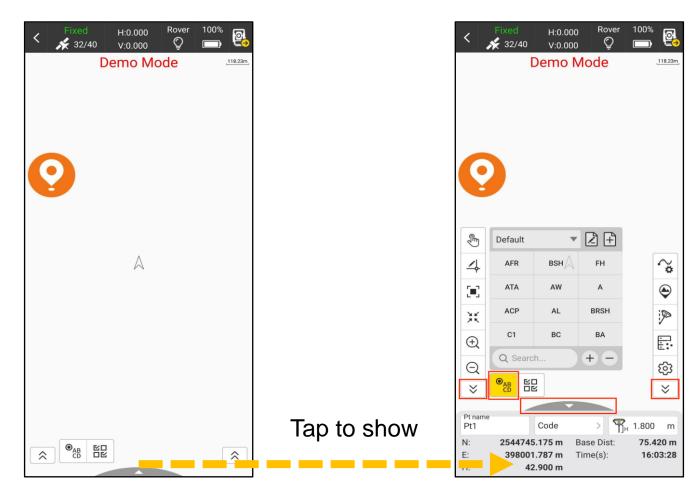


Refined Icon for a More Intuitive Experience —Toolbox

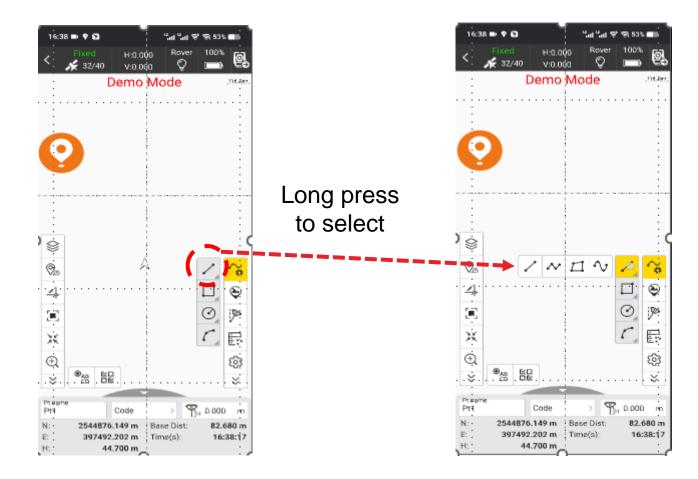


Hiding and showing a toolbox dynamically helps surveyors flexibly find the field target

Refined Icon for a More Intuitive Experience —Toolbox



Refined Icon for a More Intuitive Experience —Toolbox



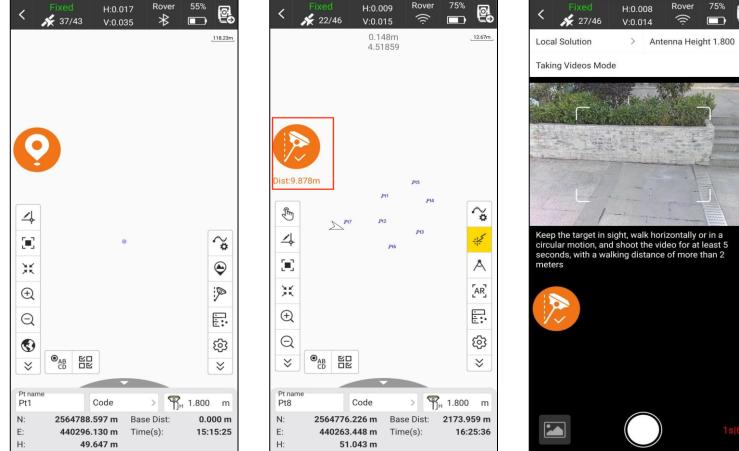


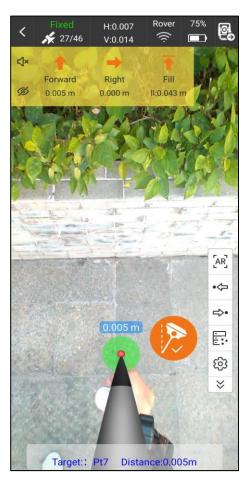
More compatible

Your All-in-One Solution for Surveying Tools

More Compatible: Regular, Visual, Laser & Total RTK







0

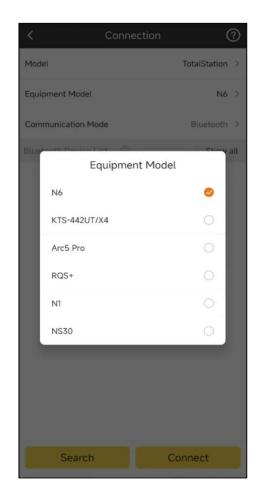
SOUTH

More Compatible: DOS & Android Total Station



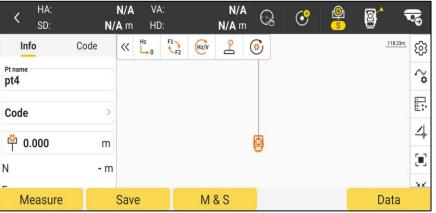


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	ATA A BP AFR	C2 BA AL	BC BT ACP AR		





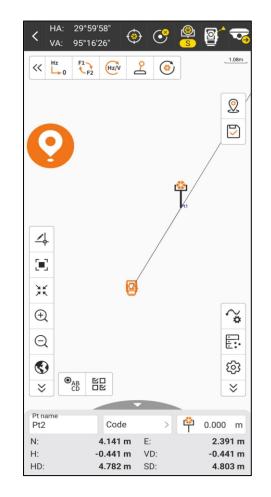
SOUTH



More Compatible: Robotic Total Station







More Compatible: Echosounder



SDE19 measurement

K Rec Mark setting	ord and D Topo Point	Inform ation	Tool Bar
Automatism			0
Display track			0
Save track			0
Display grid			0
Map auto follow	v		0
Echo sounder			
Plan lines		No	plan lines
Lock survey line	е		0
Select survey li	ne	Ma	nual select
Default s	ettings	0	к

< Echo sounder	
Start gain(db):	0 >
Echo threshold:	3 >
Time gate: 10%	6 >
Shallow water survey Disabl	e >
Low frequency settings	
Measurement status: Enabl	e >
Measurement mode artificial mod	e >
Transmit pulse width(ms): 0.	2 >
Inhibit water depth(mm): 0.	в >
Power:	2 >
TVG curve(LogR): 2	0 >
Start gain(db):	0 >
Echo threshold:	3 >
Send	

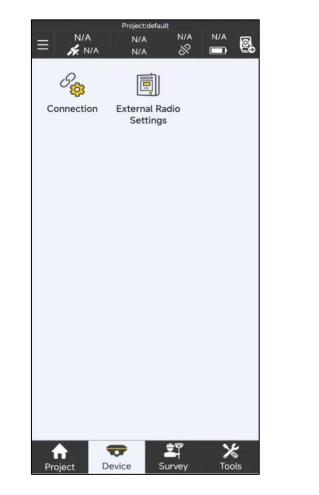
< ε	Echo soundei	r	
Echo Sounder Netwo	0		
Echo Sounder Regist		>	
General settings			
Speed of sound(m/ s):	148	30	
Draft(m):	0	.5	
Measuring gear:		>	
High frequency se	ettings		
Measurement status		Enable	>
Measurement mode	artificial mode	>	
Transmit pulse width	0.2	>	
Inhibit water depth(r	0.8	>	
Power:	2	>	
TVG curve(LogR):		20	>
	Send		

More Compatible: External Radio

SOUTH



External radio configurations (protocol, frequency, channel...)



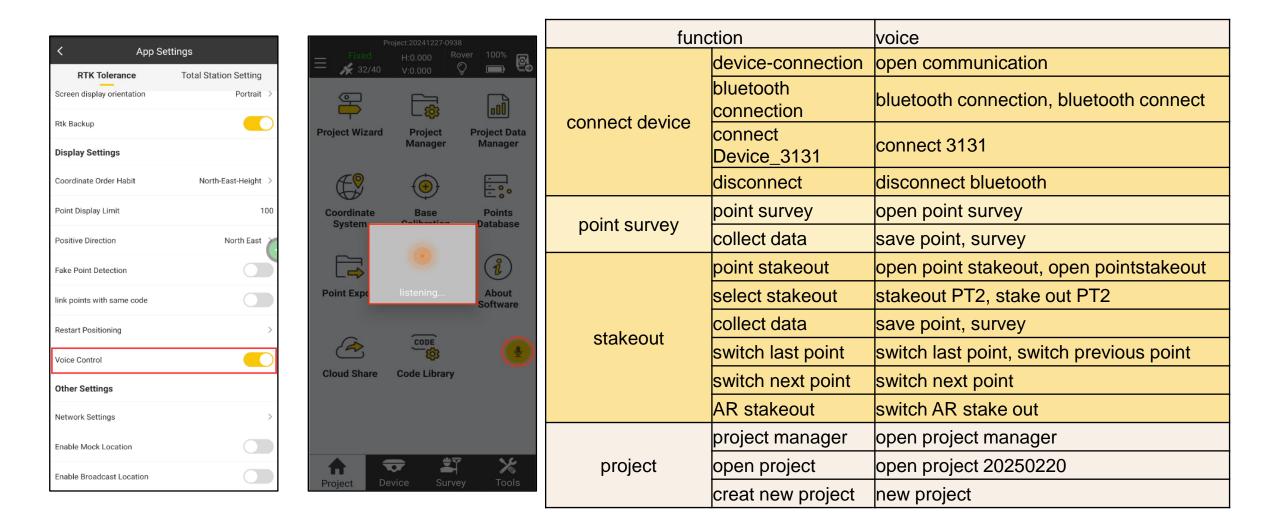
K External Radi	o Settings 🛛 🕐
Radio Channel	2 >
Frequency	451.000 >
Power	High >
Baud Rate	9600 >
Radio protocol	FARLINK >
High Performance Mode	
Radio channel group	>
Receiver Firmware Ver	BERL.1.0.20220321



More Intelligent

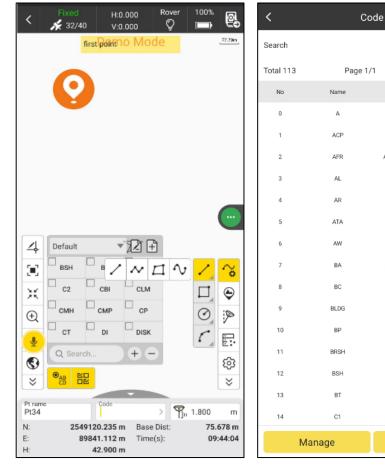
Work Smarter, Enhance Efficiency

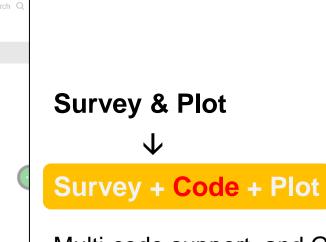
More Intelligent, Understand you Better —New Al Voice Engine (Coming Soon)



More Intelligent, for Seamless Workflow —New Survey + Code + Plot System







Code

Arrow

AcPad

ArrowForwardRight

ArrowLeft

ArrowRight

AnyTree

Awning

BridgeAbutmen

BackCurb

building

BarrierPost

BRUSH

BUSH

BroadleafTree

CAR1

OK

Multi-code support, and GIS attributors (coming soon)

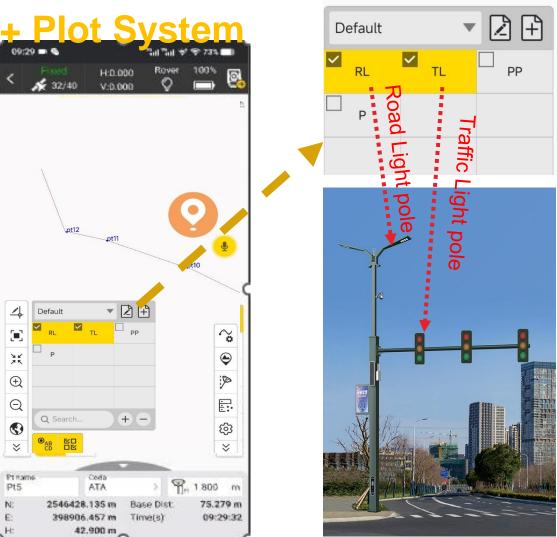
Previous Version

SurvStar 2025

More Intelligent, for Seamless Workflow

-New Survey + Code + Plot System

- Code Updating: manage/delete/multi-code selection.
- Plot Updating: start/pause/continue

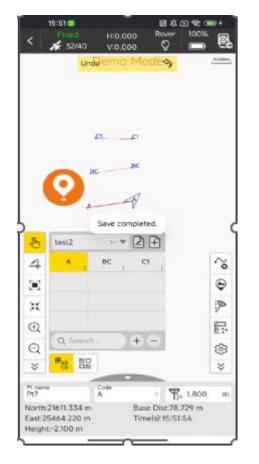


multi-code selection

More Intelligent, for Seamless Workflow —New Survey + Code + Plot System



Plot multiple roads on map simultaneously

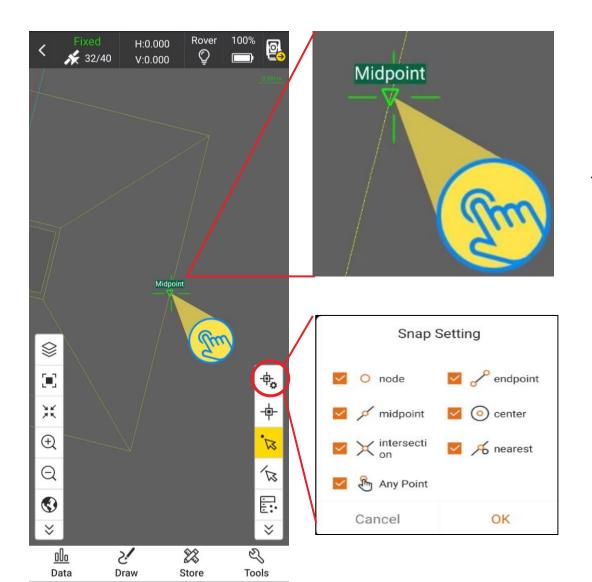


More Intelligent, for Seamless Workflow —CAD Upgrading

Integrated CAD survey, edit and stakeout, all tools in one-map

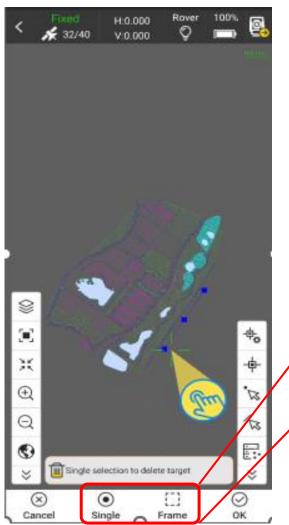


More Intelligent, for Seamless Workflow —CAD Upgrading



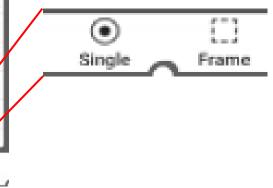
You can select the different target on CAD

More Intelligent, for Seamless Workflow

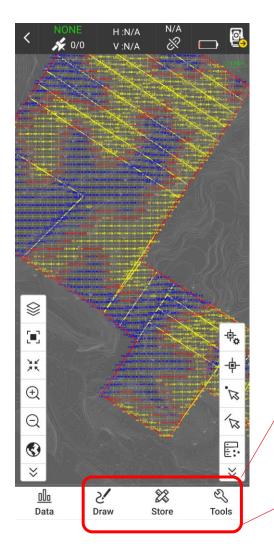


Delete single object,

or delete a set of objects by selecting with rectangular frame.



More Intelligent, for Seamless Workflow —CAD Upgrading

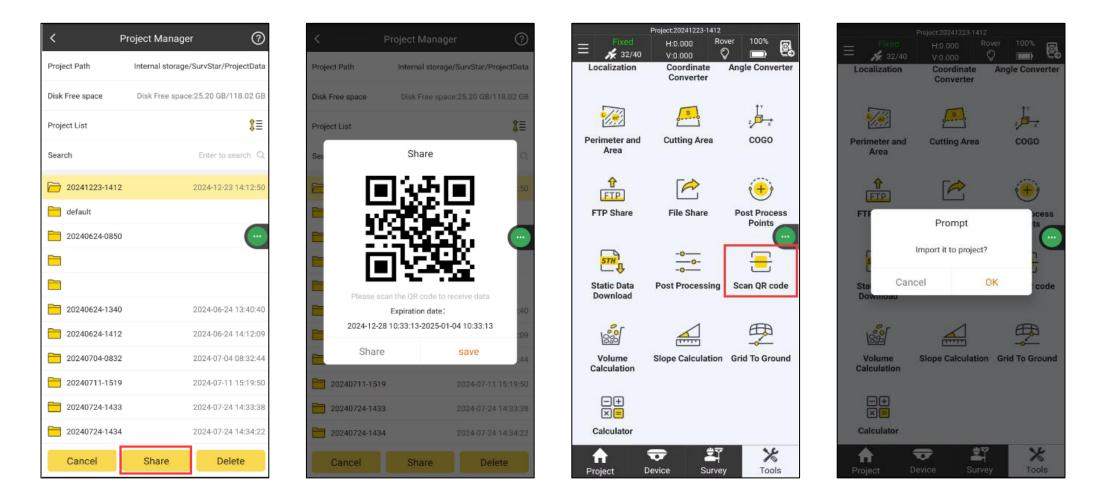


polygon	square	rect	arc	S pline	T Text		
Draw	: draw	ing the	e line/	polyg	on		
	X Two-line in tersection		Distance offset point	/ Element offset	م ر Divided by num.		
Store	: calcı	ulate a	nd sto	ore the	e inter	section.	••



Tools: measure distance/angle.

More Intelligent, for Seamless Workflow —QR Code Data Sharing

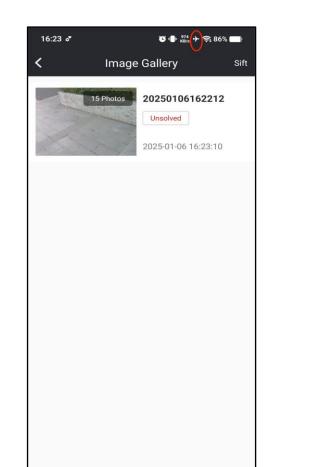


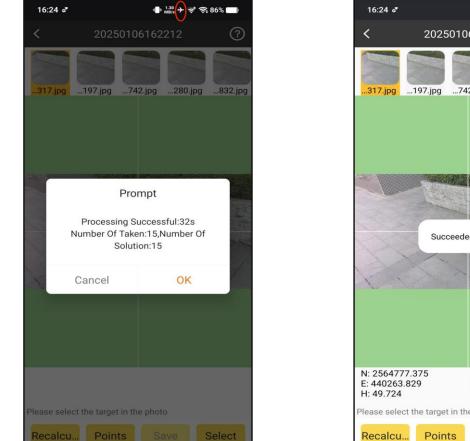


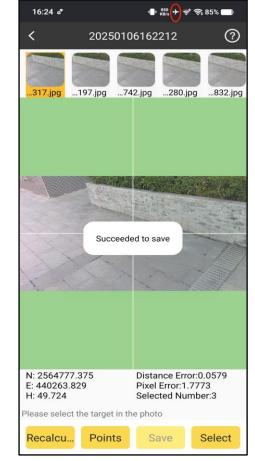
More Secure

Processing-Modification-Storage-Transferring

More Secure, Protect Data in Collecting and Processing -Photogrammetry Local Processing



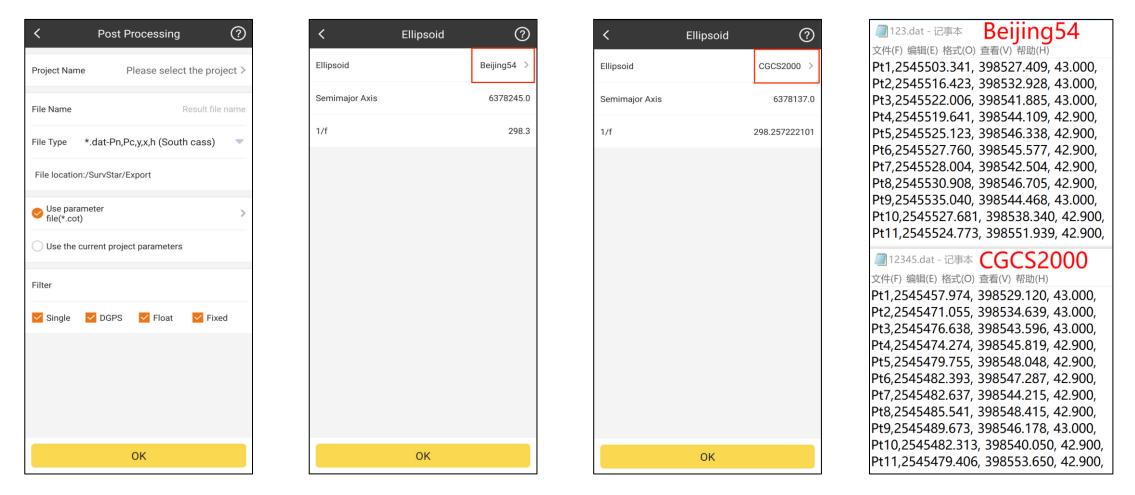




SOUTH

Photogrammetry local processing: processing on controller, protecting the sensitive information

More Secure, Avoid Repetitive Work and Wasting Data —Post-Processing



SOUTH

Transfer the data according to different coordinate system

More Secure, Put Eggs into Different Baskets —Data Backup

< App Se	ettings
RTK Tolerance	Total Station Setting
Angle decimal	4 >
TextCoding	UTF-8 >
Language	English >
Screen display orientation	Portrait >
Rtk Backup	
Display Settings	
Coordinate Order Habit	North-East-Height >
Point Display Limit	100
Positive Direction	North East >
Fake Point Detection	
link points with same code	
Restart Positioning	>

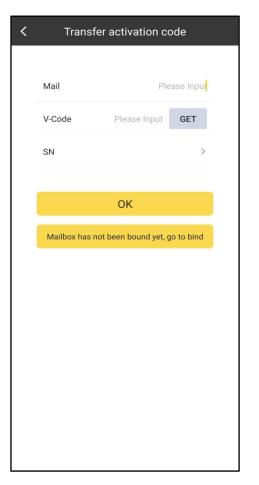
15:35 🚯 🖸		4	III 56 III 🤤 49% ■				
<		Points Database		e			
Pt name 🗸		~	Please Input		:	Search	
Tota	I 28		Page	1/1			
1	Name		North	ing	E	asting	Height
Z	Pt28	25	56480	1.228	440	299.370	0.000
2	Pt27	25	56479	4.913	440	306.754	0.000
2	Pt26	25	56479	8.088	440	309.501	0.000
2	Pt25	25	56480	1.189	440	309.102	0.000
2	Pt24	25	2564803.129		440	314.584	0.000
2	Pt23	25	2564792.300		440	310.333	0.000
2	Pt22	25	56480	9.682	440	310.013	0.000
2	Pt21	25	56479	6.115	440	318.348	0.000
2	Pt20	25	2564780.874		440	312.858	0.000
2	Pt19	25	2564806.659		440	297.404	0.000
2	Pt18	25	2564806.488		440	301.351	0.000
2	Pt17	25	2564803.102		440301.961		0.000
2	Pt16	25	2564797.448		440301.600		0.000
F	Add	Ec	lit	Deta	ails	Import	



SOUTH

RTK backup, controller data will backup to GNSS receiver automatically

More Secure, Your Software is Always with You —License Transfer



Controller broken? Forget charging battery? License can be transferred via email to different Android controller

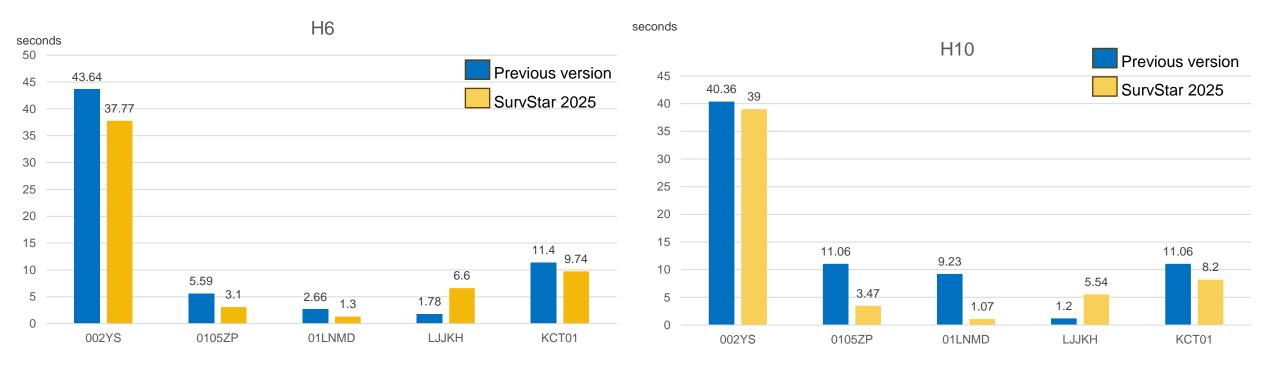


More Responsive

Backend Algorithmic and Frontend UI Speed-Up



More Responsive, Open Files Faster —CAD Files Loading



 DWG file
 002YS
 0105ZP
 01LNMD
 LJJKH
 KCT01

 36.77MB
 8.45MB
 7.16MB
 0.65MB
 8.95MB

Faster algorithmic for CAD, load map quicker

More Responsive, One Button to Set up Receiver —Configurations List

Pre-define work mode/datalink information...

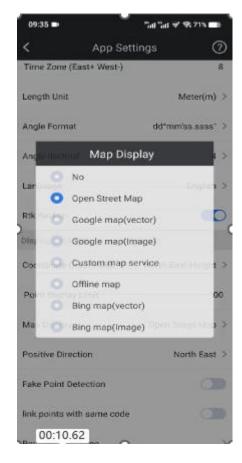
Select it and no need configure again next time.

< Create	Config
Working mode	Rover >
Datalink mode	Internal UHF >
Radio Channel	1 >
Frequency	457.0 >
Power	Low >
Baud Rate	9600 >
Radio protocol	FARLINK >
High Performance Mode	
Radio Repeater	
Base Locked	
Base ID	>
Maril Arril	10 \
Apply	ОК

< Con	figList
Rover-Internal UHF Radio protocol:FARLINK Channel:8	Baud rate:9600 Frequency:457.0
Base-Internal UHF Radio protocol:FARLINK Channel:8	Baud rate:9600 Frequency:457.0
Rover-Bluetooth Radio protocol:NTRIP. AcceptPoint:RYCM33_GR.	Port:8001 Address:sdk.pnt.10086.cn
Static	
New	Apply

More Responsive, Easier Switch between Maps —Basemap Settings Update

Streamline basemap settings, easier to switch google image/vector map





More Responsive, Important Parameters in One Page —Photogrammetry Settings

Change the basic information in photogrammetry page (antenna, method, calculation....)

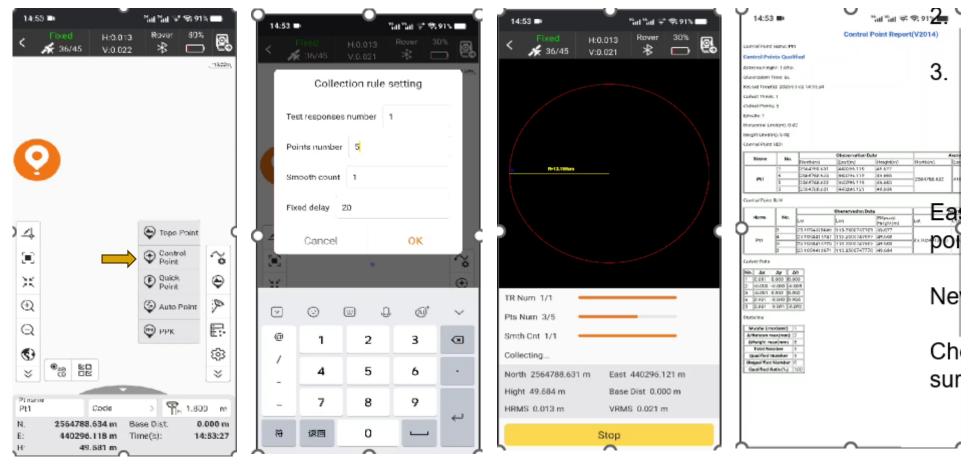




SOUTH

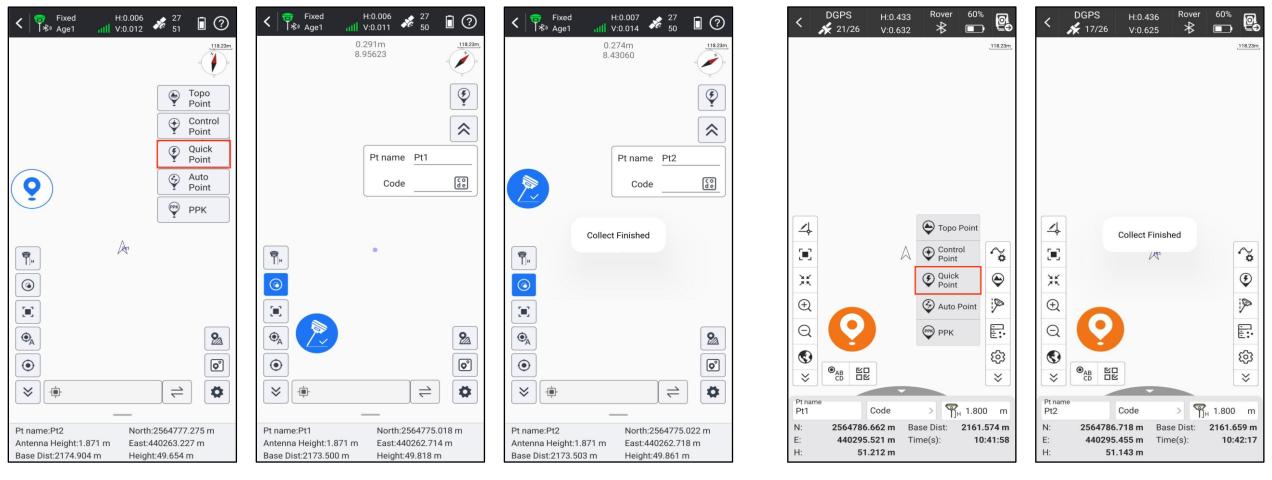
More Responsive, Simplify the Process of Collecting —Control Point Collecting Optimized

Optimized the control point survey settings, processing and report can be seen



More Responsive, Simplify the Process of Collecting —Quick Point Collecting Optimized

Combined the settings to tool box, Quicker



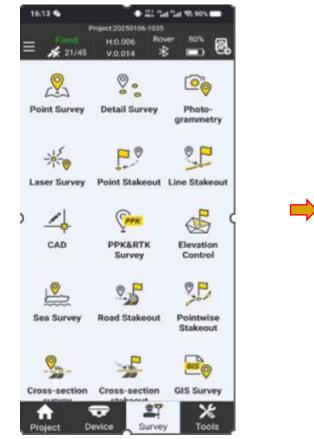
Previous Version

SurvStar 2025

More Responsive, Go & Stakeout

-Stakeout Optimized

Stakeout directly from the point database, more responsive stakeout to the target







More Versatile

User-friendly Tools for Every Task

More Versatile: Grid to Ground

<

B:

L:

H:

A GNSS data (grid) convert to Total Station data (ground) tool

Grid To Ground Grid To Ground < 2 <u>:</u>: Ē. Source Coordinates Source Coordinates 📀 BLH NEH O BLH NEH **Conversion Type** Conversion Type 23°00'25.7696" Northing 2545667.648 m Ground Distance Pt 1 Pt 2 399307.469 m 113°01'04.1938" Easting Height 110.000 m 110.000 Ground **Geodetic Distance Calculation Result Calculation Result** Pt 2 Pt 1 Elevation Factor 0.999982713561138 **Elevation Factor** 0.999982713561138 Ellipsoid Grid Factor 1.0001244960143458 Grid Factor 1.0001244960143458 Grid Plane Grid Distance Pt 1 Pt 2 **Combined Factor** 1.000107207423391 Combined Factor 1.000107207423391 Center of Earth Calculate Apply Calculate Apply

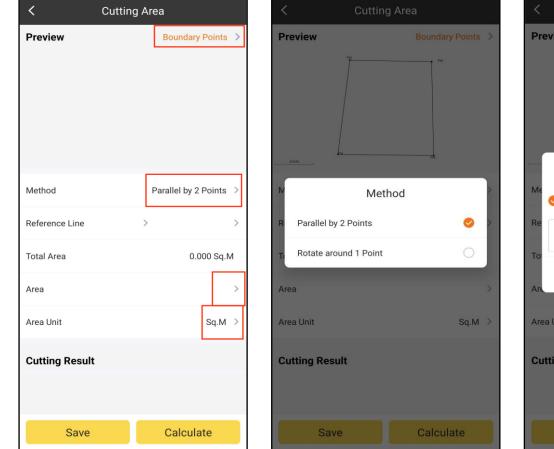


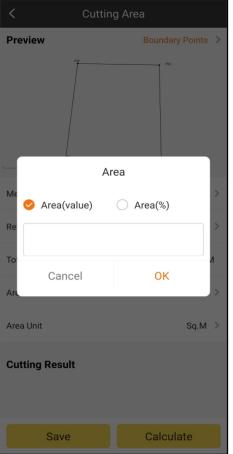
More Versatile: Cutting Area

S

Cutting Area

To divide polygon area for Land confirmation industry





<	Cu	tting Area
Preview		Boundary Points >
M	А	vrea Unit
R Sq.M	I	o >
Te mu		\circ
Sq.F1	:	\circ
Acres	5	0
Hect	are	0
Cutting	Result	
Area_1 N: 254533	39.501	E: 397872.608
Area_2 N: 254533	33.122	E: 398389.175
	Save	Calculate

<	Cutting Area	
Preview	Boundary Points	<
Method	Parallel by 2 Points	>
Reference Line	Pt4 > Pt5	>
Total Area	298025.772 Sq.M	I
Area	50 %	>
Area Unit	Sq.M	>
Cutting Result		
Area_1 N: 2545339.501	E: 397872.608	
Area_2 N: 2545333.122	E: 398389.175	
Save	Calculate	

More Versatile: Perimeter and Area

Calculating the Perimeter and Area around by specified points

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Pt name Pt15 Pt name: E:

Base Dist:

<mark>ked</mark> 32/40	H:0.00 V:0.00		ver 1009	0		<	
			\$\\\\	$\nabla_{\mathbf{o}}$		Bound	lary
C)emo	Mode		69.57m		Name	N
		Name: 111 Area: 1167 Surface are Perimeter:	8.071ml a: 116798.071ml 328.838m			Pt2	254
						Pt3	254
PRE12			n₿13]		Pt7	254
						Pt6	254
PgR16			₽ 9 17	•			
			Name: 222 Areg: 212736.392ml Surface area: 212736.3 Perimete: 1924.962m				
			burtace area: 212736.3 Perimeter: 1924.962m	ŝ			
				×			
	Code	>	କ୍ମି _H 1.80	0 m			
397925. 75.	Pt15 .608 m .552 m	N: H:	2545504 42	.194 m .900 m		Add	C

erimeter and Area oints Preview Height Easting 2.788 397350.003 0.000 0.785 397627.560 0.000 0.000 6.571 397662.050 38.772 397314.913 0.000 Edit Calcul... ... ete

Boundary Points Preview Calculation Result Area(2D): 102797.214 m² Surface area(3D): 102797.214 m² Perimeter(2D): 1288.590 m Perimeter(3D): 1288.590 m OK Cancel

Add Delete Edit Calcul...

Perimeter and

Area

More Versatile: FTP Share

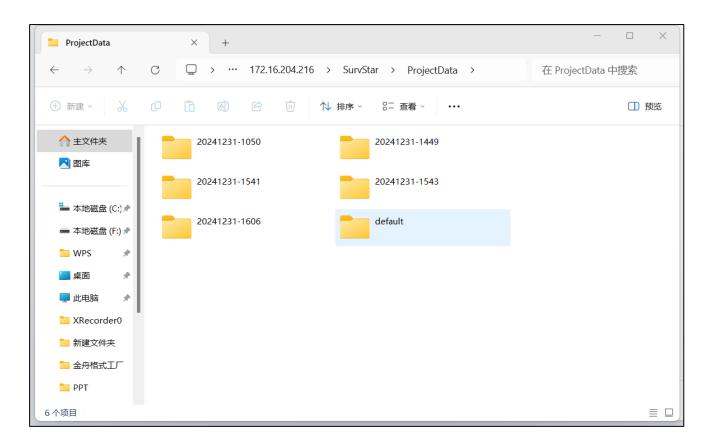
Transferring data to computer wirelessly

<	FTP Share	
FTP Mode Settings		Client >
IP		Please Input
Port		21
Username		Please Input
Password		Please Input
Select File to Share		>
	OK	

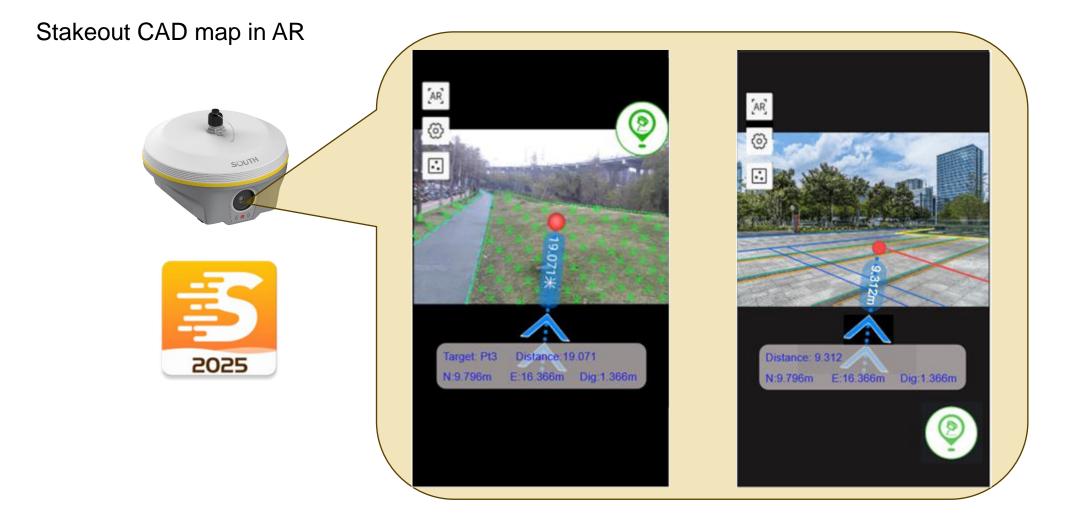
FTP Mode Se	ettings	Ser	ver >
	Connected	to WIFI:SOUTH-AP	
access FTF		er" Use the link to	
Prompt Please mal after servic	ke sure device	s are in the same ou can use any F1	
	Deactivate F	TP Service	



FTP Share



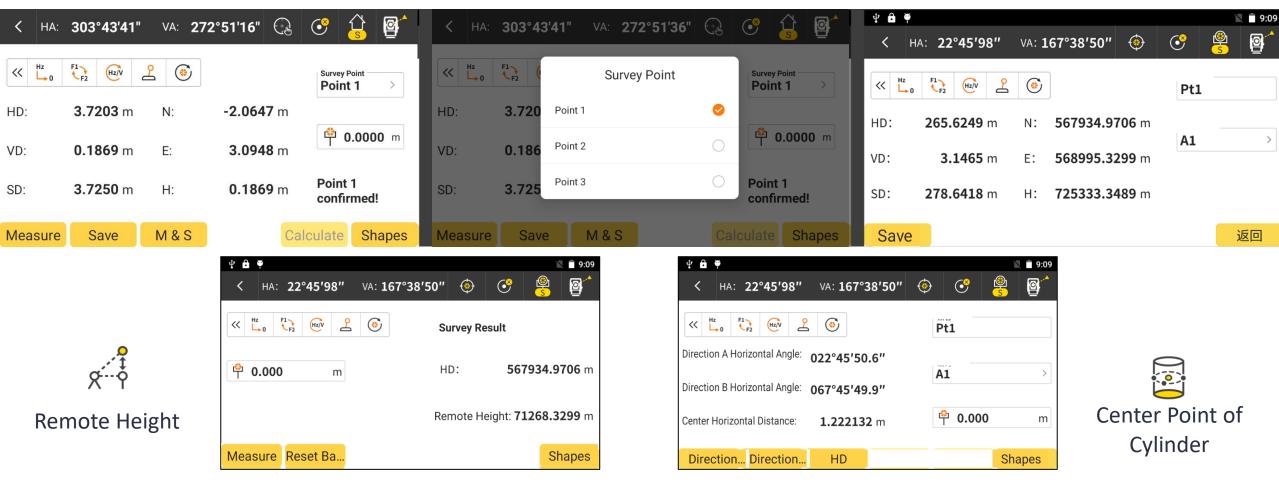
More Versatile: CAD + AR Stakeout (Coming Soon)



More Versatile: More Total Station, Laser Applications (Coming Soon)

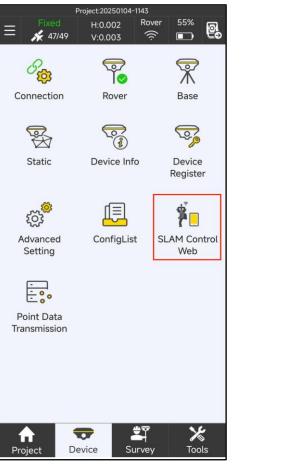


Plane Eccentricity



More Versatile: SLAM RTK Support (Coming Soon)



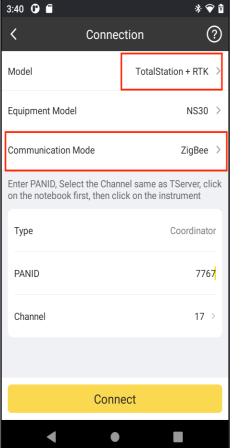


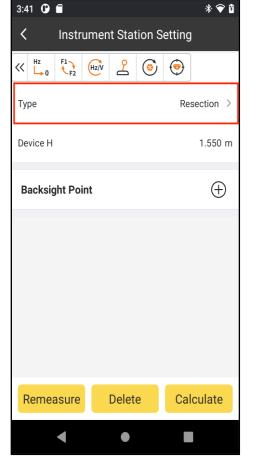


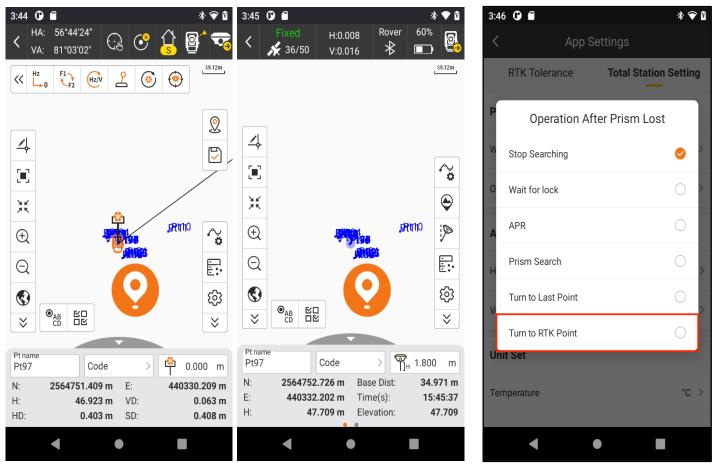
• One More thing: PRISM PLUS POSITION (PPP mode, Coming Soon)



About PRISM PLUS POSITION (PPP mode)







New connection

Station setting with RTK coordinates GPS+TS measurement mode switch

using RTK coordinates position prism



THANKS

South Surveying & Mapping Technology CO., LTD. https://southinstrument.com/