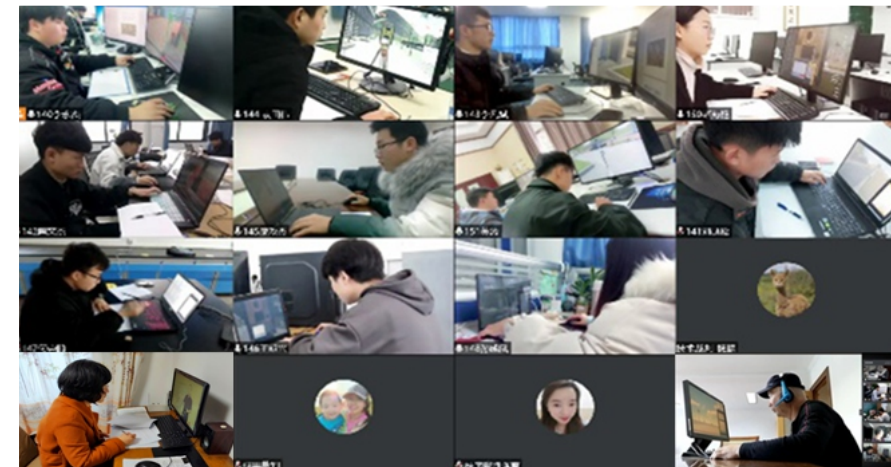


ANY DIFFERENCES COMPARED WITH SIMULATOR?

Item	Survey Instrument Simulator Software	Simulated Survey Training Software
Purpose	instrument operation	instrument operation guide, survey training, survey skills contest, etc.
User	instrument operators mainly	instrument operators, survey students, distributors/dealers, resellers, manufacturers, etc.
Device Category	total station, GPS	auto level, digital level, total station, GNSS RTK, UAV, laser scanner, etc.
Display Terminal	desktop, laptop	desktop, laptop, projector, mobile phone, etc.
Display Contents	keypad and LCD interface	instrument & scene
Display Method	VR basic	VR advanced
Operational Scene	N/A	3D immersive Sim-to-Real, 1:1 reality reconstruction
Instructional Approach	N/A	available in LEARN Mode
Survey Methodology	N/A	abundant options to learn
Survey Job Simulation	N/A	available, targeted at practical talents good for actual survey jobs and future employment
Learn-Practice-Quiz Mode	N/A	available, targeted at a scientific training workflow
Coordinates Export	N/A	genuine coordinates to export for further application in CAD software, Sim-but-Real experiences
Backstage Management	N/A	available for assignment, storage, statistics, assessment, feedback, report, etc.

ANY CASE REFERENCE?



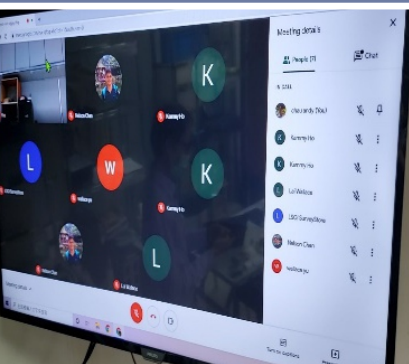
Students are practicing individually...

Teacher is guiding students how to...



survey skills contest at campus

user training during pandemic lockdown



online meeting, webinar presentation

Virtual Reality Simulated Survey Training System

World's First. 1:1 Reality Reconstruction. Genuine Coordinates.

Buttons

- Move Role: W S A D
- Jump: Space
- Run: Shift
- Walk: Ctrl
- Crouch: C
- Lock/Unlock Mouse: V
- Pole & Prism: F4
- Operate TS: F2

SPECIFICATION

Server End (to store data and perform backstage management)	
Operating System	CentOS 7.6 or Windows 2012
CPU	6-core E5 or above
RAM	16 GB or above
HDD	1 TB or above
Network Card	1 GB or above
Bandwidth	5 MB or above
Power Supply	500 W or above
Computer Case	tower server recommended

Regular User End (to install VR software individually)	
Operating System	Windows 7/8/10
CPU	Processor main frequency 2.0 GHz or above, Intel Core i5-7 series recommended
HDD	500 GB or above
RAM	8 GB or above
Graphic Card	Graphic memory 2 GB or above, Nvidia GTX1060(recommended)/GTX970 or Gigabyte RX580
Display Resolution	1920 x 1080
Power Supply	500 W or above
Input Device	mouse, keypad

SIM-TO-REAL SCENES

SIM-BUT-REAL EXPERIENCES

"Greatly accelerates the informatized survey teaching for educational sectors? Yes, but not just like that! This simulated training system also well prepares practical talents capable of survey job workflow practice with latest equipment for the society. Still, distributors could find it much easier to train clients with such VR-based software kits when unable to meet, like pandemic lockdown. The so-called revolutionary accomplishments might be considered as a blockbuster to the geo-spatial industry," according to Prof. Baoyu Guo, a senior Chinese scholar in pursuit of modernized survey learning for decades.

dealer info

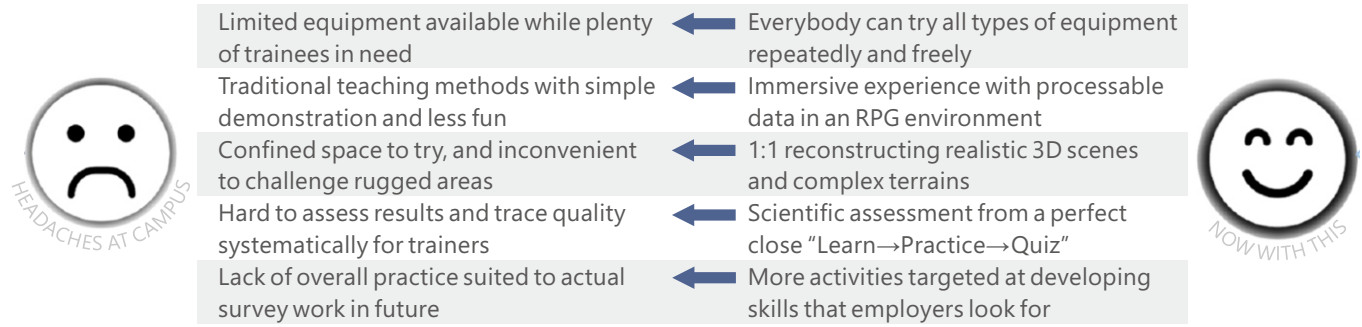
SOUTH SURVEYING & MAPPING TECHNOLOGY CO., LTD.
 Add: South Geo-Information Industrial Park, No. 39 Si Cheng Rd., Guangzhou, China
 Tel: +86-20-23380888 Fax: +86-20-23380800
 E-mail: mail@southsurvey.com export@southsurvey.com
 http://www.southinstrument.com

dealer info

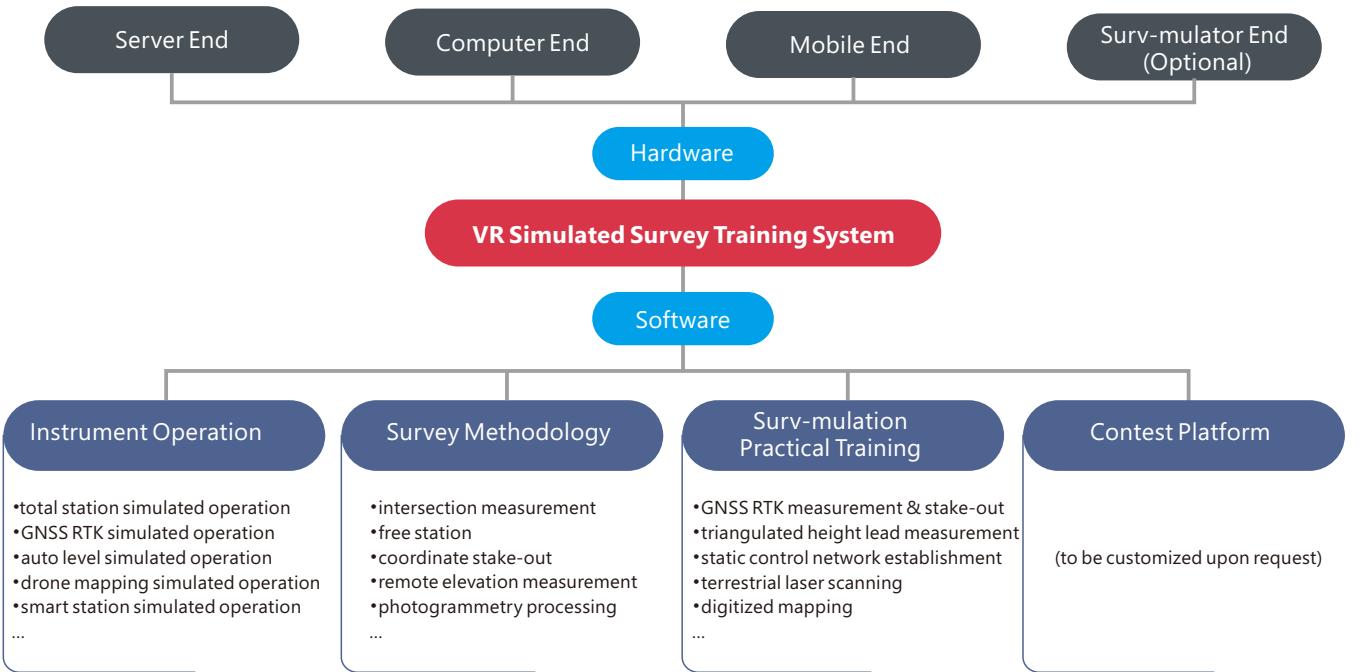
(V. 2021JUL)

WHAT IS IT?

This system is consisted of a series of game-like software kits and some hardware configurations. The simulated survey training actually includes Instrument Operation, Survey Methodologies, Overall Surv-mulation Practice, etc. which provides a turnkey solution to the modern society in terms of survey class teaching and user operation training.



WHICH ARE INCLUDED?



WHO WOULD NEED IT?



Education (universities, colleges, vocational schools, etc.)

Institutions (survey skills contests, science research, webinars, etc.)

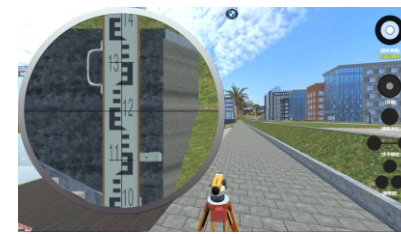
Distributors (remote training, online presentation, new product release, etc.)

Contractors (intern training, survey job practices, engineering survey programs, etc.)

HOW IS IT LIKE?

1:1 Clicks-and-Bricks Scenes

All simulations will be running in the virtual scenes, large or small, which include abundant elements such as vegetations, roads, buildings, and contain different terrain features like downtown, outskirts, hilly zones, etc. The clicks in virtual-based software well interpret the solid bricks in reality.



Leveling Survey with Automatic Level

Equipment Sim-to-Real 100%

Enjoying practical operation in the way of FPV simulation, users may stay away from the troubles of device defects and malfunctions caused by improper or careless operation. Make it work here, and you would probably understand how to handle with the actual unit.



Drone Mapping Operation

A Variety of Survey Practice Simulations

To increase more know-hows, you may focus on the first 2 categories in particular, Instrument Operation and Survey Methodology, which extend the key points in manuals and textbooks. And, the intuitive and interactive interfaces make fun indeed.



Triangulated Height Lead Measurement

Instructional Approaches to Quality Results

The "Learn-Practice-Quiz" workflow keeps a perfect close and helps teachers to check each individual more effectively. Operational knowledge used to be difficult in assessment but now, things have changed when this VR-based technology comes into practice.



Learn-Practice-Quiz Mode Options



GNSS RTK Measurement



Terrestrial Laser Scanning

Tailor-made Geo-referenced Environment

The scenes provided are in fact geo-referenced, which allows users to further experience the real survey practices. Localization is possible. Just imagine how interesting doing survey in both realistic and simulated environments of the same location is.

Usable Outputs Ready for Actual Application

The measurements recorded in the software could be exported to CAD platform for further utilization. This streamline works out a complete solution from field to office. Data acquisition, processing and application should always go hand in hand according to the veterans.

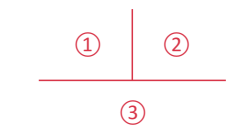
Multi-media Display to Co-share

"Excuse me, repeat please!" "Oh sorry! I missed the last step." "Just show again!"... such conversations would no longer occur when this system is in use. Procedures might be presented in various terminals to co-share so everybody could follow and understand in time.

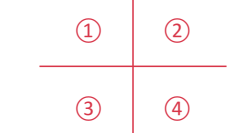
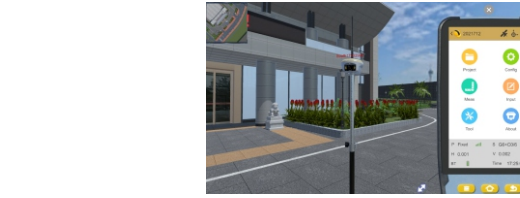
Directional Delivery of Practical Talents

Bookworms and apprentices incapable of actual operation could never satisfy the employers. Accordingly, this VR training enables users to probe into site knowledge through overall survey practices. With no doubt, preparing trainees well for future job opportunities is the final aim.

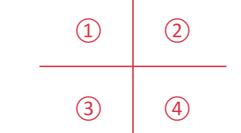
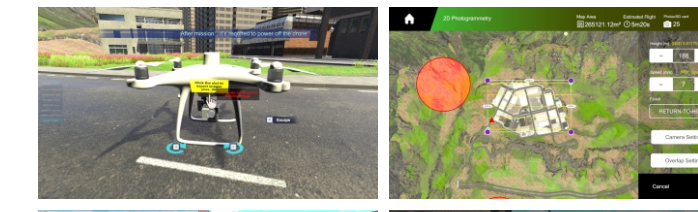
WHICH PROGRAMS ARE AVAILABLE?



- 1 RTK Base Station Setup
- 2 Receiver Mode Setting
- 3 Controller Connected to Rover



- 1 Laser Plumbing for Centering
- 2 Adjusting Footscrew for Levelling
- 3 Collimating at Backsight Point
- 4 Collimating at Target Object



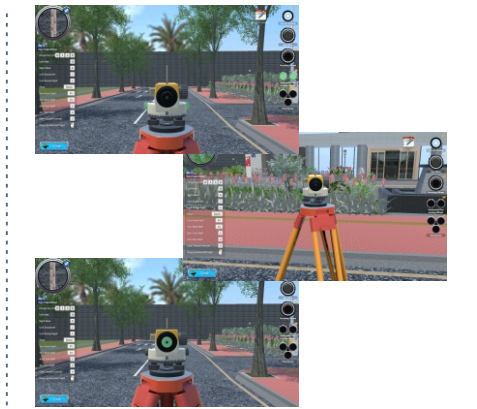
- 1 Pressing PWR Button to Start Operation
- 2 Setting Flight Height & Ground Resolution
- 3 Downloading Aerial Images to Computer
- 4 User Operation Quiz Result Display



BIM Data Acquisition by 3D Laser Scanning



REM/MLM/Column Offset Measurement Programs



Automatic Level Simulated Operation