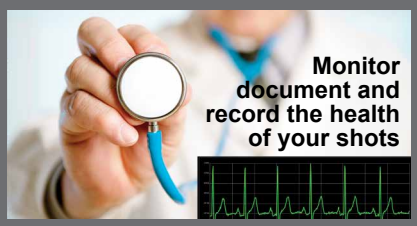
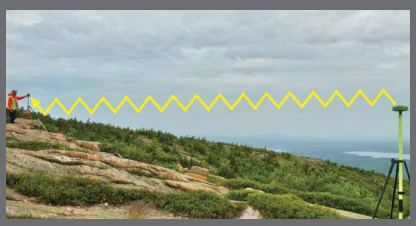
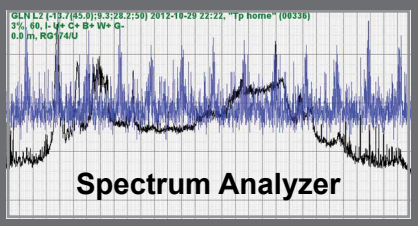
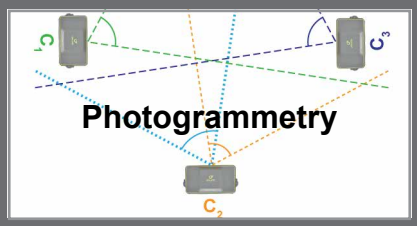
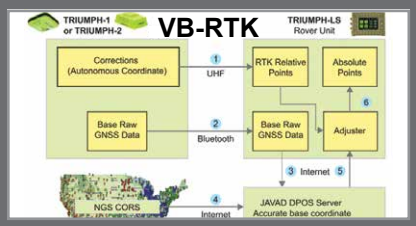
JAVAD Total Solution

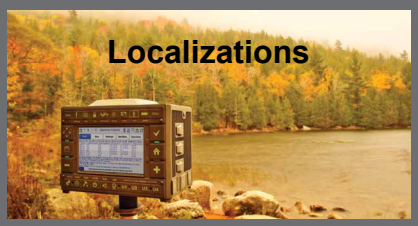


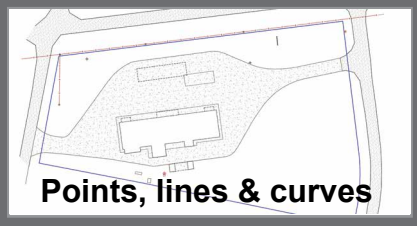


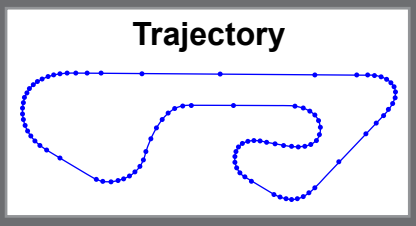




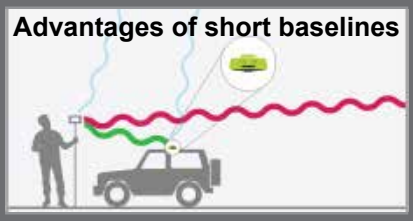








REVERSE
SHIFT<<it



RAMS
Remote Assistance & Monitoring Services

For all others see www.javad.com

Front

The TRIUMPH-LS and its field software, J-Field,

have many revolutionary and innovative features as compared to current GNSS systems:

- The TRIUMPH-LS contains everything needed to function as a **complete RTK rover** in one small, compact, ergonomic and very portable unit: an **864 channel GNSS receiver, a UHF or spread spectrum radio, a GSM modem, a Wi-Fi adapter, two internal cameras, a flashlight, and a bright 800x480 pixel display.** Included with the system is a collapsible monopod rover pole which allows the unit to be quickly folded up to fit in a very small space, **perfect for carrying the system through the woods** or quickly stowing inside a vehicle. The lack of a data collected bracketed to the rover pole increases further increases its portability and the user can **carry the system through the woods** without having to worry about a data collector bracketed to the rover pole getting caught in brush.

- This system was ergonomically engineered; the head height vertical display allows the user to operate the TRIUMPH-LS while standing in an upright position and looking forward. The user does not need to bend their neck to look down to view the display as is traditionally done with a system having a data collector attached to a rover pole. This feature allows the system to be used **without the neck soreness** that can plague a user bending their head downward to view a data collector for extended periods of time.

FL

LIVE at www.javad.com

G’day, Mate!

Redefining Total Stations and GNSS workflow.

The “Total Solution”

From the company who brought you the best GNSS receiver on the planet, our latest innovation will allow you to break away from decades-old methods of measurement and positioning. Why employ a workflow designed for yesterday’s gear?

See the video at www.javad.com for proof!

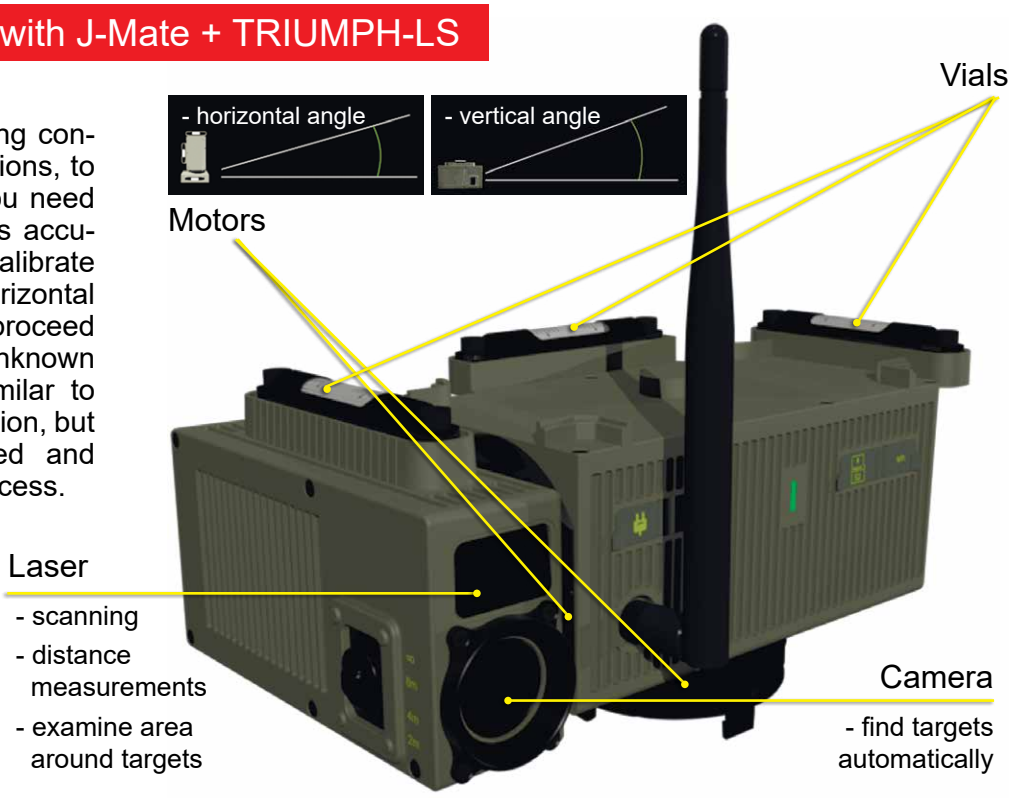
Why follow a workflow designed for yesterday's equipment?

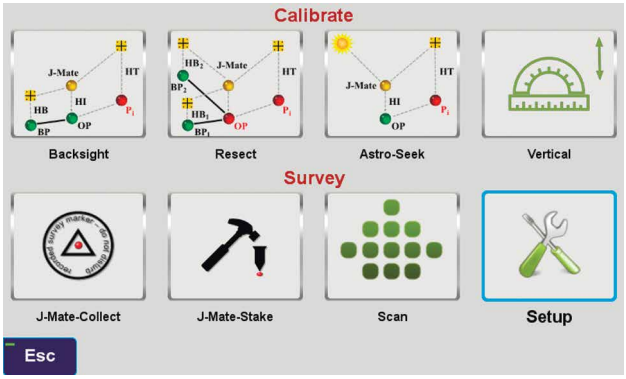
This is J-Mate

J-Mate features a **camera** that can also find targets automatically, and a **laser module** for accurate distance measurements. It scans and examines the area around the intended target to ensure reliable identification. Two **precision encoders** measure vertical and horizontal angles to the target. Three **precision vials** allow a visual check on levelness of the instrument.

Take control with J-Mate + TRIUMPH-LS

Similar to using conventional total stations, to use the J-Mate you need first to establish its accurate position and calibrate its vertical and horizontal encoders. Then proceed to shoot the unknown points. This is similar to using any total station, but we have improved and automated the process.





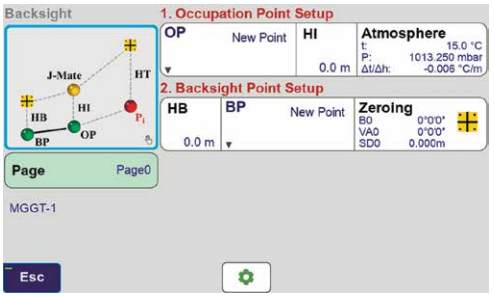
With J-Mate you can establish your occupied position via three different ways: 1) Backsight; 2) Resection; or 3) our new Astro-Seek (more of that later).

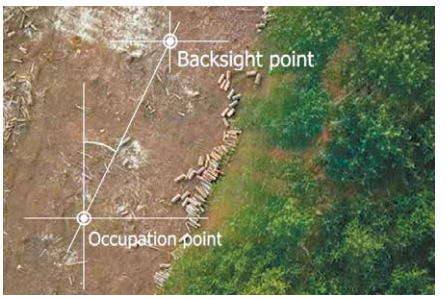
When you click the Setup icon of the J-Mate screen you get access to parameters that tunes J-Mate to your desire.

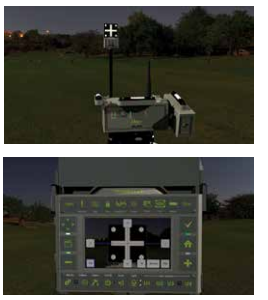
After the J-Mate is calibrated, you can proceed with your work as normal via the Collect or Stake icon.

Backsight icon

If GNSS signals are available at the job site, click the J-Mate Backsight icon.



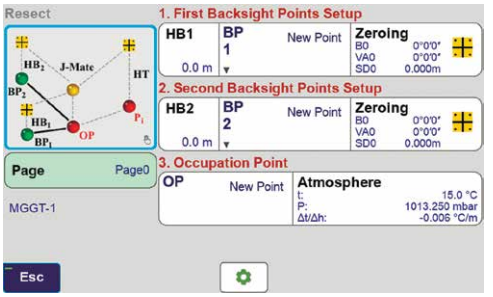


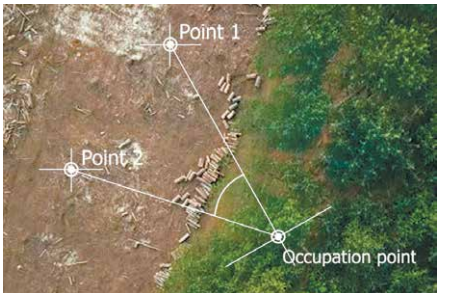


This screen appears which guides you to determine the accurate positions of the Occupation Point and the Backsight Point, to establish an azimuth and calibrate the J-Mate angular encoders.

Resect icon

If GNSS signals are not available at the Occupation Point, click the “J-Mate-Resect” icon

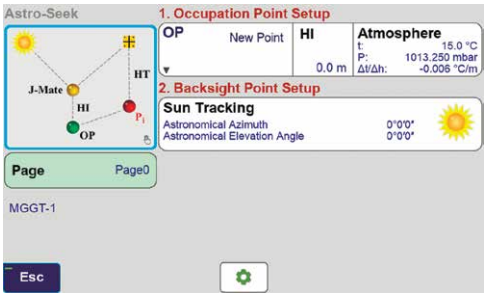




Shoot two or more known points to establish an accurate position and calibrate the encoders. Then continue to shoot the unknown points.

Astro-Seek icon

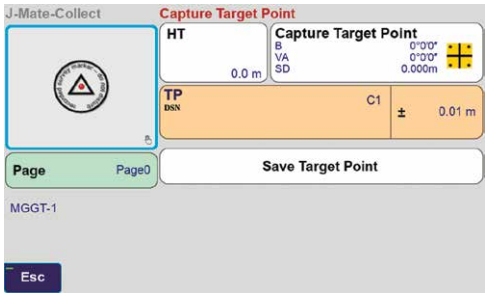
And now our new feature!



We have added a new innovative feature to the J-Mate that it can automatically calibrate itself via its automatic Sun or other astronomical objects-Seeking feature.

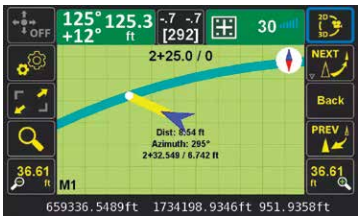
J-Mate-Collect

After calibration is performed, click the J-Mate-Collect icon to shoot the unknown points.



J-Mate-Stake

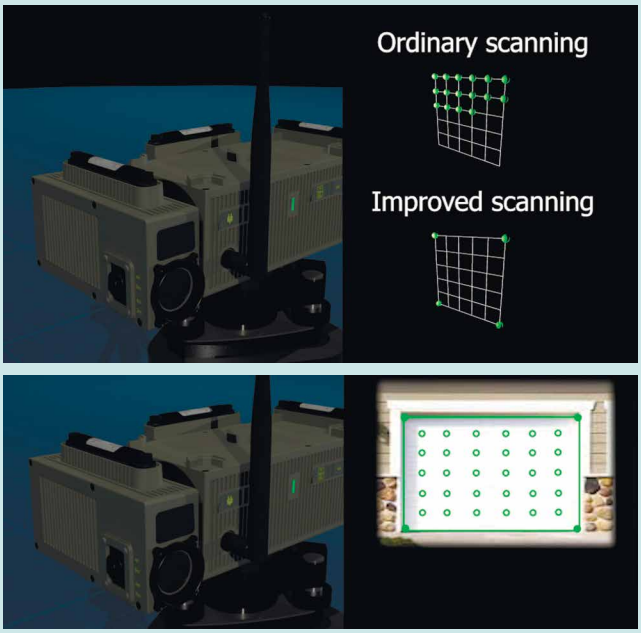
Click the J-Mate-Stake icon to use for stakeout.



The functions and features of the J-Mate stakeout are very similar to our conventional GNSS stakeout: RTK solutions guide you to the stake points. But with the J-Mate the camera follows the “+” sign that you carry and then the encoders and laser measurements (shown on screenshots) provide guidance to the stakeout features. This is similar to Visual Stakeout and other useful and innovative features of our TRIUMPH-LS GNSS RTK stakeout.

Smart laser scanner

J-Mate is also a camera-aided, smart laser scanner. The camera identifies redundant points that do not need to be scanned, but instead can be copied or interpolated from other readings without loss of information. That is, if the camera identifies a completely uniform flat area, it only scans the four corners of that area and interpolates in between. This feature can increase the effective speed of the scanner to much higher than its native 10-points-per-second speed.



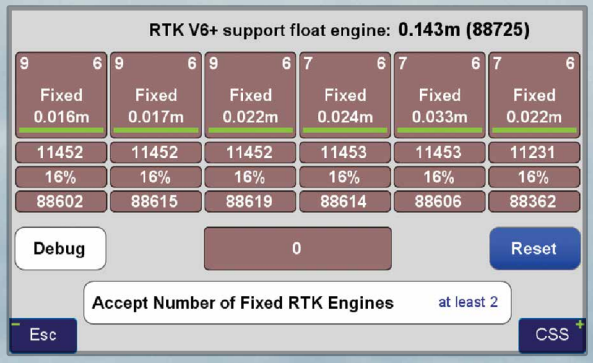
The scanning feature can also be used to find items like wires and poles and "closest-in-view" items and shoot them automatically.

Seize the day with J-Mate + TRIUMPH-LS

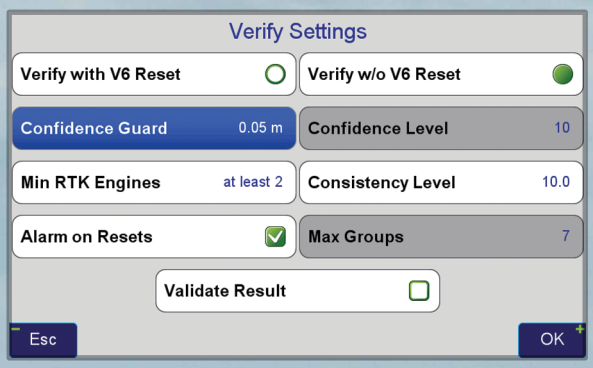
And all components fit in this small carrying case.

So we have a "**Total GNSS**" with a "**Robotic Total Station**" and a "**Smart Laser Scanner**". We call it our **"Total Solution"** and it can be operated by one person to perform jobs.

• The field software, J-Field, is included **at no extra charge** with the system. There is no need for an external data collector or software. J-Field is constantly being improved and updates will always be available free of charge with the system. The updates can be **downloaded through Wi-Fi** and are very simple to install, requiring only a couple button presses to update the system.



• J-Field, features **6 separate parallel RTK engines** that all run simultaneously with separate assumptions. This allows for fixes to be obtained quicker than if only a single RTK engine was used.



• It has an advanced **RTK verification system** that can be used in difficult RTK environments where there is high multipath and/or tree canopy cover. This process will automatically reset the RTK engines and eliminate points from being collected with bad RTK fixes that often plague other systems in difficult locations.

• J-Field has many **customization** features that can be used to increase productivity as your knowledge of the system grows. The stake and collect screens have **10 white boxes** that are easily customized to display a number of fields which the user may desire.

Scan me and wach full video

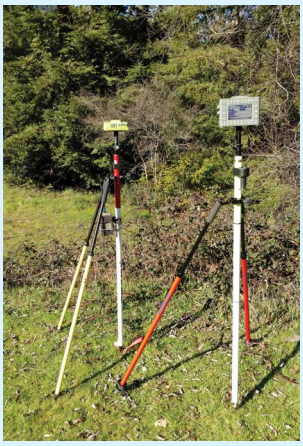
FR

TRIUMPH-LS vs. R-10

Stephen K. Drake, PLS, CFedS

Scan to read details of competition >

JAVAD TRIUMPH-LS rover, TRIUMPH-2 base, with spread spectrum radio, and a set of pods I have hiked up mountains all over the country, even at a 115 degrees in the desert, thankful the whole set weighs less than my R8 tripod.



Trimble R-10 rover, TSC3 controller, and R-8 base, with its bonus (heavy) tripod. (yea I want to hike that up the mountain for my setup…) The market heavy weights! (yea pun intended).

Where Have You Been With Your TRIUMPH-LS Lately

"Btw, pardon my French, but holy shit. I got some ridiculous 'fixes' today in some horrible situations. Reset receiver, moved around, etc. Tried to get a bad fix but had a hard time doing it."

"Truly amazing with a 4" grape vine directly overhead and the tree cover."

"Got some shots that he could not get with our gr5's."

"This thing is bad ass!"

"I often get 2 days of work done, in a day."

"I got some ridiculous 'fixes' today in some horrible situations. Reset receiver, moved around, etc. Tried to get a bad fix but had a hard time doing it."