

#### Learn and win!

## First JAVAD GNSS Technical Competition

To participate in this competition, correctly answer the eight questions in the following pages and visit www.javad.com to enter your answers by July 22, 2011. Answers to the questions can be found in the Video Lessons on www.javad.com.



First winner: \$5,000 towards the purchase of a TRIUMPH-VS
Five other winners: iPad 2 (WiFi+3G, 64GB, smart cover)

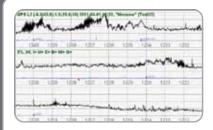
Winners will be randomly selected and announced on www.javad.com by July 29, 2011.

No purchase is necessary to participate in this competition. Void where prohibited or restricted by law. Participants must be active GNSS, GIS or survey professionals. This competition is not open for JAVAD GNSS employees and its affiliates. JAVAD GNSS will pay shipping expenses. Winners are responsible for applicable duties, taxes, and related expenses. At any time, JAVAD GNSS reserves the right to disqualify participants at its discretion and cancel or modify this competition.

WWW.JAVAD.COM

# For the latest GNSS news and technical information visit www.javad.com





#### **QUESTION 1**

TRIUMPH-VS has 216 channels. The spectrum analyzer feature of TRIUMPH-VS scans GNSS bands and shows the presence of jammers and interferences using:

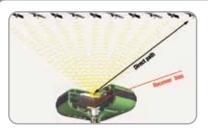
| A | 60 channels for jammer detection while normal satellite tracking continues using the remaining 156 channels. | 0 |
|---|--|---|
| B | 60 channels for jammer detection but normal satellite tracking stops during jammer detection.                | 0 |
| C | 10 channels for jammer detection while normal satellite tracking continues using the remaining 206 channels. | 0 |
| D | 216 channels for jammer detection and normal satellite tracking stops during jammer detection.               | 0 |
| E | 108 channels for jammer detection and 108 channels for normal satellite tracking.                            | 0 |
|   | 3 channels for each band for jammer detection and the remaining channels for normal satellite tracking.      | 0 |



#### **QUESTION 2**

A commercially available \$430 GJ6 jammer can:

|   | A commercially available 3430 GJO Jammer Can:  |   |
|---|--|---|
| A | Completely knock out all GPS bands and significantly damage GLONASS bands.                 | 0 |
| B | Completely knock out all GLONASS bands and significantly damage GPS bands.                 | 0 |
| C | Completely knock out all GPS L2 and GLONASS L1 bands.                                      | 0 |
| D | Completely knock out only GPS and GLONASS satellites that are in its direct line of sight. | 0 |
| E | Completely knock out all P-Codes with minimal affect on C/A codes.                         | 0 |
|   | Create huge amount of multipath in all GPS and GLONASS bands.                              | 0 |



#### **QUESTION 3**

GLONASS signal quality in JAVAD GNSS receivers is as good as GPS because we dynamically remove the effects of GLONASS inter-channel biases with the accuracy of:

| A | Better than 2 meters.        | 0 |
|---|------------------------------|---|
| B | Better than 20 centimeters.  | 0 |
| C | Better than 2 centimeters.   | 0 |
| D | Better than 2 millimeters.   | 0 |
| E | Better than 0.2 millimeters. | 0 |
| F | Better than 20 microns.      | 0 |

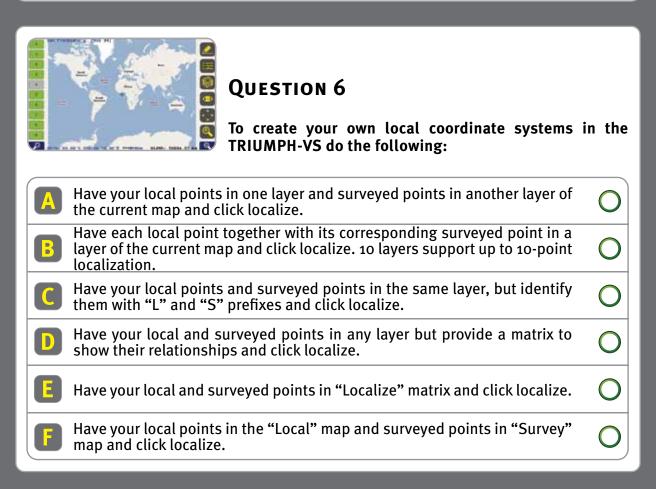


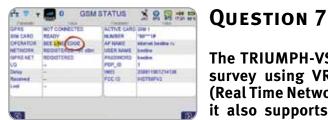
#### **QUESTION 4**

Superior performance of JAVAD GNSS six-pack RTK V6 engine is achieved by:

| A | Assigning 3 engines to GPS and 3 engines to GLONASS.   | O |
|---|--|---|
| B | Randomly assigning satellites to each engine.  | 0 |
| C | Engines operating sequentially to obtain the best combination.   | 0 |
| D | All engines operating simultaneously but each with a different algorithm and their weighted averages providing the final RTK solution. | 0 |
| E | All engines operating with the identical algorithm and their sum providing much better results.  | 0 |
| F | Engines being divided between GPS and GLONASS satellites according to the relative number of visible satellites of each system.        | 0 |

|   |             | QUESTION 5  |
|---|-------------|---|
| E mon<br>E was<br>E |             | You can assemble points in your computer and transfer them to the TRIUMPH-VS for stakeout (or other purposes) and get points back to your computer using the following JAVAD GNSS software: |
| A   | JustinLink. | 0   |
| B   | Giodis.     | 0   |
| C   | NetView.    | 0   |
| D   | NetHub.     | 0   |
| E   | SteakWare.  | 0   |
| F   | Tri-VU.     | 0   |





The TRIUMPH-VS contains all you need to perform RTK survey using VRS (Virtual Reference Station) or RTN (Real Time Network). In addition to Wi-Fi, LAN, and GPRS, it also supports the "Edge" connection. Compared to Standard GPRS, Edge is an advanced and special GPRS protocol that is:

| More secure but slower.   | 0 |
|---|---|
| Slower but less expensive.  | 0 |
| Much faster.  | 0 |
| Same speed but less expensive.  | 0 |
| Same speed but more secure.   | 0 |
| Same speed but uses much less power which saves battery life significantly. | 0 |

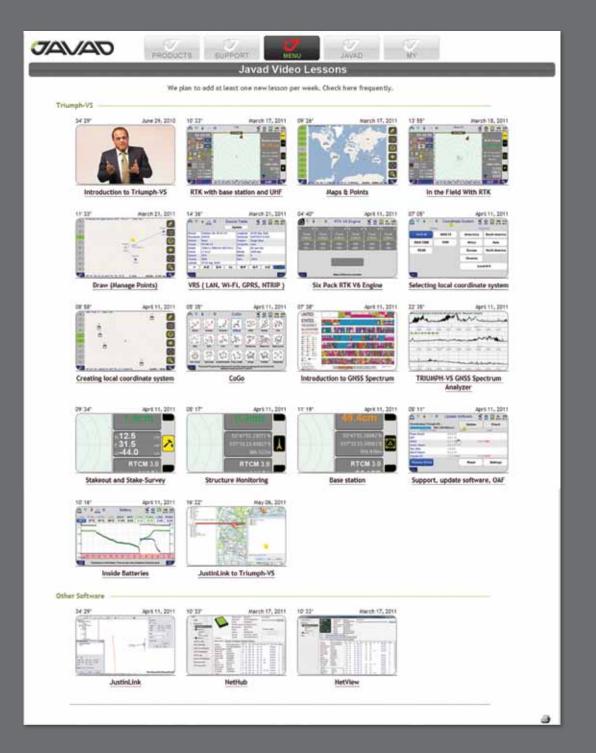
| Describeding Tramph | ATL.                | Update | Check    |
|---------------------|---------------------|--------|----------|
| Saffanir Titler     | LP (Asses Armystel) |        | 100      |
| Power Seart         | 8.0.0.18            |        |          |
| LHF                 | 3.61.16             |        |          |
| CASS                | 23.17675            |        | 1.1004   |
| Corre Beerl         | 2314                |        |          |
| Ges Data            | 12.10               |        |          |
| WHICE Board         | 8.8(2.75            |        |          |
| Trumph/VE           | 11.1.14007          | 113    | 2,10101  |
| Rolessa Notes       |                     | Reset  | Settines |

#### **QUESTION 8**

We continue to improve TRIUMPH-VS software. To update

|   | Il TRIUMPH-VS software components to the ersion you must:   | lates |
|---|---|-------|
|   | www.javad.com to computer and then transfer to ows Mobile Device Center or Active Sync.   | 0     |
| Download updates from TRIUMPH-VS using Justin | www.javad.com to computer and then transfer to Link software.   | 0     |
| Download updates from take them automatically | www.javad.com to computer and TRIUMPH-VS will   | 0     |
| Download updates from TRIUMPH-VS using NetH   | n www.javad.com to computer and transfer to ub.   | 0     |
| On the "Software Upda                         | 'S directly to the Internet (LAN, Wi-Fi, or GPRS) . te" screen click "Update". Decide which software date and click "Download". | 0     |
|   | S directly to the Internet (LAN, Wi-Fi, or GPRS). On  | 0     |

#### www.javad.com Video Lessons



### Another Offer\* Try TRIUMPH-VS and Compare!



First visit www.javad.com and view our 21 GNSS Video Lessons (total of about 4.4 hours). It will be a good learning experience, even if you do not proceed with the following offer:

- To experience the TRIUMPH-VS, pay \$2,990 and receive one complete system with all accessories for RTN/VRS RTK, or RTK using your own base station (like a TRIUMPH-1 or another TRIUMPH-VS).
- Experience it for one month. To purchase it, send us three additional monthly payments of \$2,990. Or send it back for a full refund.

Visit our dealer near you or www.javad.com

<sup>\*</sup> Limited time offer and subject to credit approval. This offer is separate from our Technical Competition event.