

*You've come a long way, Survey!*



# Triumph-VS



View at  
[WWW.JAVAD.COM](http://WWW.JAVAD.COM)

## Three New Revolutionary Products

1



High precision all-frequencies GNSS Antenna  
GPS+GLONASS+Galileo

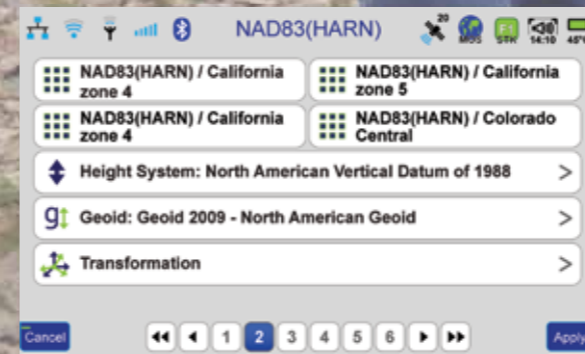
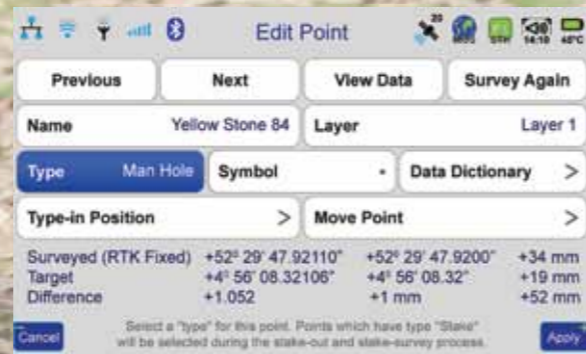
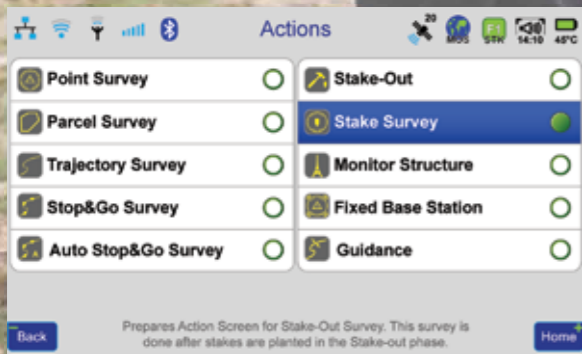
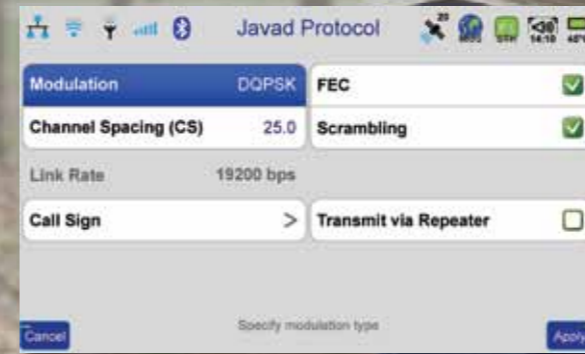
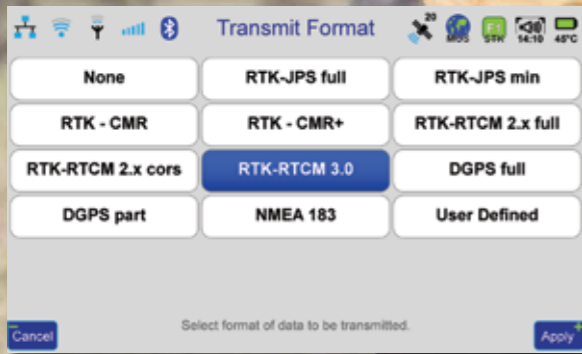
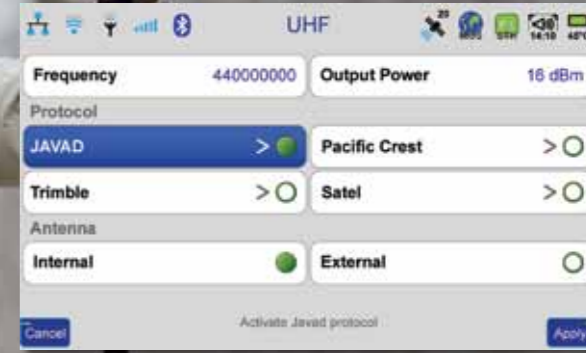
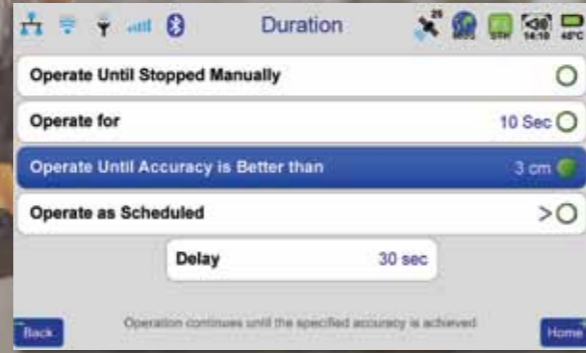
2

Revolutionary, compact,  
216-channel GNSS Receiver

External  
Power  
USB  
USB  
Ethernet



# Let the Screens...



# Speak for themselves

**Stake 35**  
 00:00:20 00:00:10  
 RTK Fixed  
 1.5 cm  
 N: +2.3 cm  
 E: -1.8 cm  
 U: -2.1 cm  
 RTCM3.0  
 365  
 99.95  
 1 sec  
 Int: 259 SD: 000  
 Int: 1.8/1.83 Mb SD: 1.9/1.04 Mb FL: 458.5/82.63 Mb  
 359°

**Triumph Palace Left Up Corner (3)**  
 00:00:18 00:00:12  
 RTK Fixed  
 3 cm  
 RTCM3.0  
 144  
 99.95  
 0 sec  
 Int: 259 SD: 000  
 Int: 1.8/1.83 Mb SD: 1.9/1.04 Mb FL: 458.5/82.63 Mb  
 359°

**Yellow Stone 36**  
 00:00:18 00:00:12  
 RTK Fixed  
 1.2 cm  
 RTCM3.0  
 144  
 99.95  
 0 sec  
 Int: 259 SD: 000  
 Int: 1.8/1.83 Mb SD: 1.9/1.04 Mb FL: 458.5/82.63 Mb  
 359°

**Triumph Palace Left Up Corner (3)**  
 00:00:00 00:00:30  
 RTK Fixed  
 3 cm  
 RTCM3.0  
 144  
 99.95  
 0 sec  
 Int: 259 SD: 000  
 Int: 1.8/1.83 Mb SD: 1.9/1.04 Mb FL: 458.5/82.63 Mb  
 359°

**Triumph Palace**  
 1 corner 4 corner 5  
 2 corner 3  
 3  
 4 corner 6  
 5  
 6  
 7  
 8  
 9 corner 2 corner 1  
 10  
 S: 600.2284 m²  
 P: 90.213 m  
 359°

**Map Layers**  
 Layer 1 Show Edit Layer 6 Show Edit  
 Layer 2 Show Edit Layer 7 Show Edit  
 Layer 3 Show Edit Layer 8 Show Edit  
 Layer 4 Show Edit Layer 9 Show Edit  
 Layer 5 Show Edit Layer 10 Show Edit  
 Click "Edit" to edit a layer. Check "Show" for the items of the layer to be shown on the map.

**Draw**  
 Draw Objects: Point, Polygon/Polyline, Circle, Rectangle, CoGo Draw  
 Map Features: List Points, Layers, View Background Map, Auto Scale to Fit All, Cursor Motion  
 Draw a circle on the current map.

**Add Relative Point**  
 Name: Yellow Stone 84 Layer: Layer 1  

Type	Man Hole	Symbol	Data Dictionary
East	4.000 m	Hor. Distance	5.000 m
North	3.000 m	Hor. Angle	53.130°
Up	10.000 m	Vert. Up	10.000 m

 Enter a name for this point. The relative location of this new point can be specified either in Cartesian or in polar formats of this screen.

**Satellites**  

SAT	EL	AZ	H	L1	P1	P2	L2C	L5	SAT	EL	AZ	H	L1	P1	P2	L2C	L5
GPS7	7	106	H 32	-	-	-	32	-	GLN11	11	96	H 40	39	26	26	-	-
GPS8	41	102	H 46	30	30	-	-	-	GLN13	54	298	H 45	44	42	43	-	-
GPS9	14	286	H 37	10	10	-	-	-	GLN14	6	284	H 34	31	36	36	-	-
GPS11	13	82	H 37	-	-	-	-	-	GLN21	34	40	H 48	47	44	45	-	-
GPS15	55	274	H 49	37	37	48	-	-	GLN22	48	114	H 48	48	47	49	-	-
GPS17	30	156	H 45	29	29	44	-	-	GLN23	14	162	H 43	41	37	40	-	-
GPS19	8	28	H 37	11	11	-	-	-	WA124	32	202	H 38	-	-	-	-	-
GPS26	46	298	H 37	-	-	-	-	-	WA126	27	196	H 34	-	-	-	-	-
GPS27	27	288	H 42	20	20	-	-	-	-	-	-	-	-	-	-	-	-
GPS28	71	86	H 49	39	39	-	-	-	-	-	-	-	-	-	-	-	-
GLN2	6	220	H 36	36	31	32	-	-	-	-	-	-	-	-	-	-	-
GLN3	31	266	H 45	45	43	44	-	-	-	-	-	-	-	-	-	-	-

 Internal battery status, temperature and discharge history.

**Battery**  
 L.Bat. R.Bat. GNSS Com L.Bat. R.Bat. Supply L.Bat. R.Bat. dV/dt  
 35°C 35°C 45°C 45°C 8.3V 8.3V 9.0 V 0.9 A 0.8 A 0.0  
 Hours: 1 2 3 4 5 6 7 8 9 10 11 12 13 14  
 Record voltages and charging currents of left & right batteries and the internal voltage used. Boxes also show temperatures of four locations.

**Support**  
 Update Firmware > Update OAF >  
 Check Hardware > Send Files to JAVAD >  
 Questions & Answers >  
 Connect to JAVAD GNSS server to check the health of your TRIUMPH V.S. hardware and software.

Message: How can I upgrade my receiver to include Galileo?  
 Q W E R T Y U I O P  
 A S D F G H J K L  
 ↑ Z X C V B N M ← X  
 123 < space > Send Esc

**Update Firmware**  
 Update Channel  
 Auto Ethernet WiFi GPRS  
 Update Now  
 Schedule Updates  
 Mon Tue Wed Thu Fri Sat Sun  
 At: 08:00 Do not wait for confirmation  
 Firmware update starts at time specified at "Start at" on days that have been checked.

**CoGo & Draw**  
 Direct Inverse Traverse Offset Translate B-B D-D  
 B-D A-A A-D Divide line Stake-out line Stake-out curve Hor. curve  
 Vert. curve Polygon Curve Fit Hinge Parallel Resection Diagonals

## Packaged in One!



3

**Breakthrough, wide-screen,  
high-resolution handheld controller**

- Loaded with Revolutionary Software



**External GNSS  
antenna  
External UHF  
antenna  
1PPS/Event  
Ext. Freq In/Out  
Connectors**

## And About Pricing...

Complete **5 Hz RTK System**, including:

- 216 All-In-View Channels
- GPS L1/L2/L2C/L5
- GLONASS L1/L2
- 5 Hz RTK/DGPS Rover
- RTK/DGPS Base
- 5 Hz Raw Data Recording
- 256 MB Internal Data Storage
- 4 GB MicroSD Card
- Two USBs
- RAIM
- Communication Channel (UHF or GSM/GPRS/EDGE)
- Internal Triple Frequency GPS/GLONASS/Galileo Geodetic Antenna
- Integrated High Resolution (800x480 pixels) Controller and Software
- Advanced Multipath Reduction
- WAAS/EGNOS
- WiFi 802.11b
- Bluetooth
- Removeable/Rechargeable Li-Ion Battery Pack (> 10 H)
- External Power Supply/Charger
- Soft Carrying Case
- Shoulder Strap
- Graduated Monopod
- Power and USB Cables
- Tripod Adaptors
- Stylus and Support Legs



# \$11,950

**Expansions and Options:**

- Galileo E1/E5A (of All Current and Future Galileo Sattalites)
- 100 Hz RTK
- 100 Hz Data Recording
- 4 GB Internal Data Storage
- In-Band Interference Rejection
- External Antenna Connection
- Audio/Visual Features and Automatic Mis-Alignment Corrections
- Second Communication Channel (UHF or GSM/GPRS/EDGE)
- Ethernet
- Timing Signals (Event Marker and 1-PPS)

See [www.javad.com](http://www.javad.com) for details