



# Base and Rover Setup via Tracy

Configuration Example

Version 1.0

Last Revised December 14, 2010

All contents in this manual are copyrighted by JAVAD GNSS.  
All rights reserved. The information contained herein may not be used, accessed, copied, stored, displayed, sold, modified, published, or distributed, or otherwise reproduced without express written consent from JAVAD GNSS.



# BASE AND ROVER SETUP VIA TRACY

## Base Configuration (TRIUMPH-1 with external UHF Modem)

### Establishing Connection between receiver and Tracy

1. Configure your external UHF radio (HPT435) as base using ModemVU software. See detailed description in “HPT435 as Base TRIUMPH-1 as Rover” Application Notes, available on the [www.javad.com](http://www.javad.com).
2. Connect the TRIUMPH-1 receiver to computer. See for details the TRIUMPH-1 Operator’s Manual.
3. Connect the external HPT435 UHF radio to receiver’s port B with cable Accessory Data-Ser cable, ODU-7/D15 (1.8 m) p/n 14-578108-01.



**Figure 1-1. Accessory Data-Ser cable, ODU-7/D15**

**Note:** The port B is optional. Make sure you have such option purchased.

## Base and Rover Setup via Tracy

Base Configuration (TRIUMPH-1 with external UHF Modem)

Establishing Connection between receiver and Tracy

4. Power the HPT435. You can use the Battery kit 2 (p/n 99-587100-10).




**Figure 1-2. Powering HPT435**

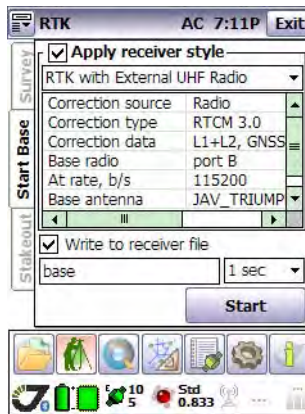
5. Turn on the TRIUMPH-1 receiver
6. Start Tracy RTK in the *Lite* view.
7. Connect you TRIUMPH-1 and controller using Bluetooth.
  - If you have once connected the receiver with Victor, Tracy will find it automatically;
  - Otherwise click to the connection button to search bluetooth receiver.



**Figure 1-3. Connection to the receiver**

## Base Station Setup

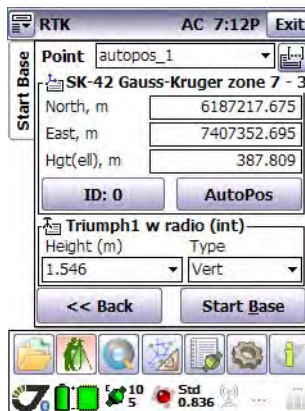
1. Click *Survey parameters* button .
2. Click *Start Base* tab (Figure 1-4). This tab allows the user to apply receiver as the base, selecting receiver style from the list (how to create new style see “How to create new/edit receiver style” on page 8), and make settings for base receiver:



**Figure 1-4. Start Base tab**

If the *Write to receiver file* check box is selected the logfile will be saved in the receiver’s memory. Type in the logfile name in the edit field below.

3. Click *Start* button and enter the base station coordinates:



**Figure 1-5. Control point coordinates setup**

4. Click *Start Base* button to start transmit corrections.
5. Click *Exit* to disconnect and close Tracy.

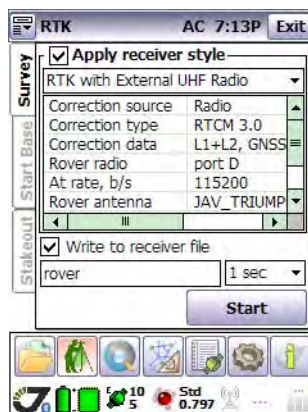
## Rover setup (TRIUMPH-1 with Internal Radio)

1. Turn on your receiver which will be configured as rover.
2. Start Tracy RTK in the *Lite* view. How to switch between *Lite* and *Extended* view see on page 8.
3. Connect you TRIUMPH-1 and controller using Bluetooth.
  - If you have once connected the receiver with Victor, Tracy will find it automatically;
  - Otherwise click to the connection button to search bluetooth receiver.



**Figure 1-6. Connection to the receiver**

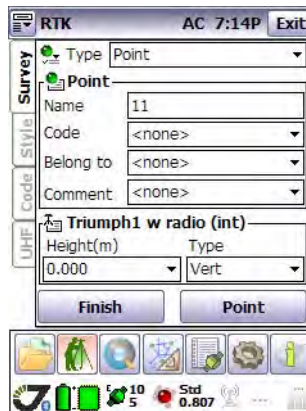
4. In the extended view click the *Survey parameters* button, then *Survey* tab and select the style:



**Figure 1-7. Survey tab**

**Note:** Please note the style should be the same as base has.

5. Click *Start* button to start survey. In the type drop-down list box select *Point* to survey a point, or *Trajectory* for trajectory surveying (Figure 1-8)
  - Insert point name in the *Name* field, code and comments in the corresponding fields.
  - Insert the antenna height and type of antenna height measurement.
  - Click the *Point* button to start point surveying. New window with the surveying information appears.
  - To finish surveying this point click the *Finish* button.
  - Click *Cancel* to stop surveying points.
  - If the trajectory is selected, make the same settings as described above, and click the *Trajectory* button to start trajectory surveying.
  - To finish surveying the trajectory click the *Finish* button.
  - Click *Cancel* to stop surveying trajectory.



**Figure 1-8. Survey Tab. Point surveying**




# How to create new/edit receiver style

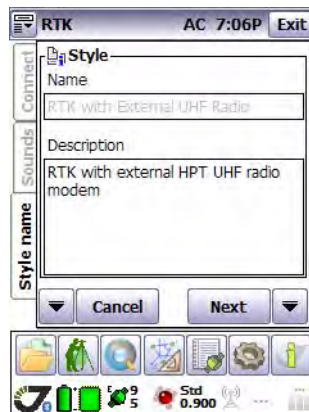
To create new or edit the saved receiver style, perform the following steps:

1. Switch to the extended mode using the top left corner menu button or *View* button:



**Figure 1-9. Mode switch**

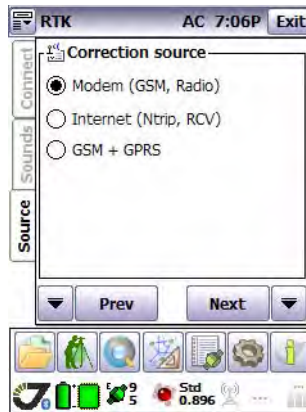
2. Click the *Configuration*  button.
3. In the *Receiver* tab click the  button to add new receiver style or  button to edit the existing receiver style.
4. Specify the new style name, add the description and click *Next*:



**Figure 1-10. Style name**

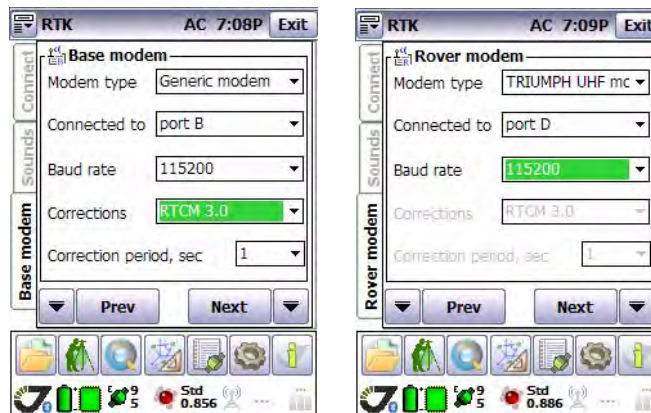


5. Select the correction source and click *Next*:



**Figure 1-11. Correction source**

6. Specify the base modem's parameters, such as modem type, port modem is connected to, baud rate, and type of corrections. Click *Next*:



**Figure 1-12. Base modem parameters**

## Base and Rover Setup via Tracy

How to create new/edit receiver style  
Base Station Setup

7. In the next screen specify the UHF modem settings: protocol, modulation, link, output power, frequency:

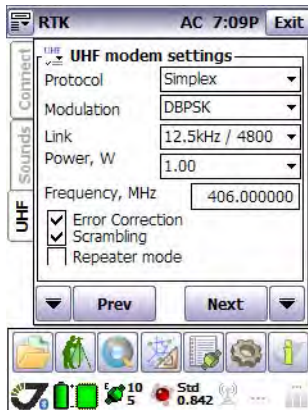


Figure 1-13. UHF modem settings

- *Protocol* - Simplex
  - *Modulation* - DBPSK
  - *Link* - 12.5 kHz
  - *Output power* - up to 35 W.
8. In the next screen specify the TDMA multibase mode parameters:

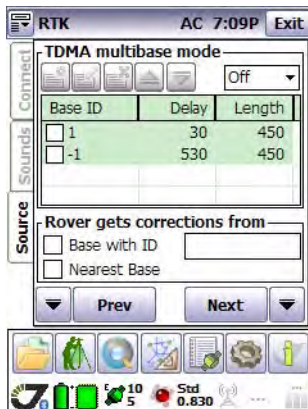


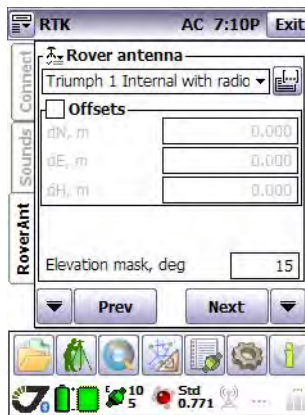
Figure 1-14. TDMA multibase mode

9. Select the base antenna:



**Figure 1-15. Base antenna**

10. Select the rover antenna:

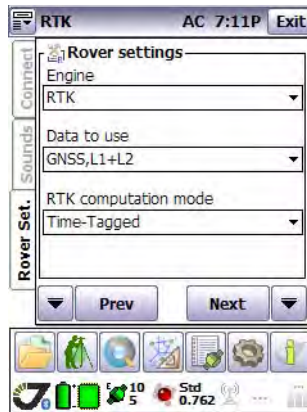


**Figure 1-16. Rover antenna**

## Base and Rover Setup via Tracy

How to create new/edit receiver style  
Base Station Setup

11. Specify the rover settings:



**Figure 1-17. Rover settings**

12. Click *Finish*. The new receiver style has been successfully created/updated.



**Figure 1-18. Style has ben updated**





900 Rock Avenue, San Jose, CA 95131 USA

Phone: +1(408)770-1770

Fax: +1(408)770-1799

[www.javad.com](http://www.javad.com)

Copyright © JAVAD GNSS, Inc., 2010  
All rights reserved. No unauthorized duplication.