Base and Rover Setup via Tracy

Configuration Example

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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.
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.

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:

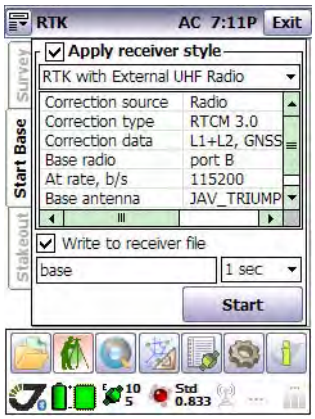

Figure 1-4. Start Base tab

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:

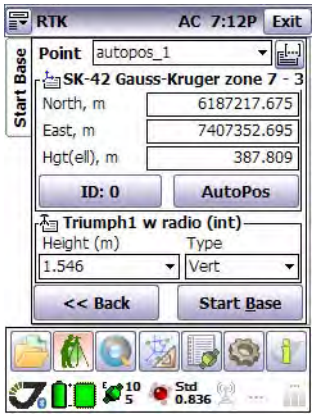

Figure 1-5. Control point coordinates setup

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:

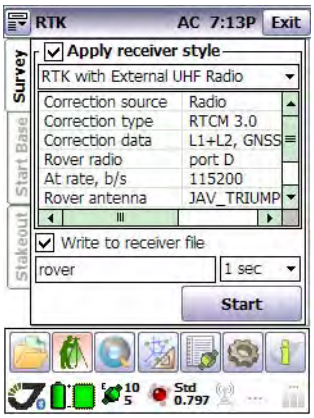

Figure 1-7. Survey tab

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.

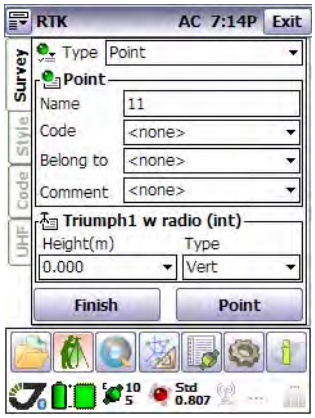

Figure 1-8. Survey Tab. Point surveying

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*:

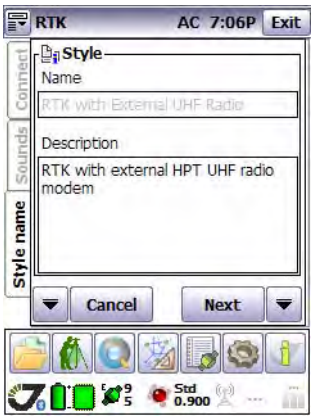

Figure 1-10. Style name

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

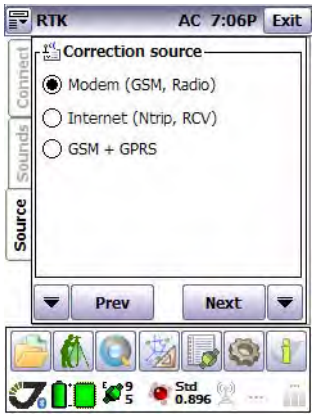

Figure 1-11. Correction source

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

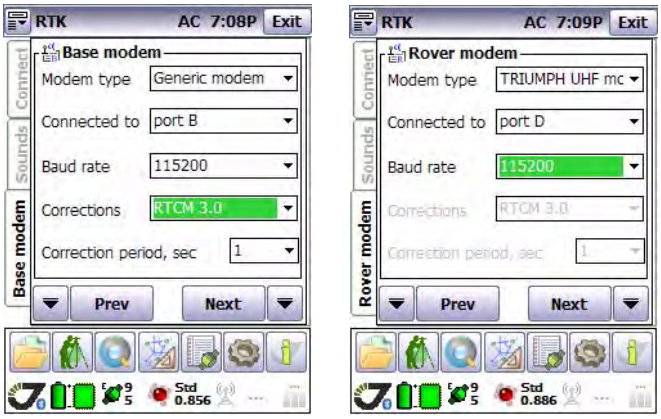

Figure 1-12. Base modem parameters

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

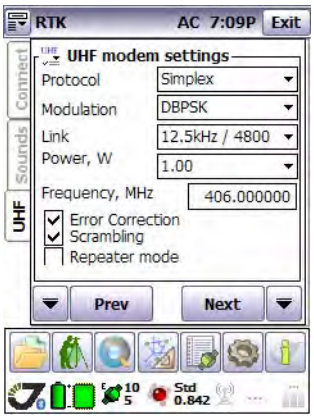

Figure 1-13. UHF modem settings

- *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:

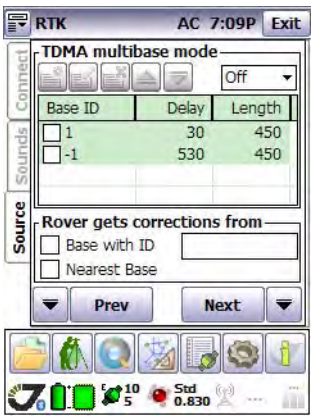

Figure 1-14. TDMA multibase mode

9. Select the base antenna:

Figure 1-15. Base antenna

10. Select the rover antenna:

Figure 1-16. Rover antenna

11. Specify the rover settings:

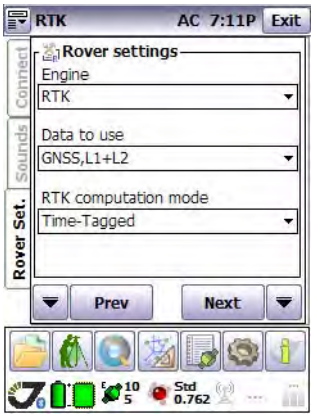

Figure 1-17. Rover settings

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

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