



External UHF via TRIUMPH-VS

Configuration Example

Version 1.0

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EXTERNAL UHF MODEM CONFIGURATION

How to activate and manage Bluetooth on HPT435BT

1. Attach antenna to the HPT435BT.

Warning: Always attach antenna before turning on! Do not use the radio without antenna, to avoid the serious damage of the equipment.

2. Connect your HPT435BT to PC using serial port. Power the modem.
3. Start ModemVU software.
4. Select HPT435BT from the list, click Ok. Then select the port the modem is connected to and click *Connect*:

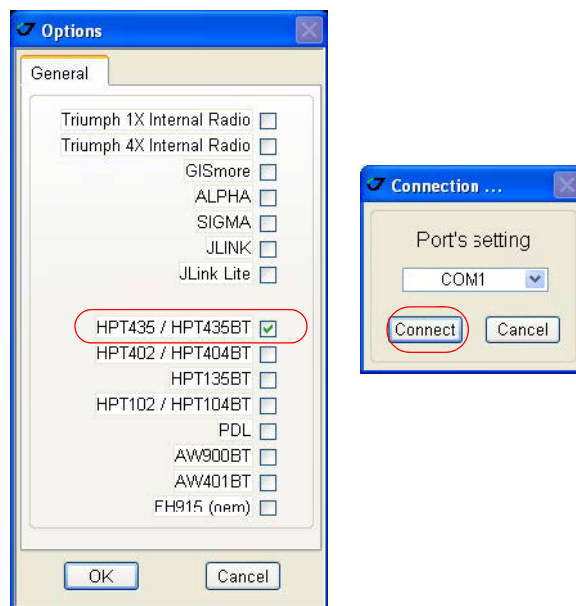


Figure 1. Connecting to ModemVU

5. Check the software version of your HPT435BT in the *Identification* tab. Ensure the software version is 3.1 or newer¹:

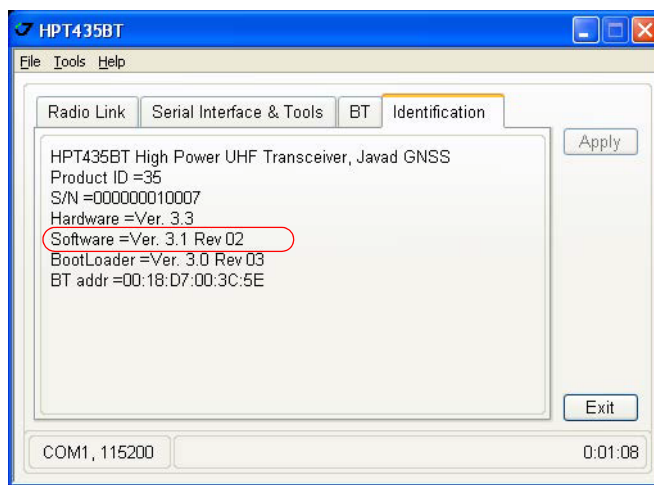


Figure 2. Identification tab

6. In the *BT* tab set *BT* to OFF and click *Apply*, then set the following parameters:

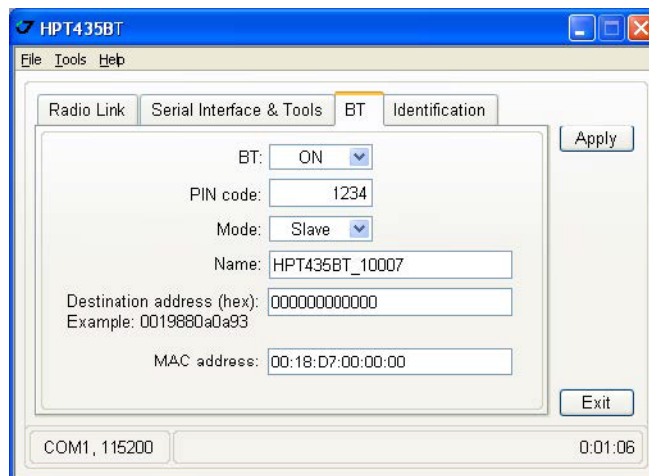


Figure 3. BT tab

- *PIN code* - enter the PIN code of the module;
- *Mode* - set to Slave;
- *BT* - set to ON to activate the Bluetooth module and click *Apply*.

1. Starting version 3.1 Bluetooth connection and connection with TRIUMPH-VS is supported.

7. In the *Serial Interface & Tools* tab set the parameters *Read data to Transmit from* and *Write Received data to* to BT, click *Apply*.

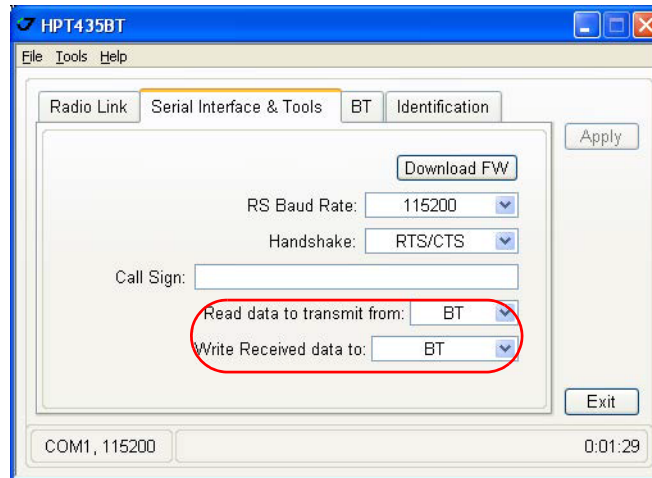


Figure 4. Serial Interface & Tools tab

External UHF Modem Configuring

To configure external UHF modem HPT435BT using TRIUMPH-VS receiver, follow the instructions below:

1. Attach antenna to the HPT435BT.

Warning: *Always attach antenna before turning on! Do not use the radio without antenna, to avoid the serious damage of the equipment.*

2. Power your HPT435BT.
3. Turn on your TRIUMPH-VS.
4. On the Main screen tap *System* ▶ *Connection Mode*.
5. Select *External radio*.

6. Tap *Connect using Bluetooth*.

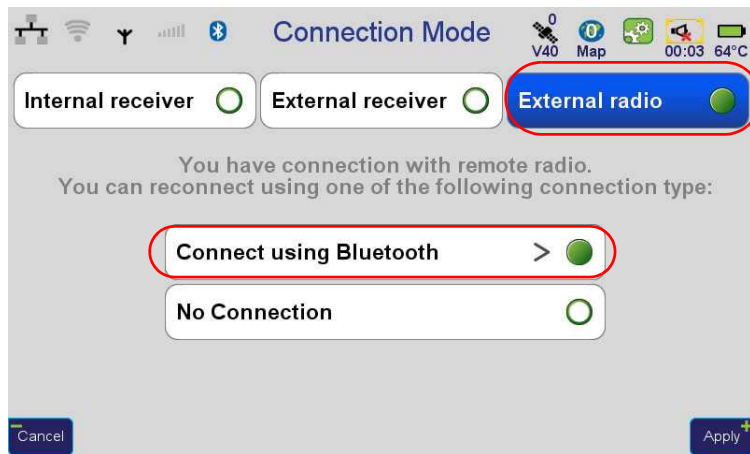


Figure 5. Connection Mode

7. Tap *Local Settings* and ensure that PIN is the same as has been configured in the ModemVU, tap *Apply*.

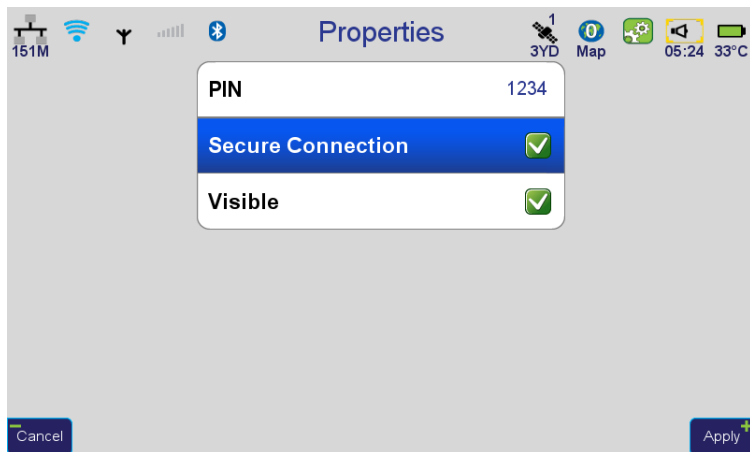


Figure 6. Properties

8. Tap *Discover* and then select Bluetooth Name of External UHF in the list.

External UHF Modem Configuration

External UHF Modem Configuring

9. Tap *Connect*.



Figure 7. Bluetooth

10. Tap on the Bluetooth icon. Ensure parameters in the right column are not "--".

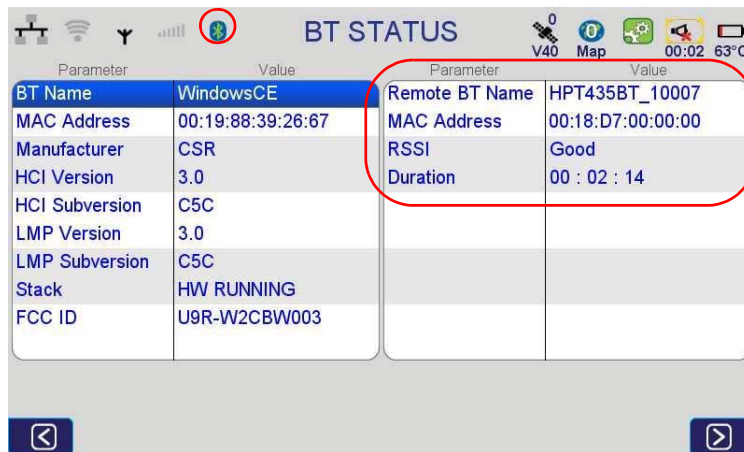


Figure 8. BT STATUS

11. On the Main screen tap *Settings* ▶ *Communication* ▶ *UHF*.

12. Configure parameters such as *Frequency*, *Output Power* and *Protocol*.



Figure 9. HPT435BT

Note: For base station set the output power to 35000 mW, to provide the best transmitting coverage.

Base Configuration

1. On the Main screen tap *Settings* ▶ *Actions* and select *Fixed Base Station*:

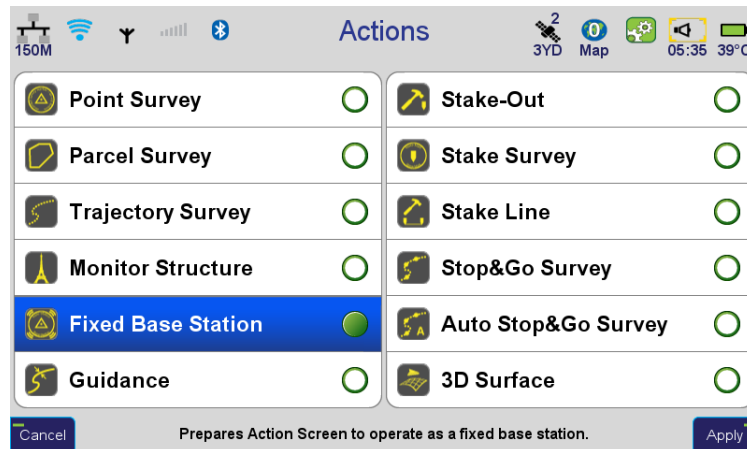


Figure 10. Actions

External UHF Modem Configuration

Base Configuration

2. Press FN button on the front panel of Triumph-VS to switch to Action screen:

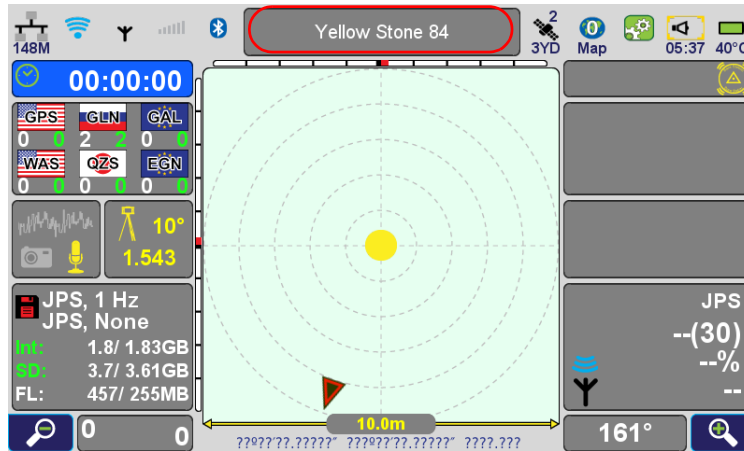


Figure 11. Action Screen

3. Tap *Yellow Stone 84* on the top of the screen to open the screen with the Fixed Base Station parameters.
4. Tap *Base Station Coordinates* and set up the coordinates by choosing them from the list or entering position manually:

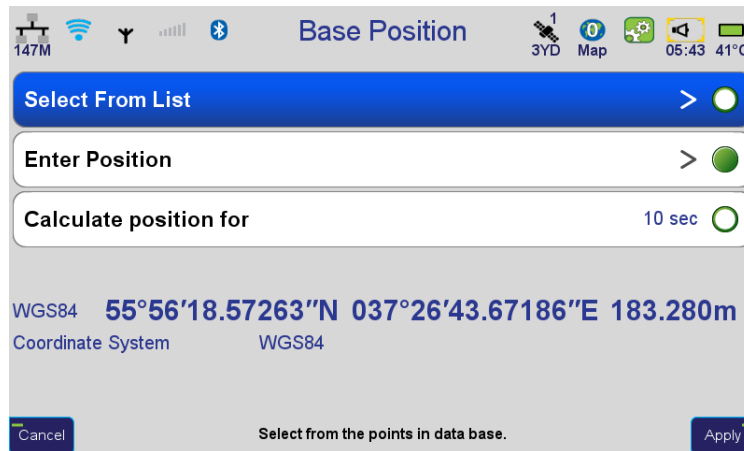


Figure 12. Base Position

5. For transmitting of correction on the Main screen tap *Settings* ▶ *GNSS* ▶ *Transmit Data (Base)*.
6. Select *UHF Modem*, *Corrections Format* and *Period*.

- Click on the UHF icon, check the *Sent* parameter. Ensure this parameter value is on the increase.

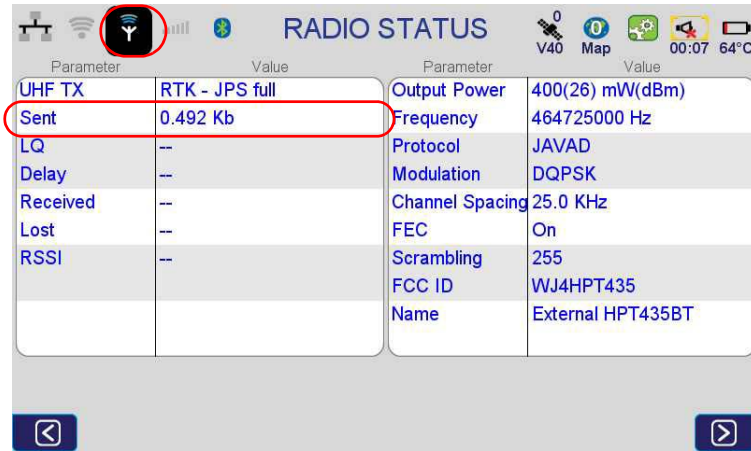


Figure 13. RADIO STATUS (Base)

Rover Configuration

- To set up the receiving of correction tap on the Main screen *Settings* ▶ *GNSS* ▶ *Receive Data (Rover)*.
- Select UHF and corrections format.
- Click on the UHF icon and check the *LQ*, *Delay*, *Received* and *Lost* parameters.

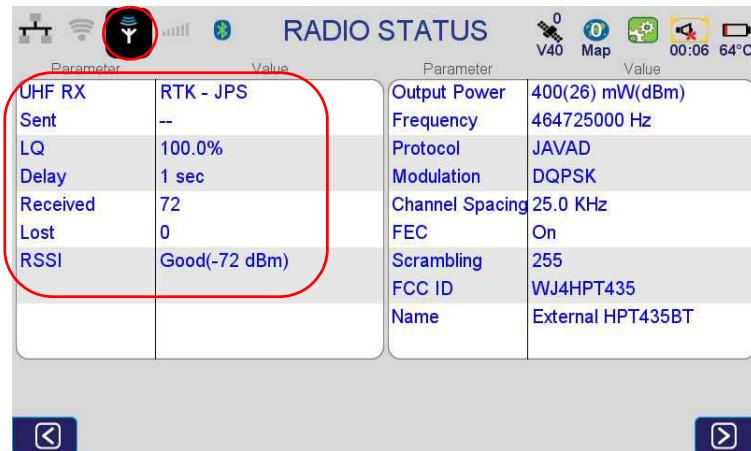


Figure 14. RADIO STATUS (Rover)



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