

How to setup JLink LTE to provide RTK data received via UHF channel to Serial Port.

The purpose of this document is to describe how to configure JLink LTE to provide RTK data received via UHF channel (in Javad protocol mode) to Serial Port.

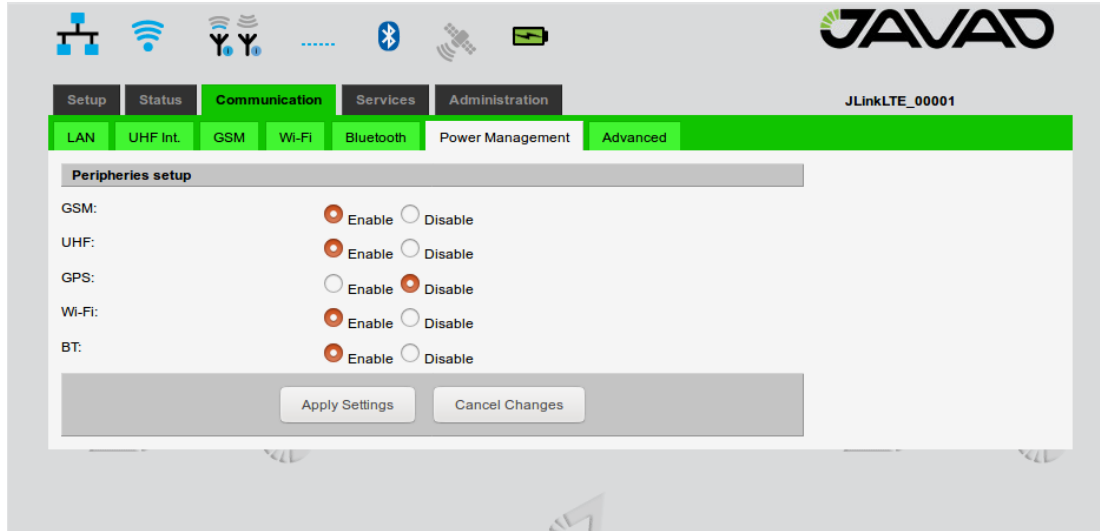
The following are the steps of configuration of JLink LTE:

1. Connect to Jlink LTE via web interface (For more detail see document “JLink LTE User Manual”).
2. UHF configuration in Javad protocol:
 - In the *Communication/UHF Int.* tab. (see Picture 1):
 - select operating frequency or add new frequency to the list
 - select Output Power
 - select Protocol type *Javad*
 - enter Call Sign string if it is needed
 - Protocol mode
 - select Modulation
 - select channel bandwidth (spacing)
 - select FEC
 - select Scrambling with seed

The screenshot displays the JLink LTE web interface. At the top, there are icons for LAN, Wi-Fi, GSM, Bluetooth, and a battery level indicator. The JAVAD logo is on the right. Below the icons, there are tabs for Setup, Status, Communication (selected), Services, and Administration. Under the Communication tab, there are sub-tabs for LAN, UHF Int. (selected), GSM, Wi-Fi, Bluetooth, Power Management, and Advanced. The main content area is divided into two sections: UHF modem and Protocol details. The UHF modem section includes fields for Frequency RX (461.025.000 Hz), Frequency TX (461.025.000 Hz), Output power (15dBm (31.6 mW)), Protocol (Javad), Call Sign, SNRM (Enable/Disable), Fan control (Enable/Disable), Antenna detect (Enable/Disable), and Status info (Enable/Disable). The Protocol details section includes Mode (Transceiver), Modulation (DQPSK), Channel spacing (12.5), FEC (Enable/Disable), Scrambling (Enable/Disable), Scrambling seed (255), and Link rate (9600 bps). At the bottom, there are buttons for Save Settings and Cancel Changes.

Picture 1. JLink LTE UHF parameters configuration tab

- In the *Communication/Power Management* tab activate the UHF interface (see Picture 2)



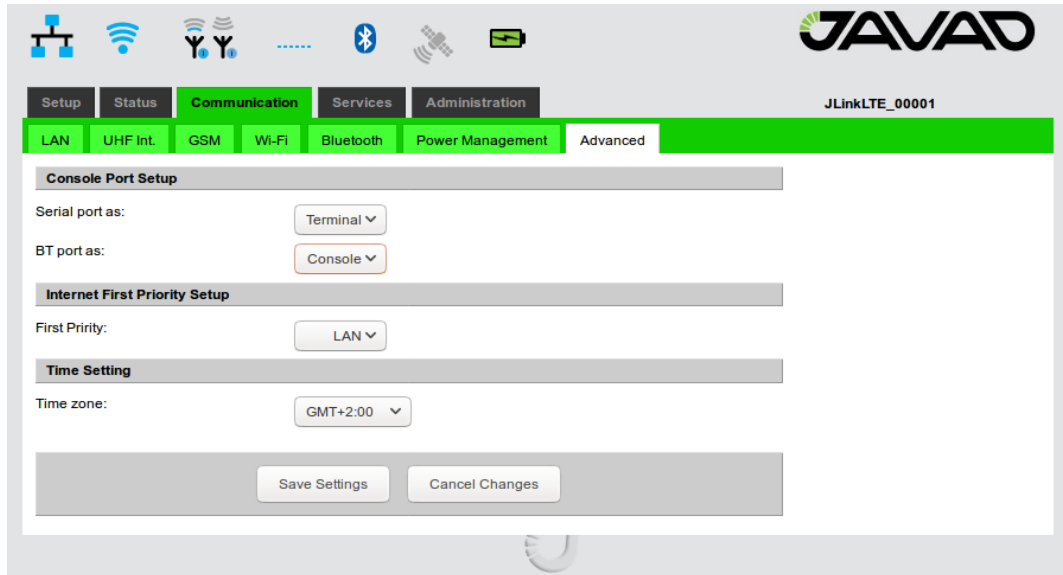
Picture 2. JLink LTE Power Management tab

- Detailed connection status you can check in *Status/UHF int.* tab (see Picture 3)



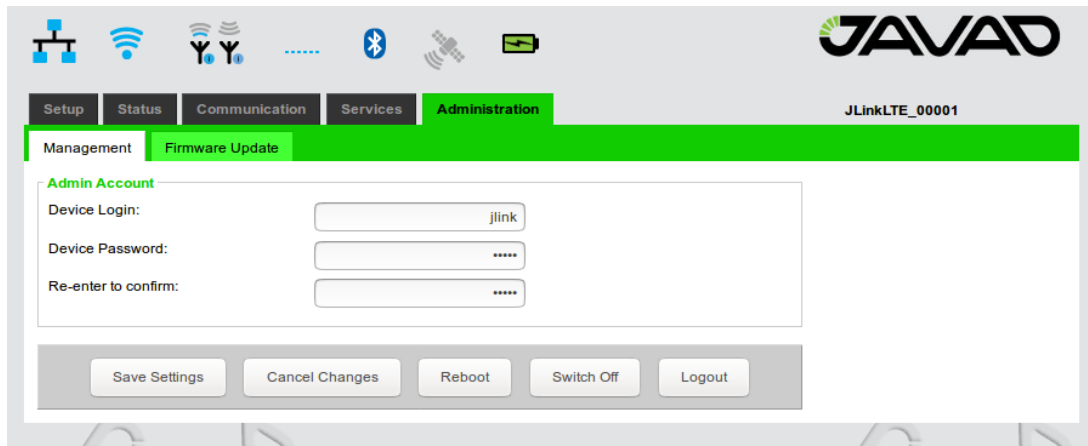
Picture 3. JLink LTE UHF Int. Status tab

3. Setup Serial Port
 - In the Communication/*Advanced tab* select “**Serial port as**” parameter as Terminal. Click “**Save Setting**” button and wait until finish (see Picture 4).



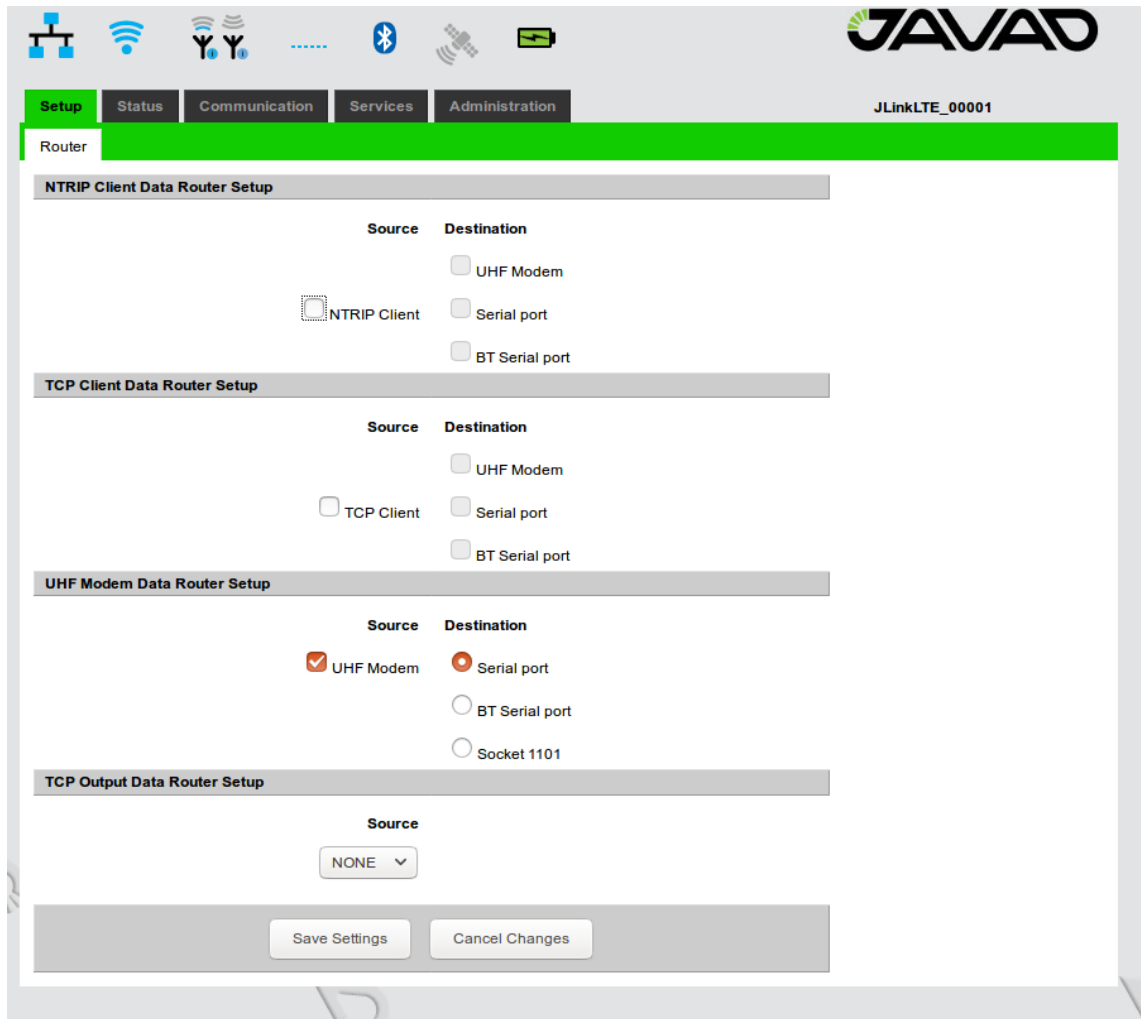
Picture 4. JLink LTE Advanced tab

4. Reboot device
 - In the *Administration/Management tab* click “**Reboot**” button and wait until reboot (see Picture 5).



Picture 5. JLink LTE Administration Management tab

5. Setup Router
 - In the *Setup/Router tab* select following parameters “**UHF Modem**” as Source and “**Serial port**” as Destination. Click “**Save Setting**” button and wait until finish (see Picture 6).



Picture 6. JLink LTE UHF Modem Router tab

6. Connect Serial Port

- Use any application to connect serial port of JLink LTE with following parameters:
 1. **Baudrate** 115200
 2. **Parity** none
 3. **Data Bits** 8
 4. **Stop Bits** 1
 5. **Handshake** hardware

