User Manual UM002

AT SIGFOX GUI Software description

AT Command Graphical User Interface Software description UM002 Rev – 1.0

Abstract

The AT SIGFOX GUI is a demonstration software to help customers to get started with the AT command set enabling faster and better understanding on how to use JPL modules as AT command modem.

This software also can be used as a generic serial terminal for other purposes.

Contents

1. Revision History

Number	Revision	Date	Description
1	REV 1.0	Nov/2019	Initial release

2. Getting Started

This section describes the requirements and procedures to install the AT SIGFOX GUI software.

2.1. System Requirements

A Windows® PC with:
• 1 USB ports
• 30 MB free hard disk space
• 256 Mbytes of RAM
• Operational system: Windows® 7 or above

2.2. Hardware Requirements

This software was designed to work with any JPL's evaluation kit which should be loaded with "SIGFOX_JPL_AT" firmware to operate properly.

2.3. Installing the AT SIGFOX GUI

Follow the steps below and the on-screen instructions to install the AT SIGFOX GUI.

1. Download the compressed AT SIGFOX GUI software from the JPL website
2. Extract the contents of the .zip file into a temporary directory
3. Double-click the extracted executable, to initiate the installation, and follow the onscreen prompts to install the AT SIGFOX GUI.
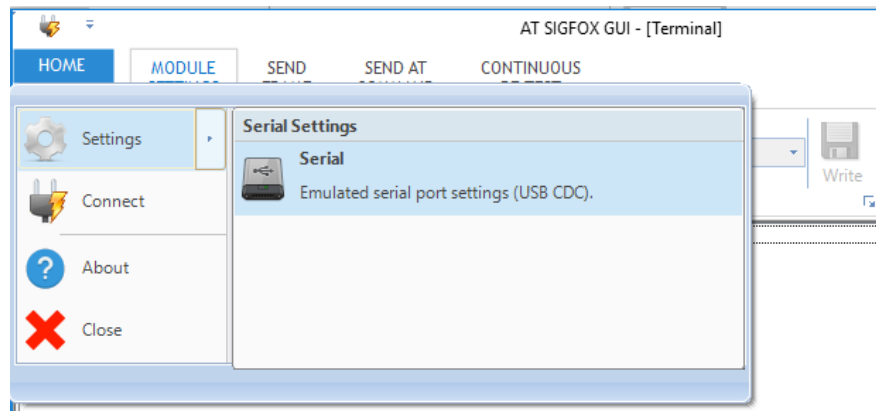
2.4. Uninstalling the AT SIGFOX GUI

Follow steps below to uninstall the AT SIGFOX GUI.

1. Select Start | Settings | Control Panel
2. Double-click on Add or Remove Programs
3. Select AT SIGFOX GUI
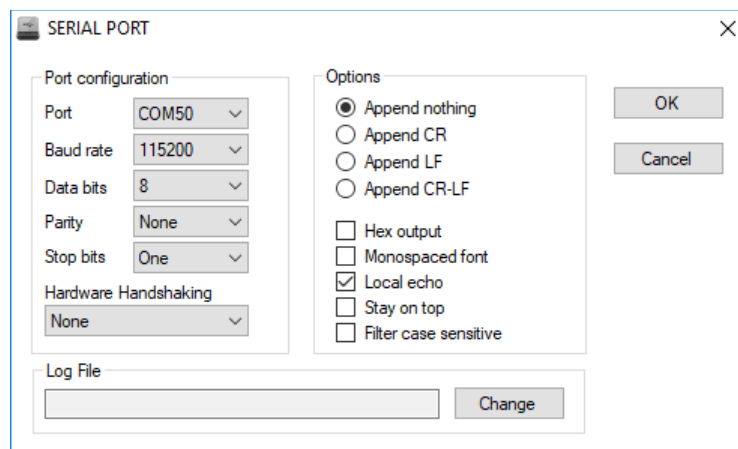4. Click on the Remove button

3. Serial Settings

Figure 1 – Screen shot of the HOME menu under AT SIGFOX GUI software

Firstly, click on HOME | Settings | Serial to choose the right serial port to connect, as shown above.

Figure 2 – SERIAL PORT window

On the Serial Port window set the serial port configuration parameters as stated in Figure 2. By default, it loads only the available serial ports on the combo box.

When interfacing with a different device, that already has local echo enabled by hardware, it is advised to uncheck the box to keep the log without duplicate information.
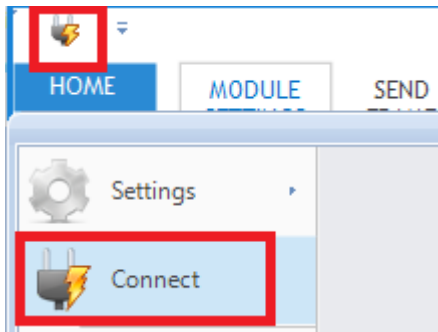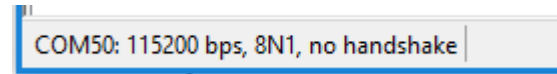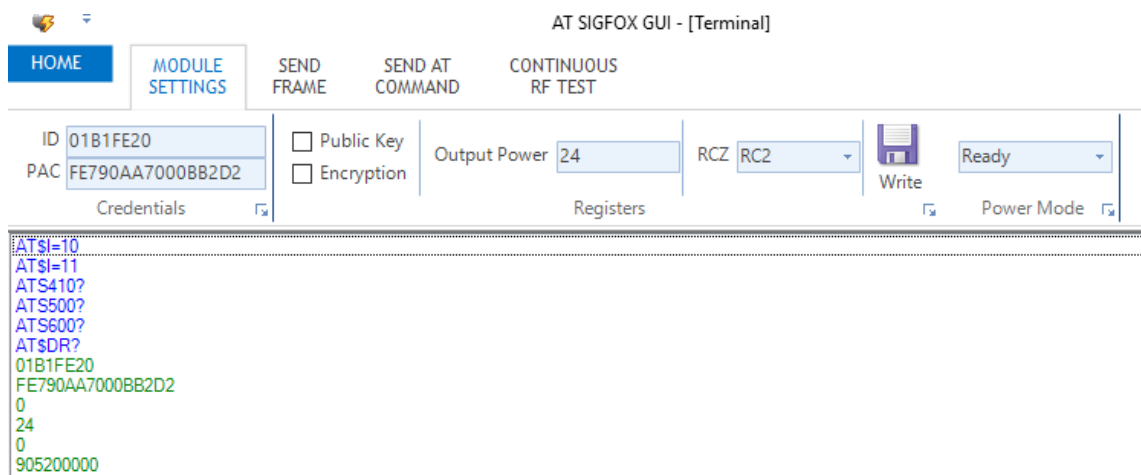
Figure 3 – Connect buttons

Figure 4 – Connection status

After having the settings done, click on either one of the connect buttons, as shown on Figure 3. The status bar, on the bottom of the window, should exhibit the status of the connection, as illustrated on Figure 4.

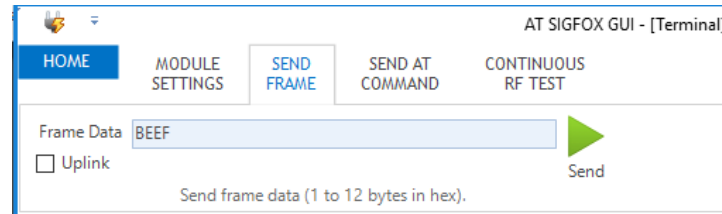**Figure 5 – Connection succeeded**

If the connection was made with a JPL device running the correct firmware, all the fields of Module Settings will be filled in automatically as illustraded in Figure 5.

4. Sending a Sigfox Frame

Figure 6 – Sending a Sigfox frame

To send a Sigfox frame properly, click on the tab Send Frame and type your data on the field. Remember the field must contain 1 to 12 bytes and all of them must be a hex byte.

Note that when the box below the frame data is unchecked, the data sent will be an uplink only. Checking that box enables the downlink request bit and therefore a full downlink is triggered.

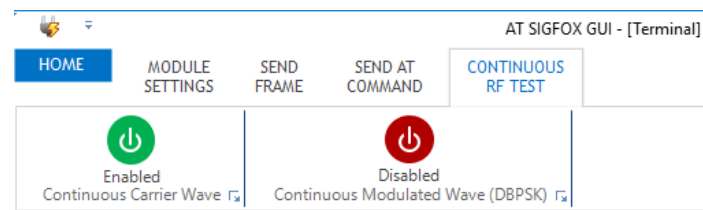# 5. Continuous RF Test

Figure 7 – Continuous Tests

Figure 7 displays both the continuous RF test modes available. By clicking on the correspondent button enables or disables the related test mode.

When the button is green, that individual test is on going. The red color indicate the test mode is off.

6. Other serial data

To send other serial data as AT commands of functions not mentioned above, one can use the tab Send AT Command for doing so as demonstrated in Figure 8:

Figure 8 – Sending other data