

# Firmware Update Procedure for NL-SW-1xRTT-V

NimbeLink Corp

Updated: July 2016



© NimbeLink Corp. 2017. All rights reserved.

NimbeLink Corp. provides this documentation in support of its products for the internal use of its current and prospective customers. The publication of this document does not create any other right or license in any party to use any content contained in or referred to in this document and any modification or redistribution of this document is not permitted.

While efforts are made to ensure accuracy, typographical and other errors may exist in this document. NimbeLink reserves the right to modify or discontinue its products and to modify this and any other product documentation at any time.

All NimbeLink products are sold subject to its published Terms and Conditions, subject to any separate terms agreed with its customers. No warranty of any type is extended by publication of this documentation, including, but not limited to, implied warranties of merchantability, fitness for a particular purpose and non-infringement.

NimbeLink and Skywire are registered trademarks of NimbeLink Corp. All trademarks, service marks and similar designations referenced in this document are the property of their respective owners.

# Table of Contents

<b>Introduction</b>	<b>3</b>
<b>Firmware Update Procedure</b>	<b>3</b>
Install USB device drivers on a Windows PC	3
Plug Modem into Development kit	3
Connect USB cable from Kit to PC	3
Apply Power	3
Recognize Modem	4
Run Update Application	4
Select Program default settings	4
Remove USB cable	7
Remove Power	7
Remove Modem	7
Check New Firmware Version	7

# 1. Introduction

As cellular carriers and chipset providers update the network and products that support it, new features get added that may be desirable to enable in NimbeLink modems. The modem part numbers are not locked to any one given version of firmware, therefore, this document provides instructions on how to upgrade and downgrade Skywire® modems with firmware versions that have been released by Telit and have also gone through the Maintenance Release approval process with Verizon for use on NimbeLink Skywire modem products.

## 2. Firmware Update Procedure

### 2.1 Install USB device drivers on a Windows PC

Installation files are available on the web here:

[http://nimbelink.com/wp-content/uploads/2014/08/Telit\\_USB\\_Driver\\_Win\\_Desktop\\_UF.00.01.zip](http://nimbelink.com/wp-content/uploads/2014/08/Telit_USB_Driver_Win_Desktop_UF.00.01.zip)

We have found this to work well on Windows 7 and Windows 8 PCs.

### 2.2 Plug Modem into Development kit

There are two development kits that are capable of providing the required USB connection to the modem to perform the firmware update:

- 1) Skywire Development kit: Part number: NL-SWDK
- 2) BeagleBoneBlack Cape: Part number: NL-AB-BBBC

### 2.3 Connect USB cable from Kit to PC

If using the NL-SWDK, connect the USB cable to USB connector J5 and the PC.

If using the NL-AB-BBBC, connect the USB cable to USB connector J3 and the PC.

### 2.4 Apply Power

If using the NL-SWDK, plug power supply into connector/barrel jack J3 and turn on the modem by pressing the ON\_BTN for 1+ seconds.

If using the NL-AB-BBBC, plug the cape into a BeagleBoneBlack baseboard, and plug power into the BeagleBoneBlack.

## 2.5 Recognize Modem

After applying power, the modem takes about 3-4 seconds before the USB ports are initialized and recognized by the operating system.

## 2.6 Run Update Application

The released firmware update package is available for download here:

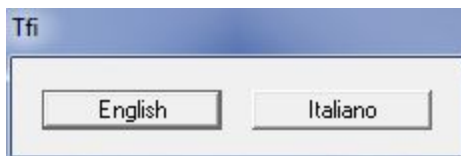
<https://drive.google.com/file/d/0BxjOCV4A3NUBbC1ZT0ptOGxQWmM/view?usp=sharing>

Extract the files in the .ZIP package to a local directory on your PC.

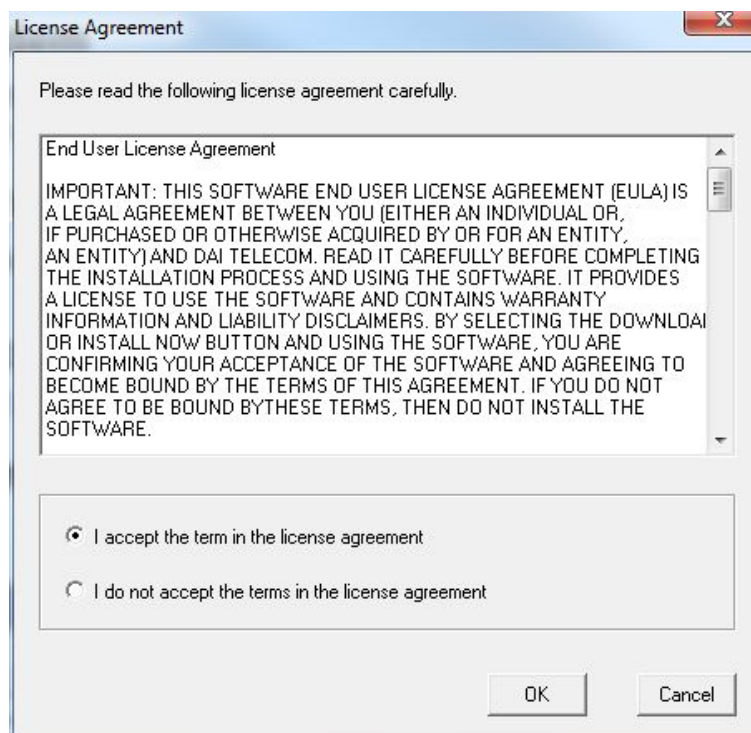
Run the CE910-DUAL\_18.02.022\_TFI.exe file.

## 2.7 Select Program default settings

Click 'English'



Review and Accept the license agreement, then click 'OK'



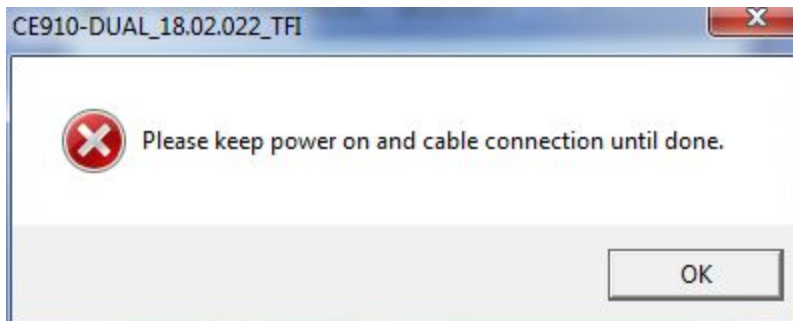
Review information regarding power and click 'OK'



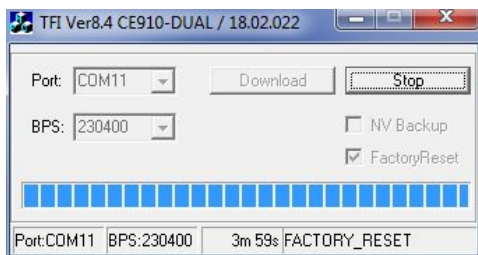
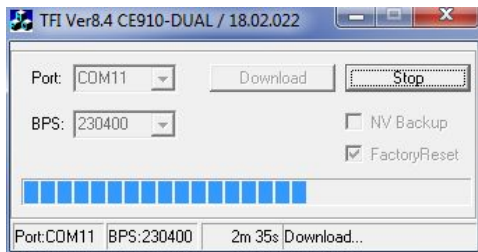
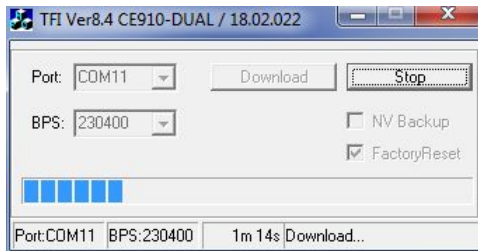
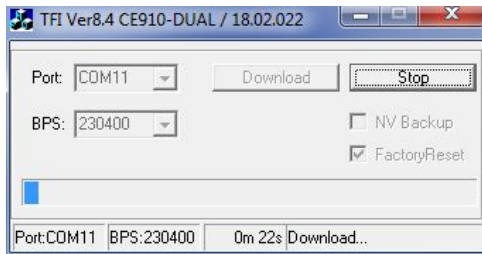
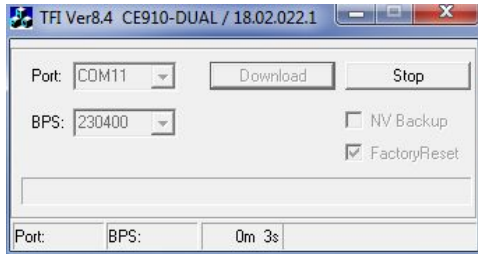
The application will search for the modem and when it finds it, it will set the Port to the modem's COM port number. Click the 'Download' button.



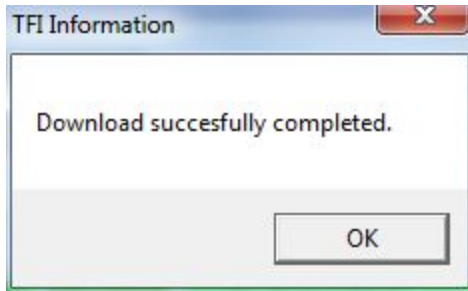
Click the 'OK' button. The application will begin downloading the new firmware.



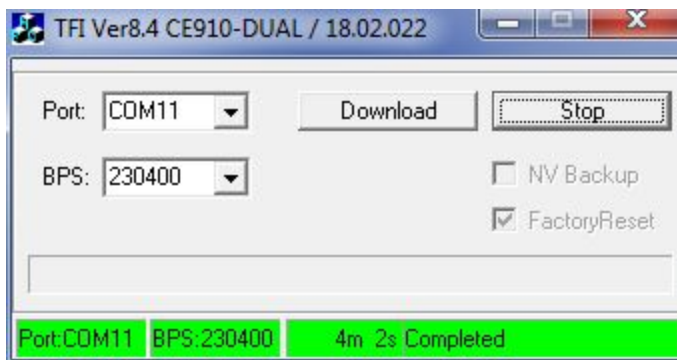
During this time, the USB COM ports will disconnect and reconnect a few times. Below are a series of images of a live update that occur during the process.



When the process completes, the notification below will be displayed. Click 'OK' to get to the main application screen.



Click the 'X' in the upper right hand corner to close the application.



## 2.8 Remove USB cable

## 2.9 Remove Power

## 2.10 Remove Modem

The modem can be installed back into custom hardware or a NimbeLink development kit.

## 2.11 Check New Firmware Version

If you want to confirm the new firmware version is running on the device, you can issue the command:

**AT+CGMR**

Response:

**18.02.022**

**OK**