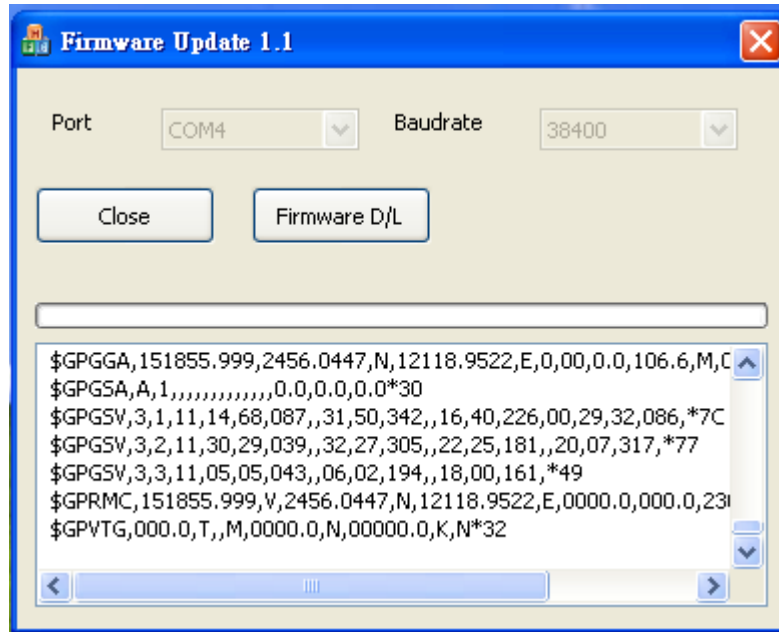
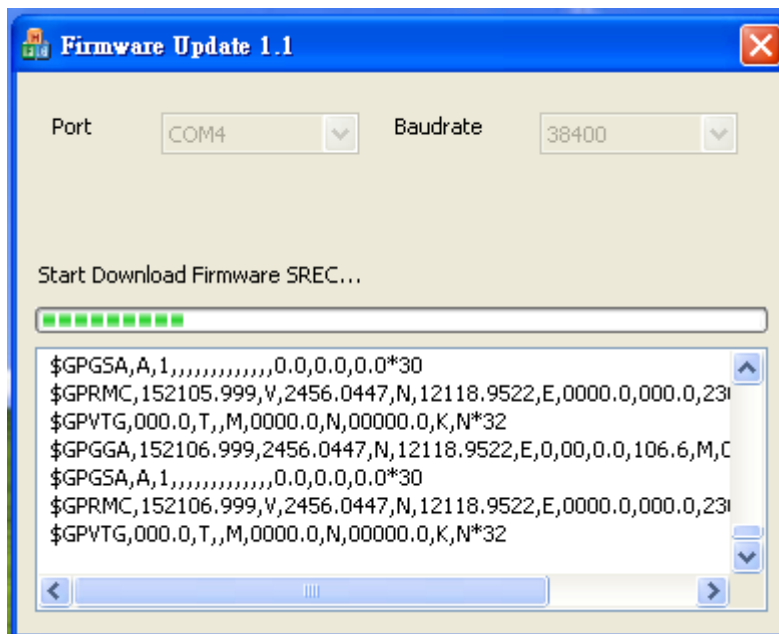


## miniHomer Program Update Procedure

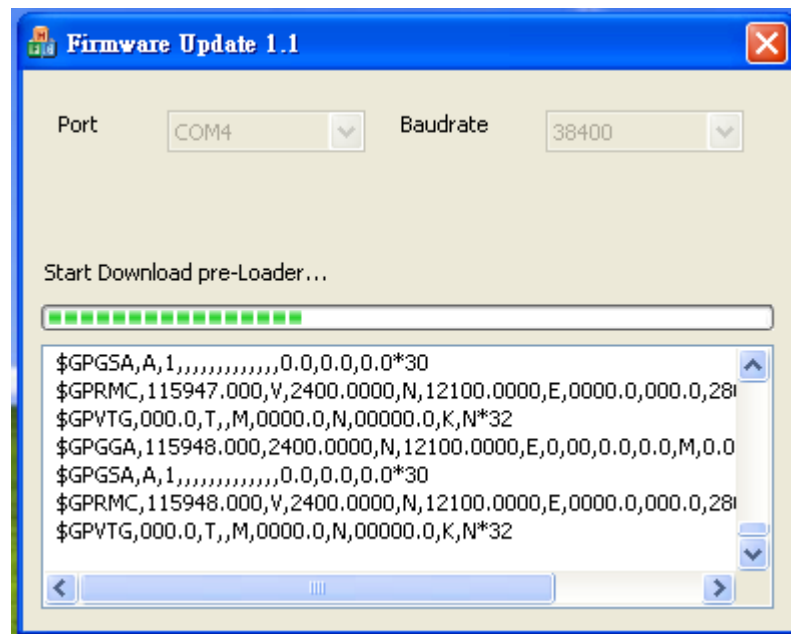
1. Unzip the firmware update .ZIP file into a directory
2. Execute Download.exe
3. Select the COM port that was used for ntrip, select baud rate to 38400.
4. Hookup miniHomer to the PC. Turn on miniHomer. Click "Connect". NMEA output message should be seen.



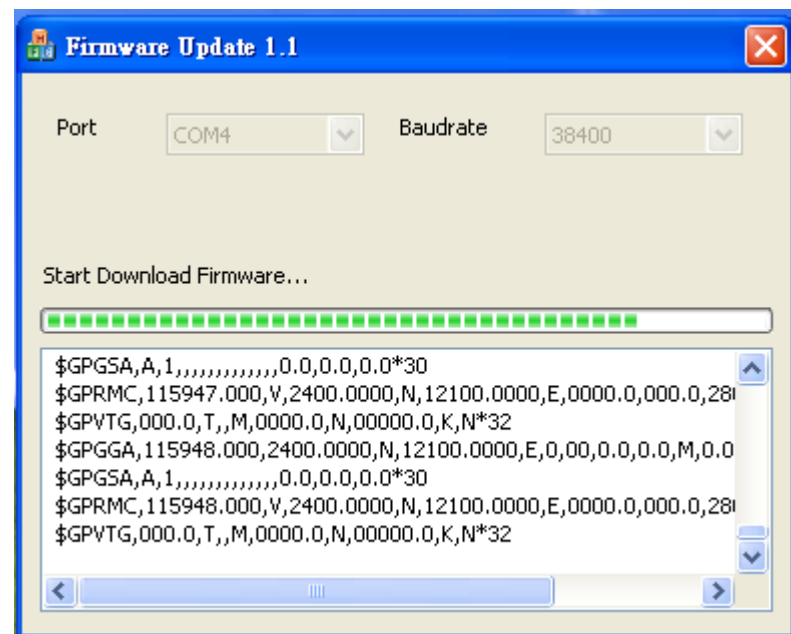
5. Click "Firmware D/L" button and firmware update should begin.
6. 1<sup>st</sup> stage a loader program is downloaded.



7. 2<sup>nd</sup> stage a pre-loader is downloaded.



8. 3<sup>rd</sup> stage the main miniHomer firmware is downloaded.



9. When firmware update is done, the miniHomer will reboot and NMEA message is being output again.

Note that the USB cable accompanying miniHomer is a 2-wire USB charger cable, not a standard USB cable. You need another standard USB cable for use with ntrip and Download.exe; this standard USB cable can be used both for data transfer and charging miniHomer. The USB driver from ntrip website need to be installed before performing program update.

After firmware update is performed, miniHomer will be put in factory default state, with logger data and marked return points **erased**. If there is valuable data, be sure to retrieve the data using ntrip before performing firmware update.

The firmware download utility should be executed under **Administrator mode**.

## Program Update Failure Recovery

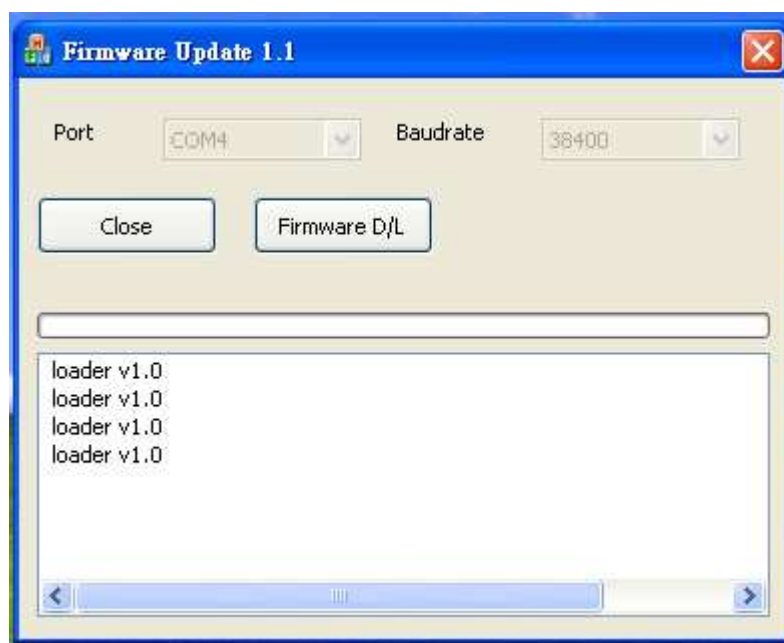
In case failure occurred in middle of firmware updating, below describes the recovery steps.

### Failure Occurred At 1<sup>st</sup> and 2<sup>nd</sup> Stage

miniHomer will display “FL”. In less than 30 seconds miniHomer will reboot with the original miniHomer firmware intact.

### Failure Occurred At 3<sup>rd</sup> Stage

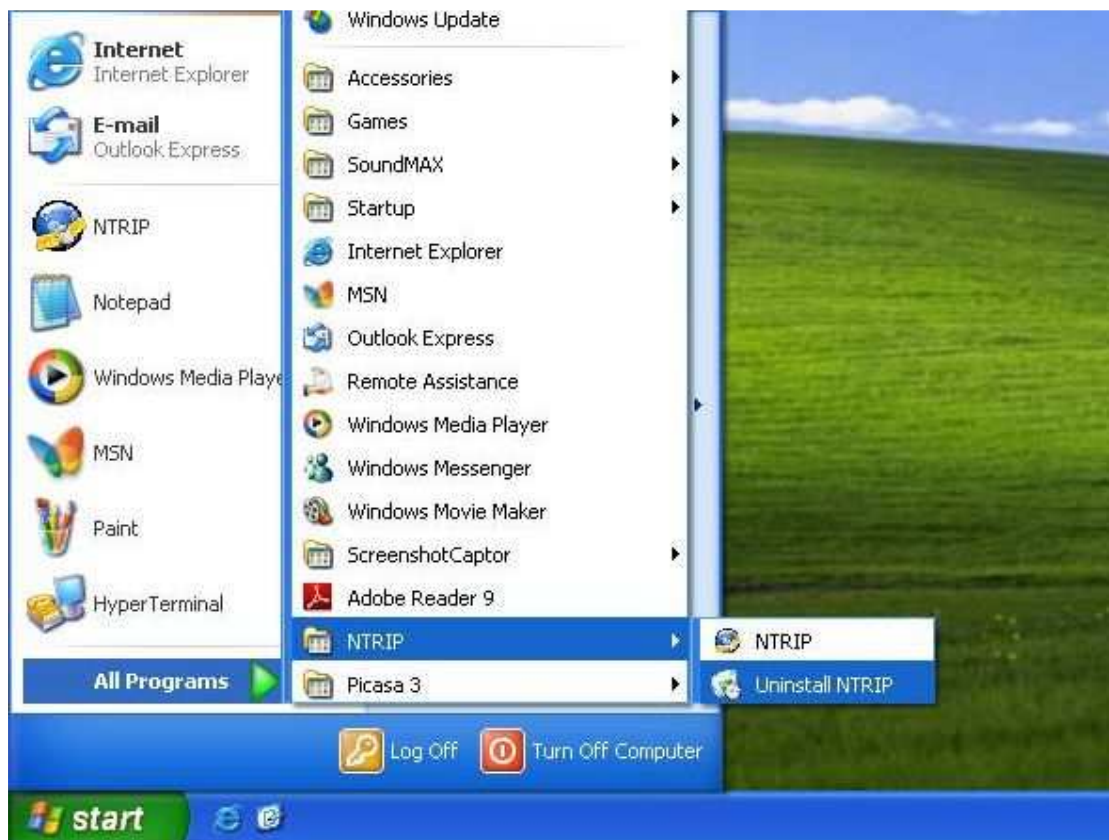
miniHomer will display “FL”. In less than 30 seconds miniHomer will be outputting “loader v1.0” from the USB port, with the screen continue showing “FL”. Firmware update can then be re-initiated by running the firmware update utility again.



If firmware update continues to fail, then there might be something peculiar about the setup configuration of this particular PC causing it to fail. One will need to try updating the firmware from another PC in order to recover.

## Uninstalling ntrip Before Installing Newer ntrip Version

1. Remove the already installed ntrip



2. Download the new ntrip software from the ntrip website and install it.