USER GUIDE
Version 3.2

SATEL Configuration Manager

Setup and configuration program

for SATELLINE radio modem

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2   GENERAL

2.1   About SATEL Configuration Manager

SATEL Configuration Manager (CM) is a PC-program, which is available for SATELLINE-TR1 based products (e.g. SATELLINE-TR1, SATELLINE-EASy, SATELLINE-EASy Pro 35W). The program makes it possible to read settings or change them.
Please check the availability for your modem from your dealer or www.satel.com.

Minimum requirements:
SATELLINE radio modem, SATEL Configuration Manager PC-program, COM Port with baud rate min. 9600 b/sec. Windows 95, 98, 2000, XP, Vista and Win7.
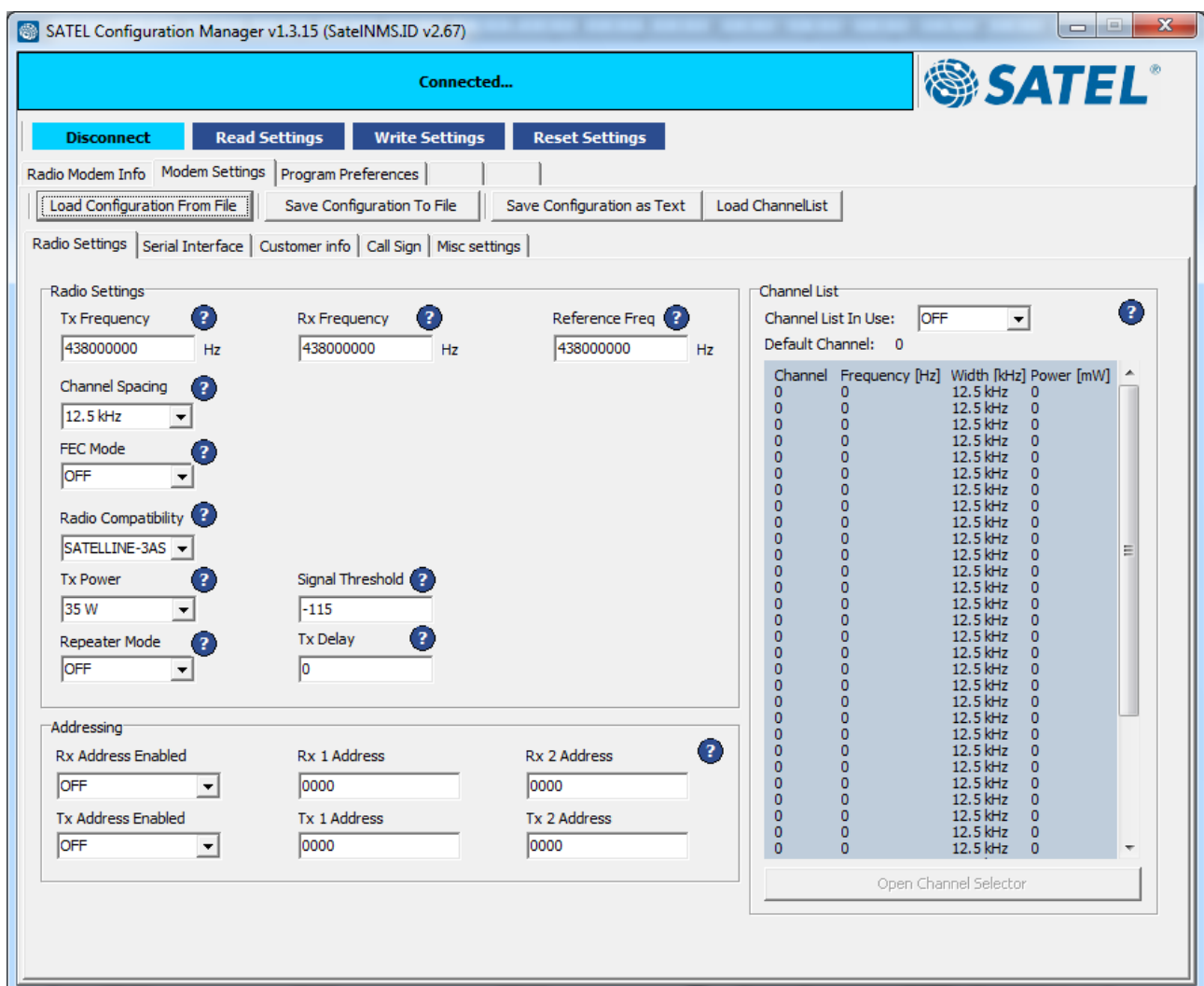
3 QUICK GUIDE TO START USING THE PROGRAM

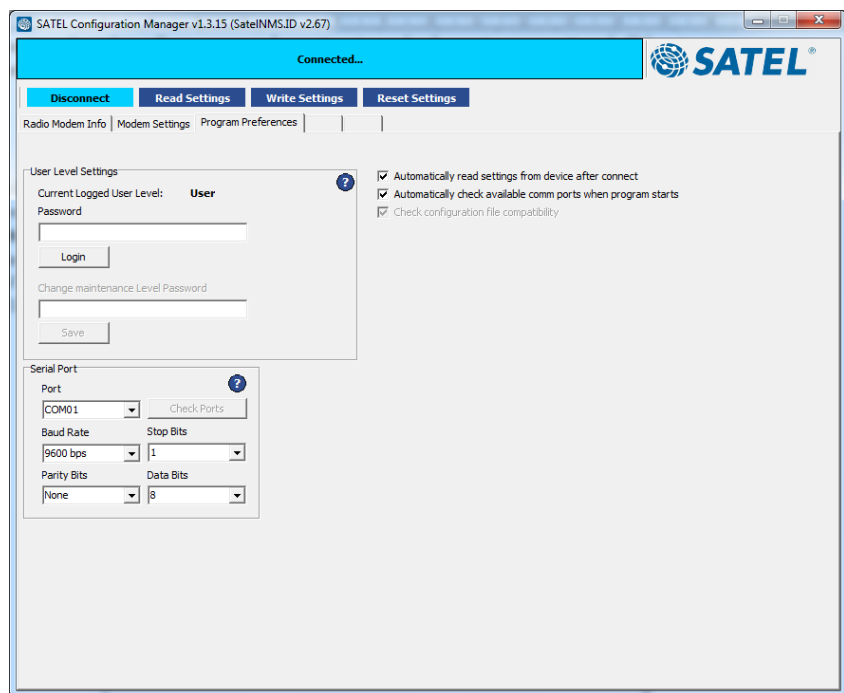This section describes all necessary information to make the system operational. Other tunings and settings are described in the following sections.

3.1 <u>QuickStart</u>

Preliminary settings:

1. Save the **SATEL Configuration Manager, SATEL_Configuration_Manager.help** and the **SatelNMS.ID** to the same directory. If available, save also the Firmware to the same directory. The FW type is 3as-oemxx-xx-xx-xx-xx.snn.
FW file extension syntax is "snn", where numbers nn define the modem model/fw variant (e.g. "s18" for SATELLINE-EASy Pro 35W).

2. Connect the modem module to the PC using either direct serial interface cable or the special SATEL programming adapter.

3. Connect supply power to the module. Check that you have the correct Supply Voltage.

4. Open the SATEL Configuration Manager program. Check from the "Program Preferences" tab, that you have selected correct COM-port number and that the Baud rate is set to 9600 (when programming adapter is used, and according to the modem serial port data rate, when the direct data cable is used.)

5. To establish connection between the modem and the PC, press the blue Connect tab. To get the radio modem info, press blue Read Settings tab. Now all the information from the modem is available.

6. Changed serial interface parameters are taken in use immediately.

Please note!
To get access to the Maintenance Settings, press the Program Preferences tab, type in the maintenance Password and press Login and OK. **Functionality is only for authorized dealer.**

4   MAIN LEVEL (User level)

4.1   <u>**Main Information Tabs**</u>

Connect/Disconnect, Read Settings, Write Settings, Reset Settings.
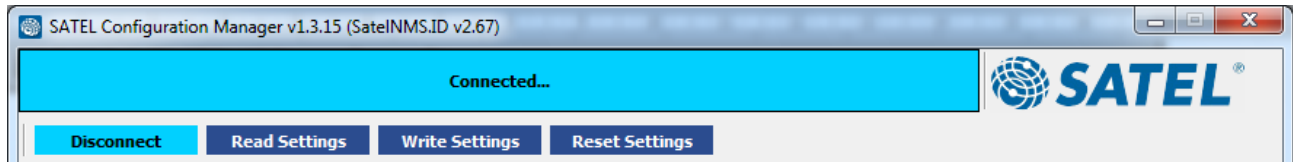
4.1.1   Connect/Disconnect

Opens and closes the connection between the modem and PC.
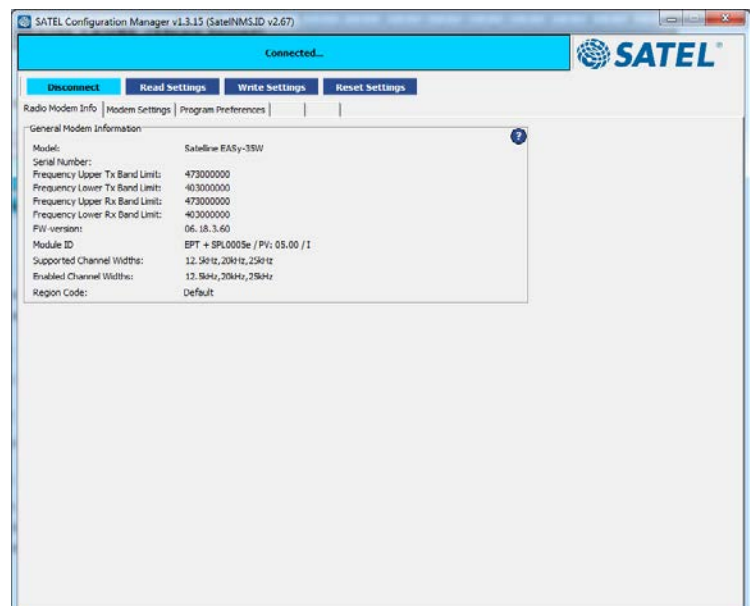
4.1.2   Read Settings

Loads settings from the modem.

4.1.3   Write Settings

Writes settings to the modem.
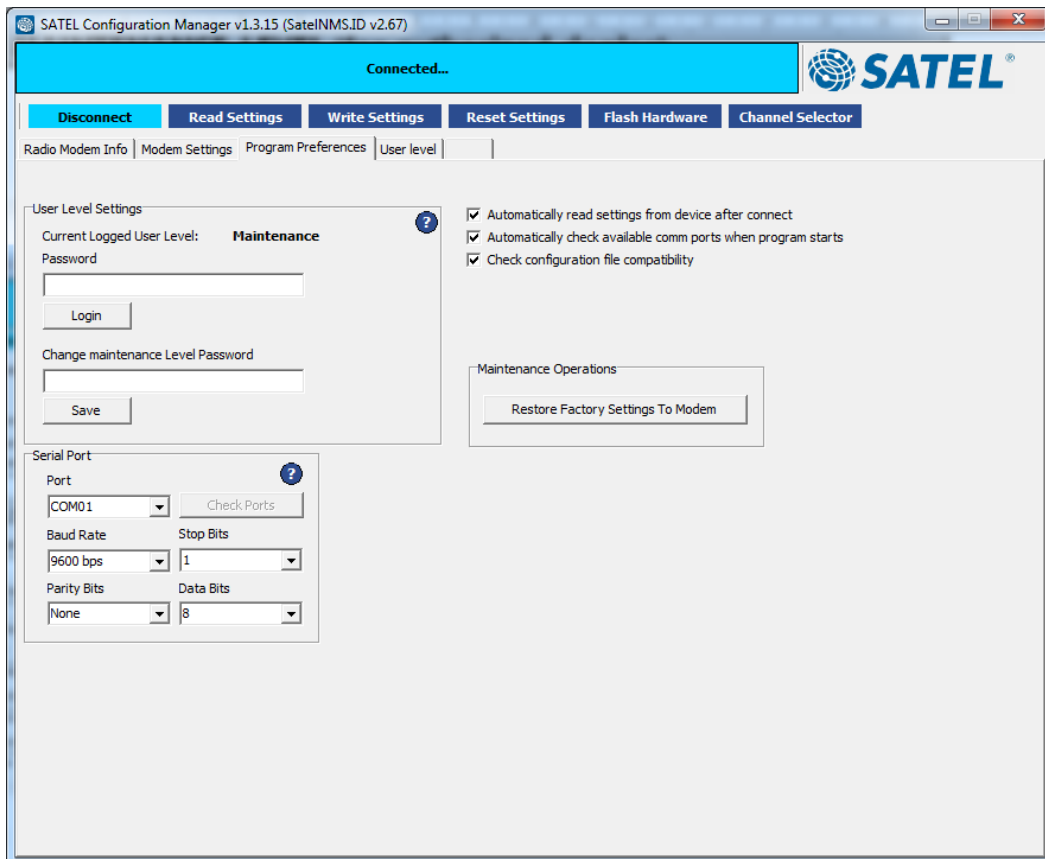
4.1.4   Reset Settings

Resets changes and retrieves settings to their value as loaded from the modem prior to saving.

5   MAINTENANCE LEVEL (for authorized dealer)

5.1   <ins>Flash Hardware and Channel Selector</ins>

Note! By default the Flash Hardware and Channel Selector are only available in maintenance level.
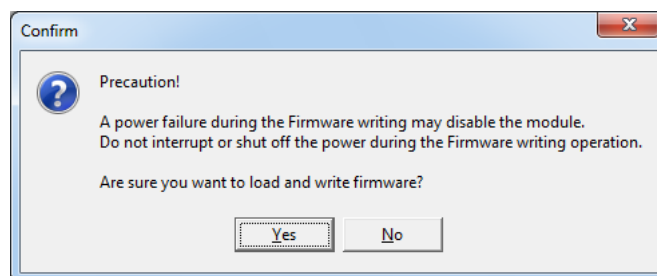

5.1.1   Flash Hardware
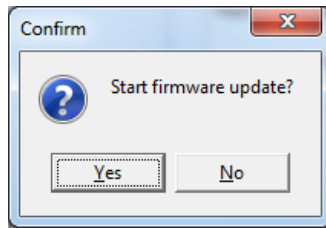
Writes new Firmware to the modem.

To Flash the Firmware, establish the connection as described before.
To check the FW-version, open the "Radio Modem Info" tab and press "Read Settings"
To start flashing procedure, Press Flash Hardware and Press "Yes or No" accordingly.

Select the program (3as-oemxx-xx-xx-xx-xx.syy). The flashing starts, when "Yes" is pressed.

Wait a while, the flashing takes about 2.5 minutes.

PLEASE NOTE! Do not disconnect the supply power or interfere with the modem in any other way during the flashing procedure. Interferences may destroy the procedure and it may no longer be possible to flash the module again.

When the text: "Device programmed successfully..." appears, the flashing is finished and the module must be switched OFF and ON, before it is ready to use.
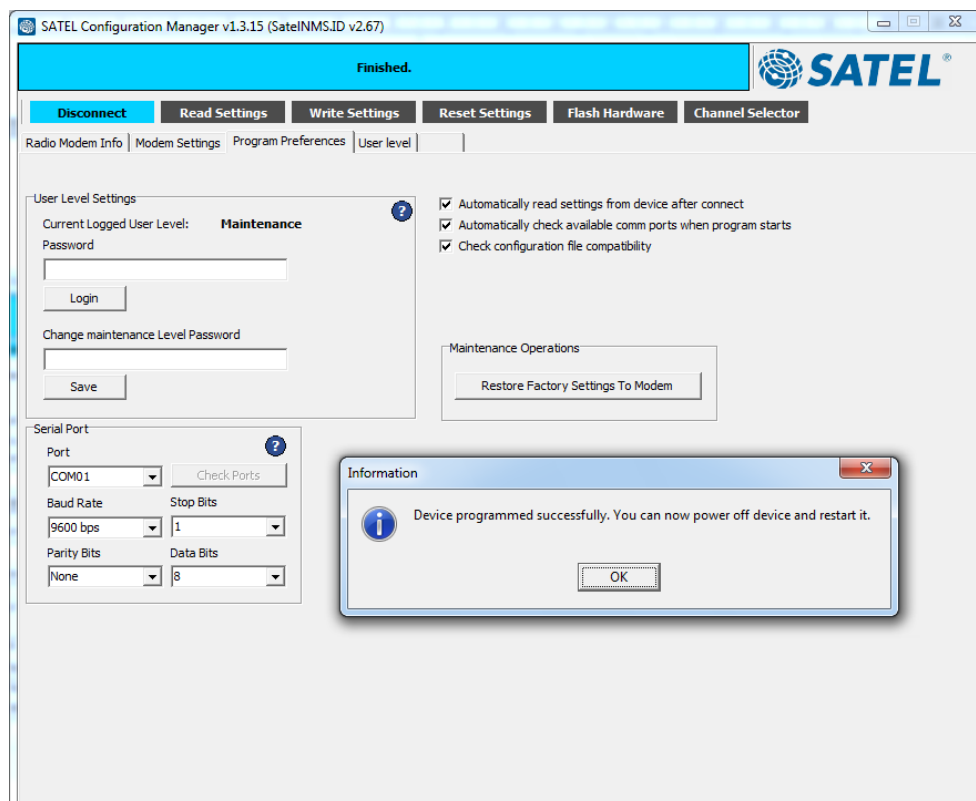
When this is done, press "Connect" (and "Read settings") to verify that the new FW has been downloaded.

After the device is programmed, you can always restore the factory settings if needed by pressing "Restore factory settings"-tab.
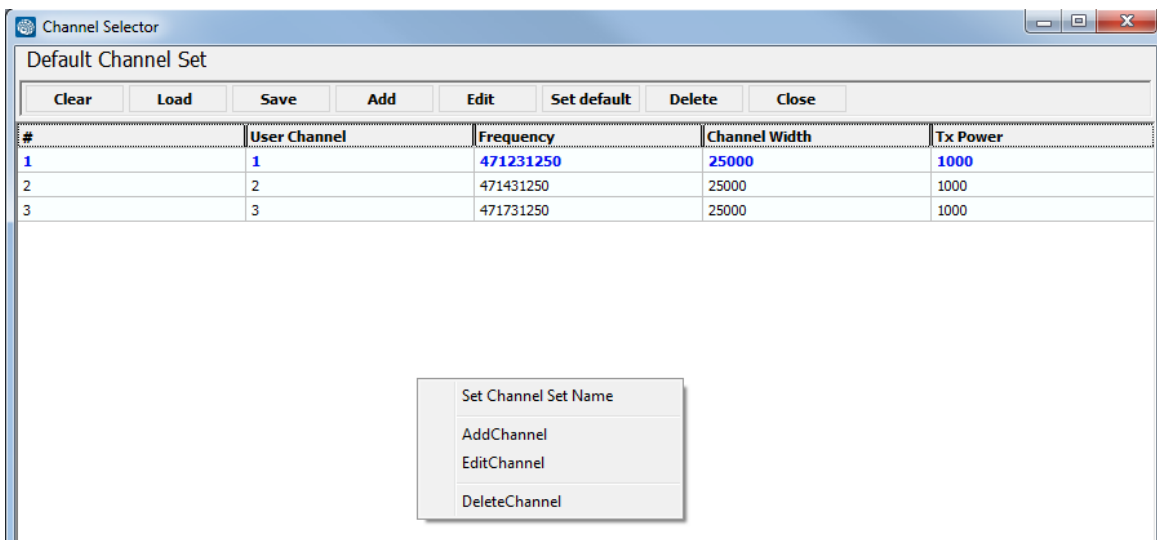
5.1.2   Channel Selector

Channel Selector is a tool to make a channel setup. The setup can be loaded to the modem's memory by clicking the "Write Settings"-tab.

Write Settings

Options:
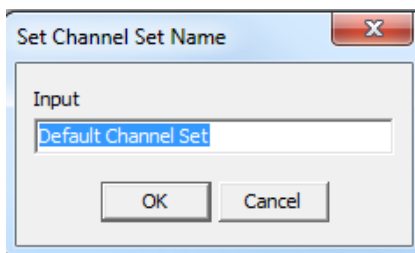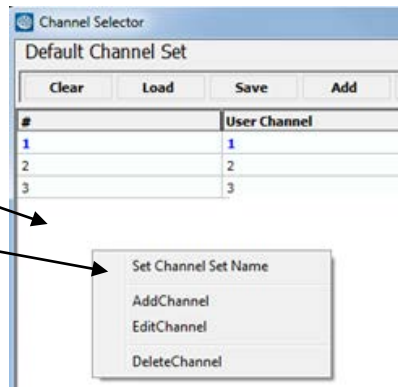Load, Save, Clear and Close.
Set Channel Name, New Channel, Edit Channel and Delete Channel.

How to make a new channel setup:

o   Open the "Channel Selector" **Channel Selector**
    and make a mouse click on the
    white area of the Channel Selector window using the
    second button (usually "right click").

o   Click Set Channel Set Name, and define
    a name for the channel list.

o Right click on the grey area and select New Channel and the following window opens.
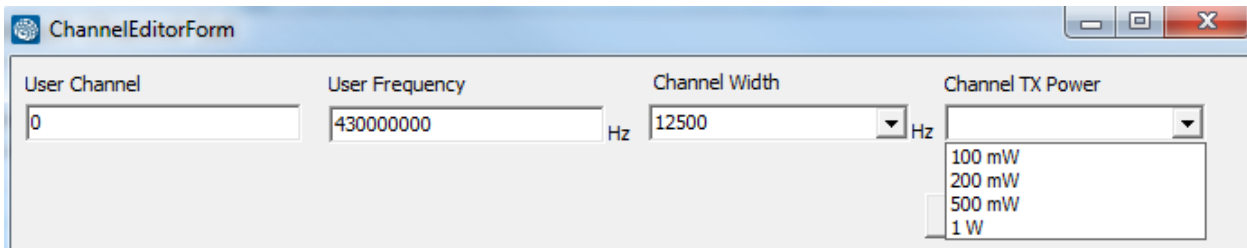

User Channel	= Any number given by the user or, for example, the SATEL distributor.
User Frequency	= Any given frequency which is available to the modem.
Channel Width	= Selected Channel Width, usually given by authorities.
Channel TX Power	= Selected TX output power

6   LOAD AND SAVE CONFIGURATIONS

6.1   Load Configuration From File

The configurations made by the Configuration Manager can be loaded from PC to the CM. Select "Load Configuration From File" and "Open" the desired cfg-file. When done, all settings become red and the following info table opens. The settings are uploaded to the modem by pressing "Write Settings" tab.
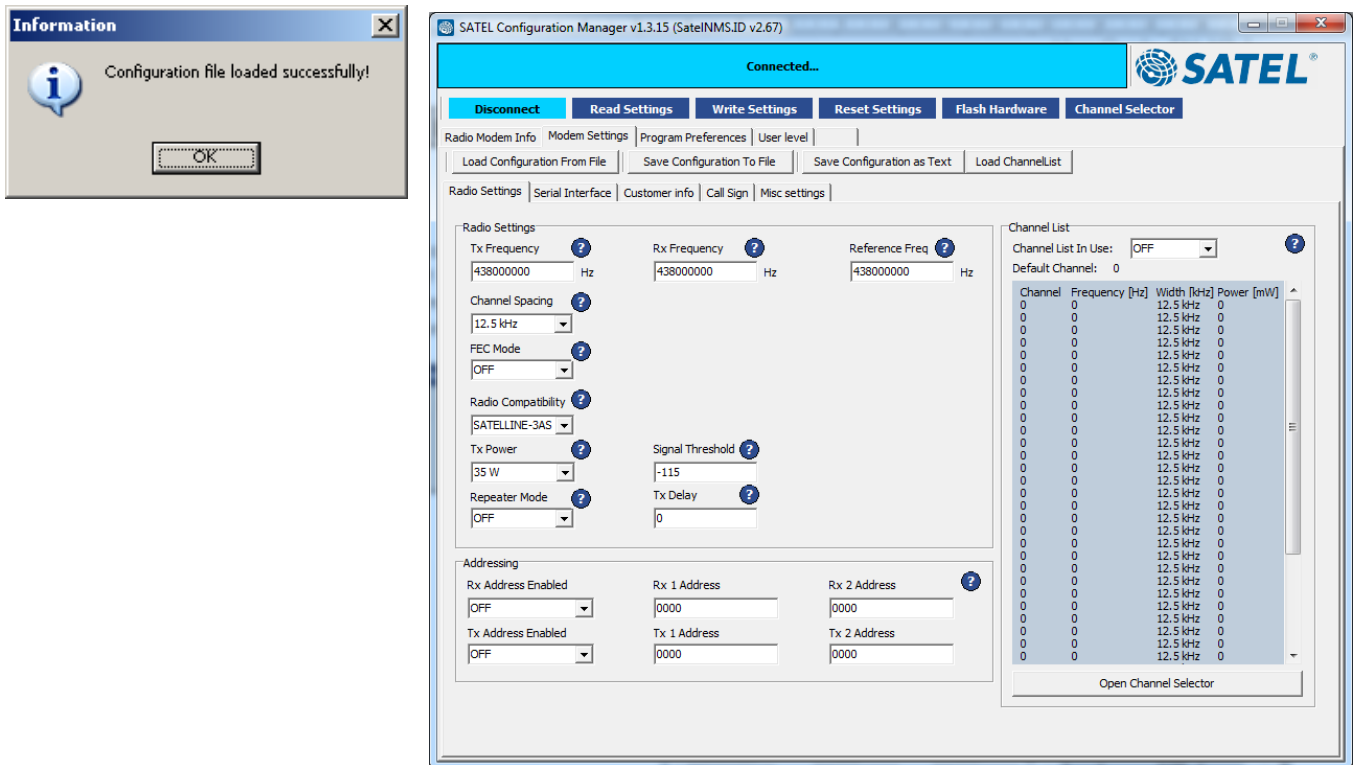
6.2   Save Configuration to File

All configurations made by the Configuration Manager can be saved to the PC. Saving is done by pressing "Save Configuration To File" and selecting the directory where the settings will be saved.

6.3   Save Configuration as Text

All configurations made by the Configuration Manager can be saved as a text-file to the PC. This feature makes it possible to use settings for other purposes, for example printing etc.
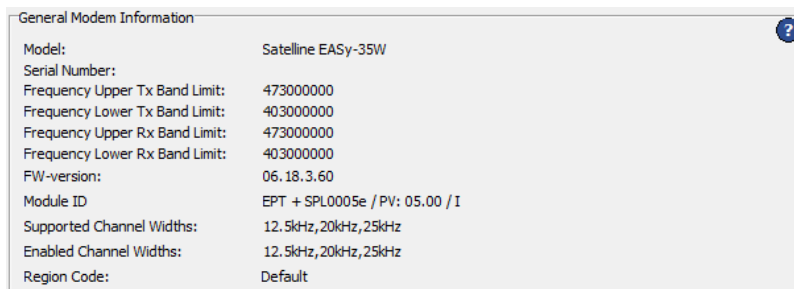
<table>
<tr><td>7</td><td>SETUP LEVEL</td></tr>
</table>

7 SETUP LEVEL

Radio Modem Info, Modem Settings, Program Preferences, User Level Settings.
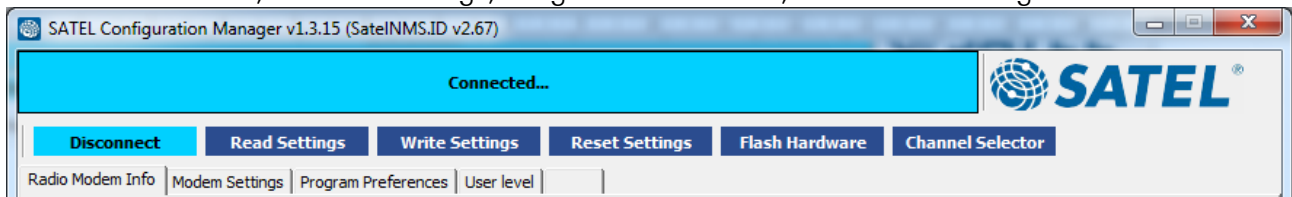
7.1 Radio Modem Info

Information about the model, serial number, frequency limits, Firmware version, and ID.

Module ID:
- SPL0005e → Support for PCC and TrimTalk® modulations
- available since serial number 1118xxxxx

7.2 Modem Settings

7.2.1 How to change values

1. Values without ▼ -button (like RX Frequency). Type new value, when the value is changed, but not sent to the modem yet, the name of the box becomes red.
2. Values with ▼ -button. Select new value from pull-down menu.
3. The changed values will be sent to the modem when **Write Settings** is pressed.
4. When the radio modem has accepted the changes the red colour changes back to normal.
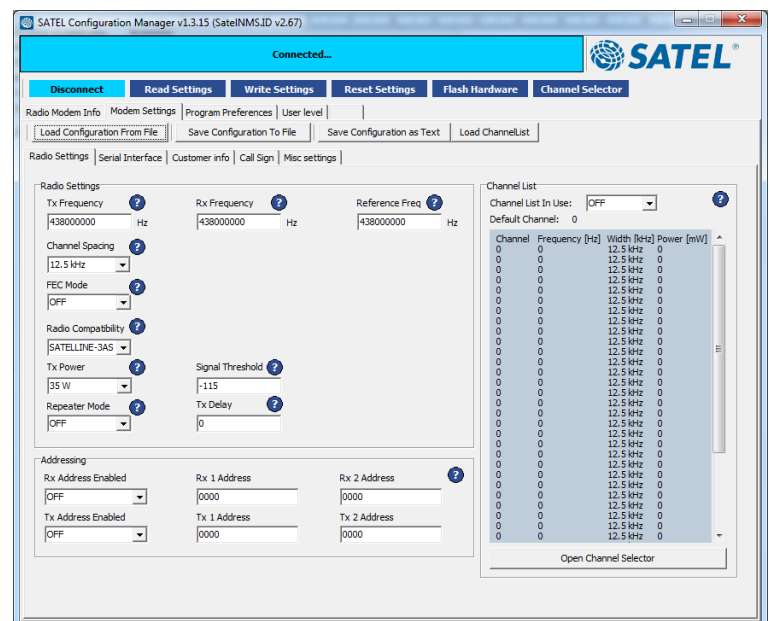
7.2.2   Radio Settings

Radio Settings
Options:
TX Frequency, RX Frequency, Reference Frequency, Channel Spacing, FEC Mode, Radio Compatibility, TX Power, Signal Threshold, Repeater mode, TX Delay.

Addressing
Options:
RX Addressing, TX Addressing.
RX/TX Address Enabled ON/OFF
RX/TX 1 Address, RX/TX 2 Address.

Addresses can be used to route a data message to the desired destination or to separate two parallel networks from each other.

The radio modem contains one transmission and one reception address, which is known as the primary address. This primary address is used whenever data from the serial interface is transmitted. At the receiving end, the radio modem will receive using this address.The ports are functioning according to the device hardware recognition.
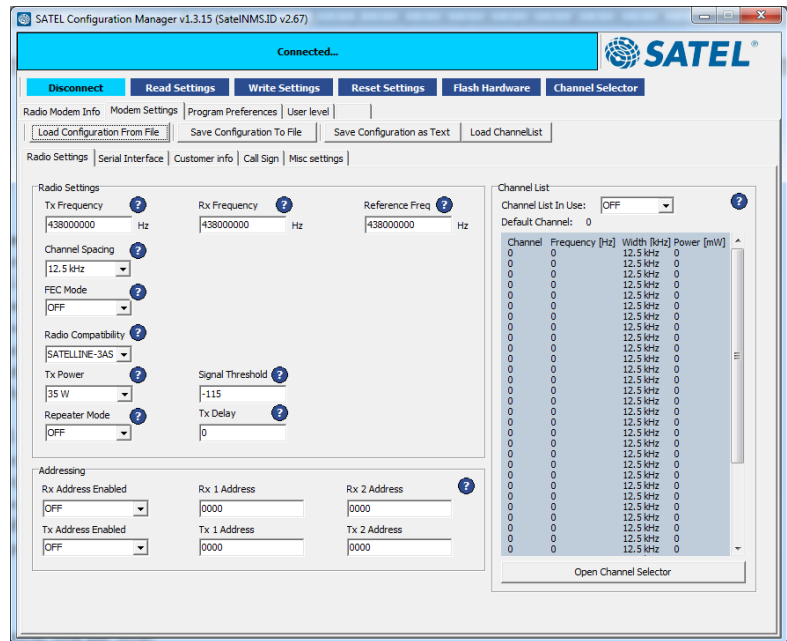
Channel List
Options:
Channel list in use: ON/OFF
Channel, Frequency, Channel Width, Power

Copy Channel To Channel Selector
When this button is pressed the channel list from the modem is copied to the Channel Selector of the CM. This function is practical if the channel list should be copied to another modem, edited or saved etc.

7.2.3   Serial Interface

The alternatives are:

One port:
- o Port 2 grey or invisible.

Two ports:
- o When one is set ON the other goes OFF.

Port 1
Options:
Function, Baud Rate, Data Bits, Parity Bits, Stop Bits, Pause Length, Wait For Pause
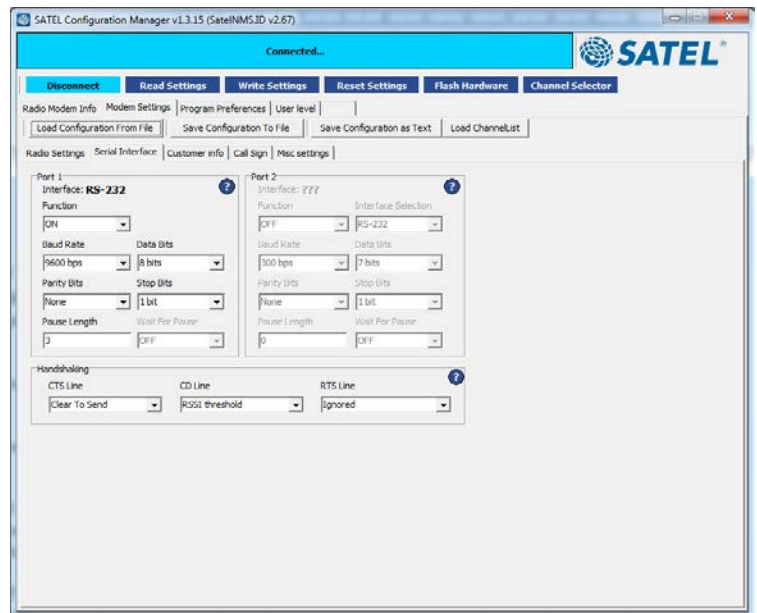
Port 2
Options:
Function, Interface Selection, Baud Rate, Data Bits, Parity Bits, Stop Bits, Pause Length, Wait For Pause

Handshaking
Options:
CTS Line, CD Line, RTS Line.

7.2.4   Customer info (accessing needs maintenance level password)

Options:
Customer Serial Number,
Configuration Number,
Model

Customer Serial Number
Any number that can be set by the author.
The maximum number is 32 alphanumeric characters.
The number is accepted by Enter.

Configuration Number
Any number that can be set by the author. The maximum number is 32 alphanumeric characters. The number is accepted by Enter.

Model
Any number that can be set by the author. The maximum number is 32 alphanumeric characters. The number is accepted by Enter.

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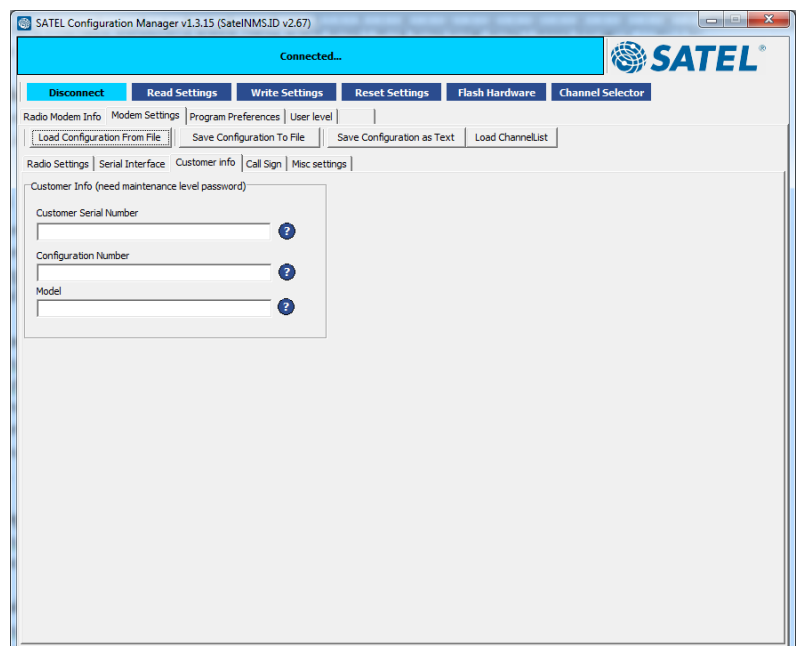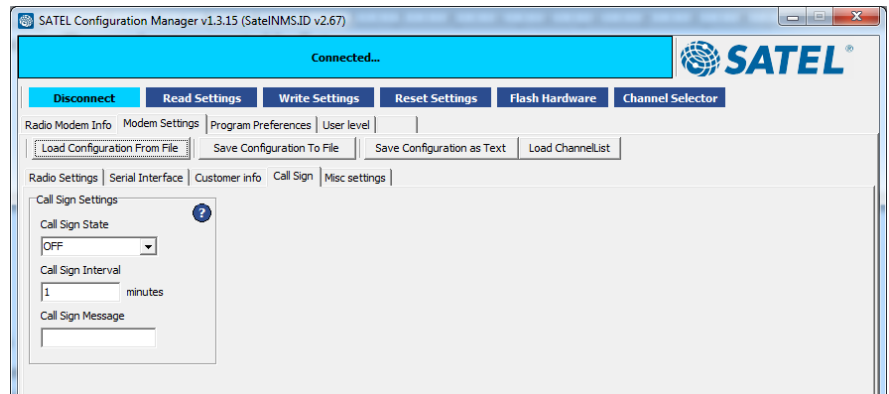
7.2.5   Call sign

Options:
Call sign state, ON/OFF
Call sign Interval
Call sign messages

Call sign feature is used in US.

7.2.6   Misc settings
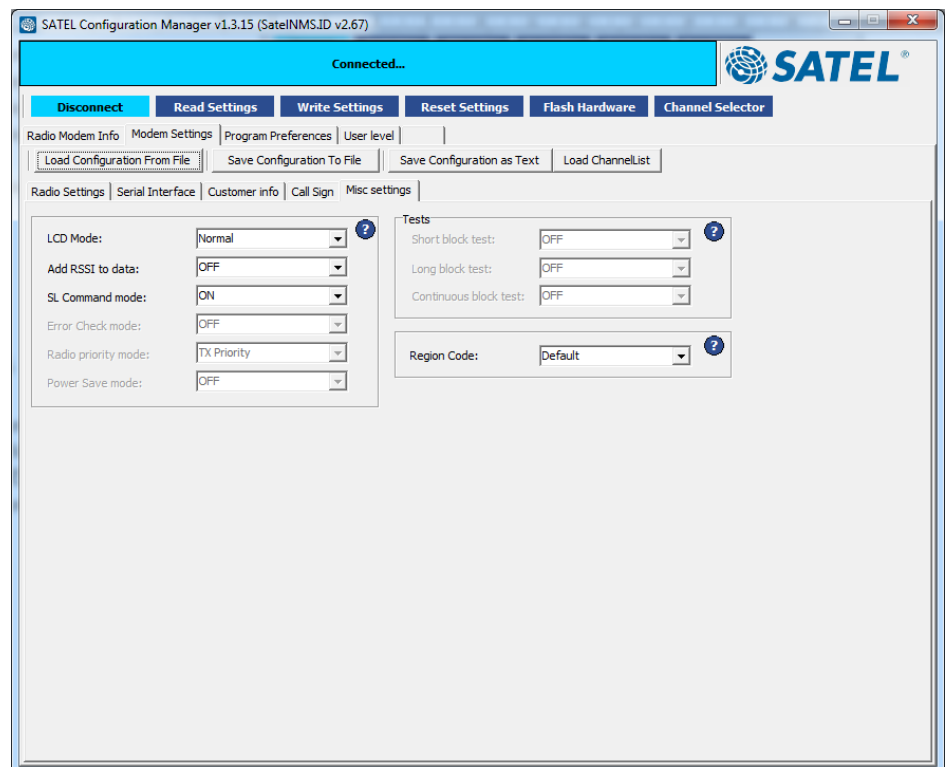
Options:
LCD Mode
Add RSSI to data
SL Command mode

Tests

Region code (accessing
requires Maintenance
level password)

Options:
Default/US

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7.3   Program Preferences

Options:
User Level Settings,
Serial Port.

The user levels are:
Maintenance / User (default).
1. The maintenance level
password is given to
authorized dealers only.
It allows the user to access to
all functions of the software.
2. The Maintenance level
password gives access to
functions that are defined by
the "User Level".
3. When no password is
given the user has access to
the standard features.
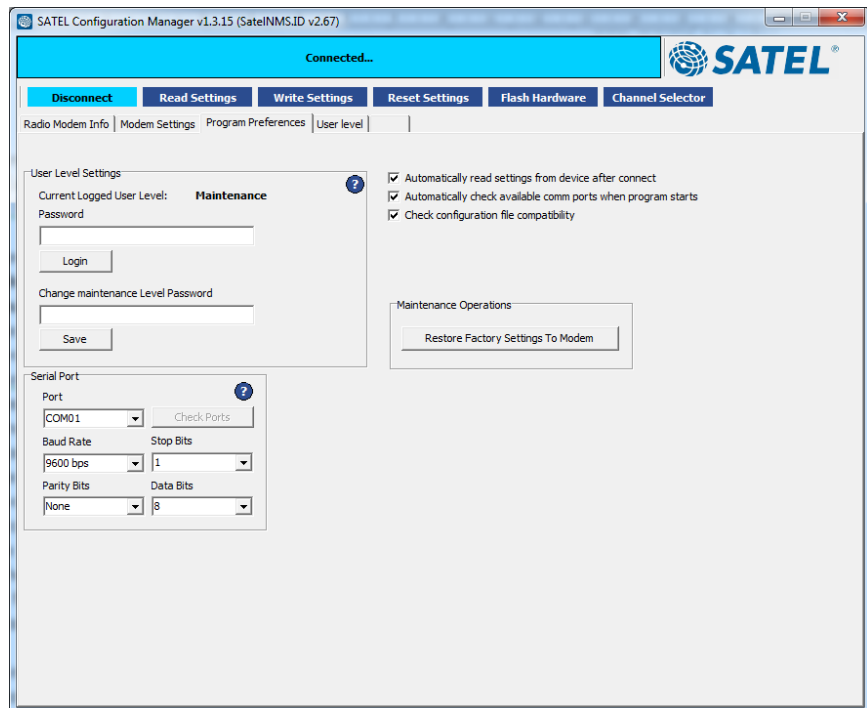
Type in the correct password xxxxxxxx (by e-mail from the SATEL Oy) and press Login. Change
and save if needed.

Port
Defines settings for the PC's serial port communication.

Check Ports
Will automatically check available (free) serial ports of the PC. Press Check Ports and select free
port. Note that if this program uses the port, it is already reserved and will not be shown
anymore as a free port.

### Automatically read settings from device after connected
When this is activated, the program reads automatically settings from the modem when the
connection is established. If this is not selected, the values must be read by pressing "Read
Settings".

Automatically check available COM ports when program starts
When this is activated, the program automatically reads available free ports.

Check configuration file compatibility

When enabled, the program verifies that connected modem model supports all parameters and settings defined in the .cfg file. Unless it does, the following error messages are shown:
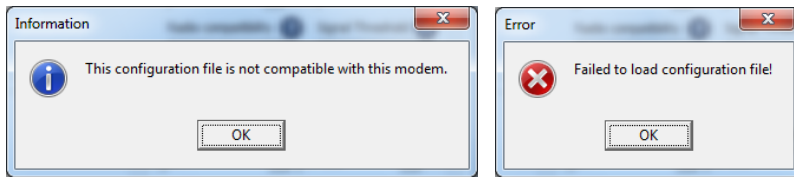
Restore Factory Settings To Modem

Restores the settings as they were originally set at the factory.

Note! Changes made in this page come effective immediately.

7.4   **User Level settings**

Options:
Description, User Level, Visibility, Status, Edited Item.
These settings are used to select which item can be seen or used on the main menu window.

If a "higher level" user, like Factory Level, has made changes, the "lower level" user cannot change it.

Select an item from the "Description" and make changes according to your choice. To make changes valid, press "Apply".
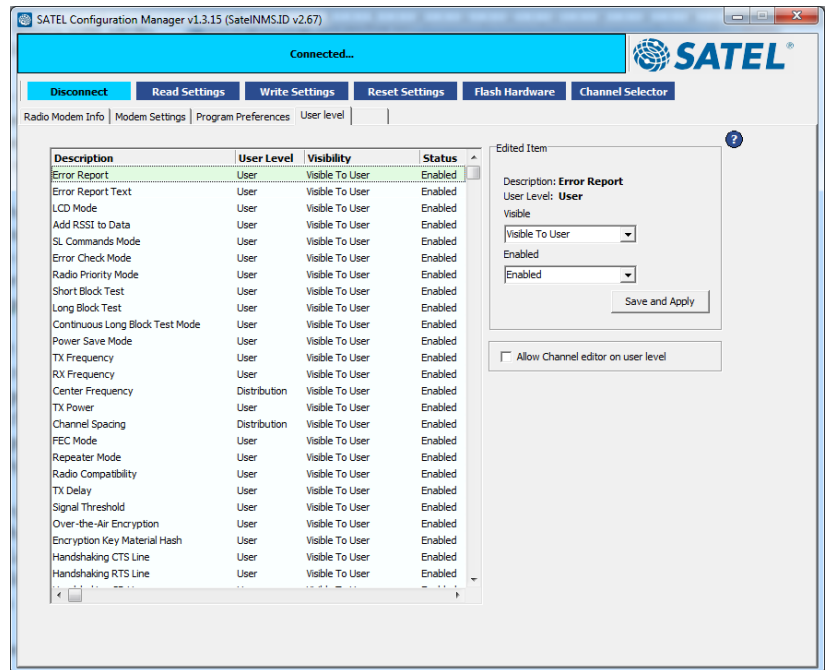
Description = Defines how the item is seen in the window
User Level   = Defines the level at which individuals have rights to control the item
Visibility   = Defines if the item is visible for the user or not
Status   = Defines if the item can be used by the user or not

Visible
The item can be either visible or hidden from the user.

Enabled
The item can be either disabled or enabled from the user.

Allow Channel editor on user level

Regular user can access to Channel List Editor, when this is selected.

7.5   Logs

General information for follow-up and service.