



ENGLISH

**Inmode**

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User manual

33951B01  
2020-06

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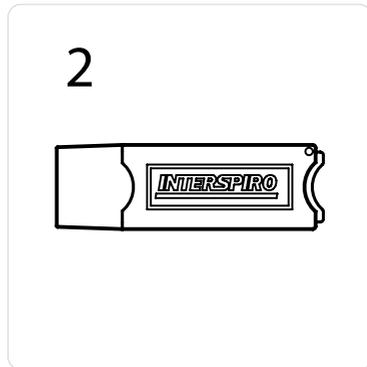
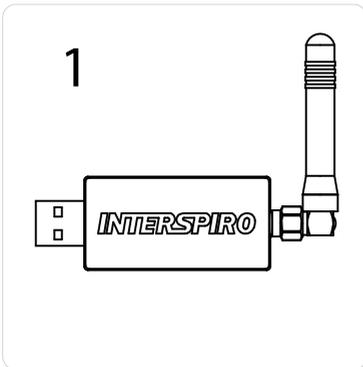
# General information

Inmode is a software to configure and to update Interspiro products containing electronics.

Inmode is only compatible with Windows 10.

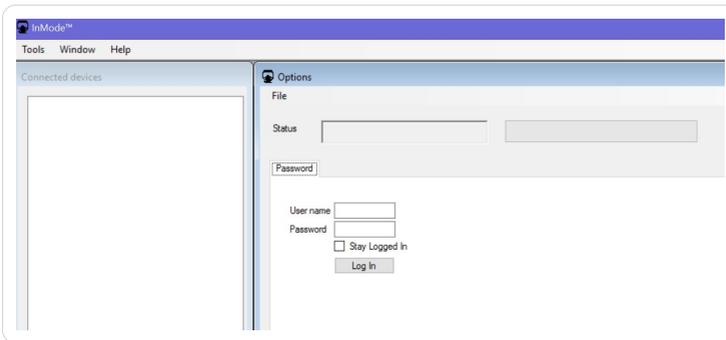
Inmode communicates with the end product through two different types of a USB adaptors:

1. Black adaptor with a small external antenna is for Spiroguide products (BAC/Spiroguide/S8/HUD etc.)
2. Grey adaptor without external antenna is for Spirocom products (Spirocom/ Spirocom BT etc.)



# Install Inmode

1. Insert the USB in the computer.
2. Click on "Start" then "Computer" and choose the inserted USB.
3. Right click on the compressed file and unpack it on your computer.
4. Double click on: "setup"
5. Click "continue" to install the program.  
You might get a warning from an anti-virus program. This is OK.
6. Once the installation is finished the program is started and you will see the below:



The left side of the screen is the connected devices side. Once the USB radio adaptor is inserted it will show up in the list. Once a unit is connected – this unit will appear under the USB radio adaptor.

The right side of the screen is the command side – here you will interact with the program and any connected units.

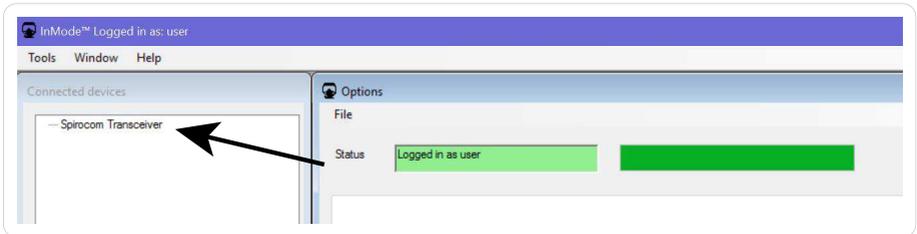
7. Log in with the credentials received from Interspiro.

# Update Spirocom

The update file is downloaded from Interspiro website.

1. Start the Inmode program on your computer.
2. Log in to Inmode with the login credentials received from Interspiro.
3. Insert the grey USB radio adaptor.
4. Make sure that "Spirocom Transceiver" appears in the left list below "Connected devices".

If it doesn't appear automatically, it has to be installed manually. See chapter "Manual installation of the USB radio adaptor".



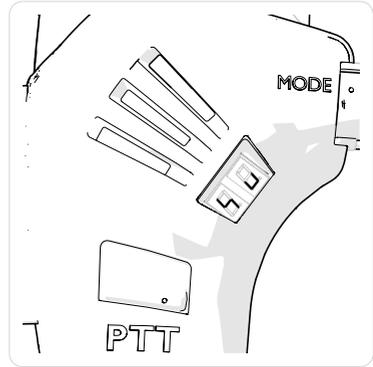
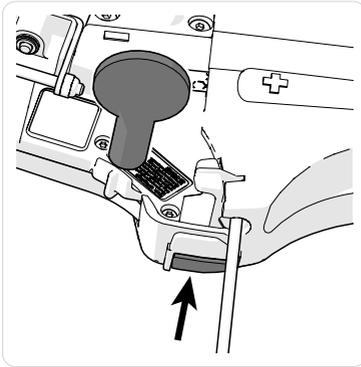
## Update Spirocom without Bluetooth function

Two different actions can be performed:

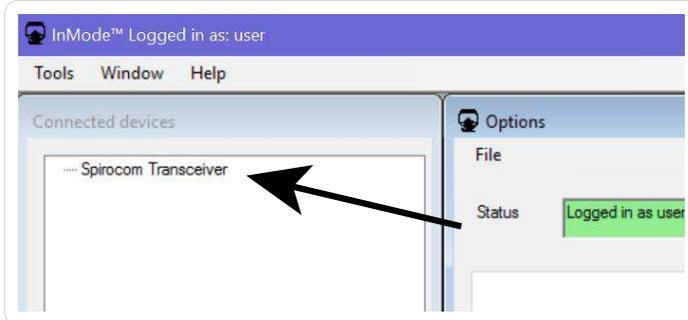
1. Update software:

- a. Activate "software update"-mode by holding the magnet key on the back side on the place shown in the image while pressing the MODE button for 3 seconds.

The display on the Spirocom will show "su".

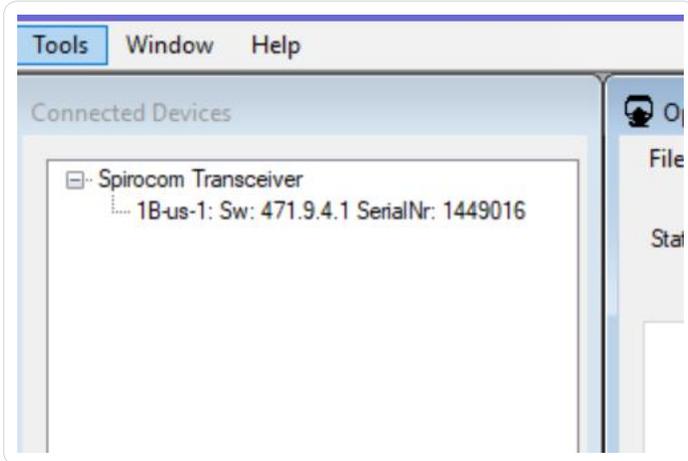


- b. Right click on "Spirocom Transceiver" and choose "Update Spirocom software".



- c. Click on "Browse Software".
- d. Select the correct update file.
- e. Click on "Update Software".
- f. The unit will restart once the update is finished.  
The unit will restart and "su" disappear from the display once finished.

2. Update voice files:
  - a. Activate "voice update"-mode by pressing the PTT-button, the MODE-button and "volume up" at the same time.
  - b. The unit will show up with its name, current software version and serial number below the "Spirocom transceiver" in the left menu. Click on that information.



- c. Click on "Browse voice file".
  - d. Select the correct update file.
  - e. Click on "Update Voice file".
- The unit will restart once the update is finished.

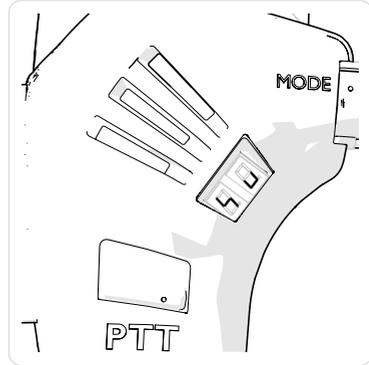
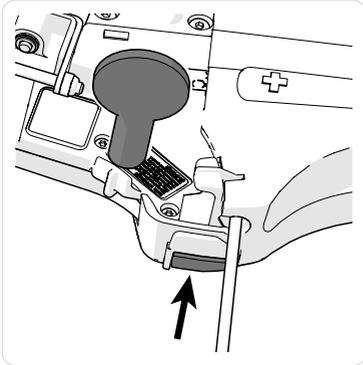
## Update Spirocom BT with Bluetooth function

Three different actions can be performed: Update software, update voice files and configuration file.

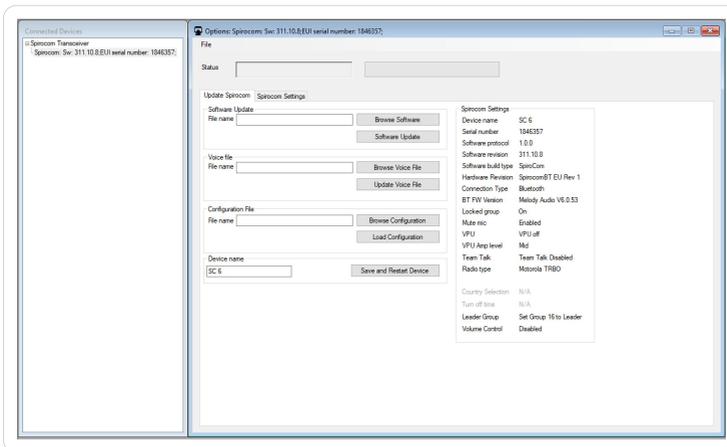
## Inmode

1. Activate "software update"-mode by holding the magnet key on the back side on the place shown in the image while pressing the MODE button for 3 seconds.

The display on the Spirocom will show "su".



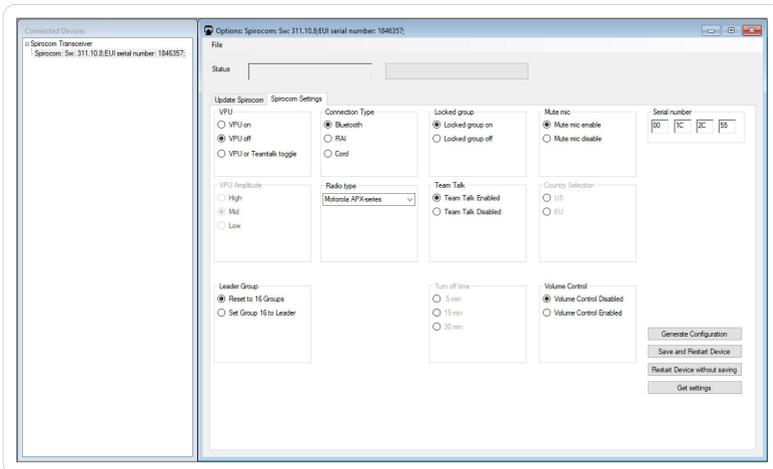
2. In the left menu, the unit will appear with information about name, current software version and serial number.  
In the right menu, one or more tabs will be visible.
3. Update the software:
  - a. Click on "Browse Software".  
Select the correct update file.
  - b. Click on "Software Update".  
The progress will show up in top of the window.  
The unit will restart once the update is finished.



4. Update the voice file:
  - a. Click on "Browse Voice File".  
Select the correct update file.
  - b. Click on "Update Voice File".  
The progress will show up in top of the window.  
The unit will restart once the update is finished.
5. Update the configuration:
  - a. Click on "Browse Configuration".  
Select the correct update file.
  - b. Click on "Load Configuration".  
The progress will show up in top of the window.  
The unit will restart once the update is finished.
6. Set the device name:
  1. Write the name of the Spirocom BT in the textbox.
  2. Click on "Save and restart device".

The given name appears in the radio display when searching for bluetooth Spirocom.

## Spirocom settings



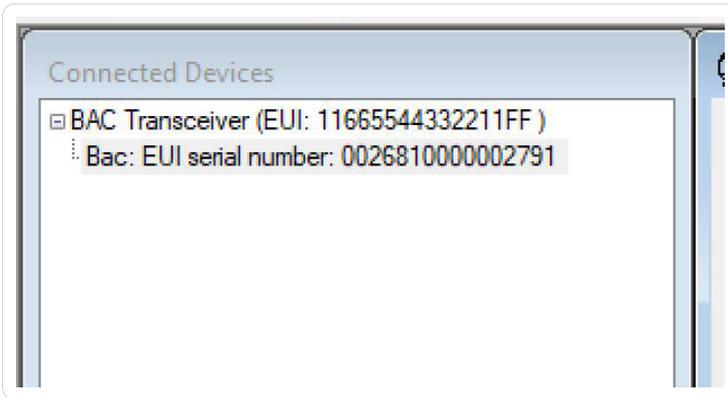
## Inmode

VPU	<p>VPU on: The VPU is on all the time and cannot be turned off. Team talk is also on.</p> <p>VPU off: The VPU is off all the time and cannot be turned on. Team talk is on.</p> <p>VPU or Team Talk Toggle: The VPU can be turned on/off by tapping Mode button. When VPU is on Team talk is off and when Team talk is on VPU is off.</p>
VPU Amplitude	Sets the VPU volume to either, high, medium or low.
Connection Type	Choose if the Spirocom BT will use the bluetooth connection to radio for PTT or if it shall use the RAI adapter.
Radio Type	Available radios shown in drop down list that can be chosen for PTT.
Locked Group	<p>Locked group on: Groups can be changed at startup but not during use. To change groups once unit is connected the unit must be restarted.</p> <p>Locked group off: Groups can be changed during use. To change groups once unit is connected press the "mode button" until group that is indicated on the display starts to blink.</p>
Team Talk	Choose if the team talk shall be on (enabled) or off (disabled).
Turn off time	The time from when the mic does not pickup any sound and unit should turn off by it self.
Mute mic	Mutes the microphone for team talk not for PTT.
Country selection	Selects for which area Spirocom is configured for.
Volume Control	Choose if it shall be possible to use the radio to change the volume for the PTT into the Spirocom.
Serial number	Unique serial number for the Spirocom in hex format.
Generate configuration	Creates a configuration file which can be used to load into other units that should have same settings.
Save and Restart Device	Saves settings made to unit and restarts the Spirocom.
Restart Device without saving	Restart the Spirocom without saving any settings.
Get settings	Reads the current settings in the Spirocom.

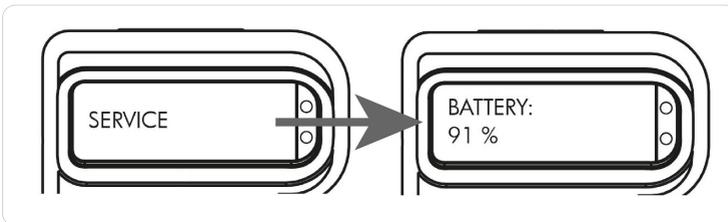
# Update BAC

## Connecting the BAC to Inmode

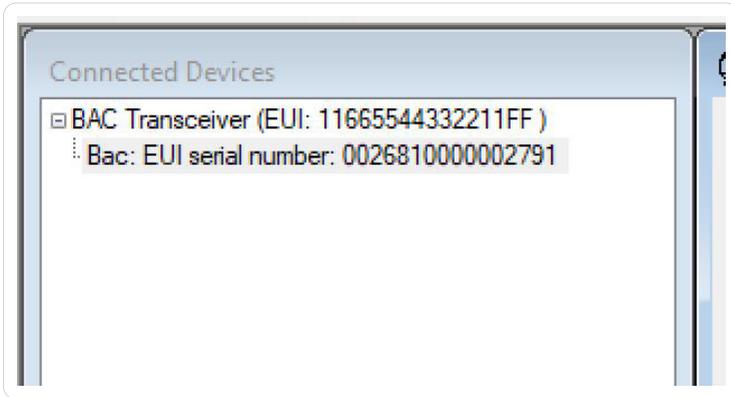
1. Start the Inmode program on your computer.
2. Log in to Inmode with the login credentials received from Interspiro.
3. Insert the black USB radio adaptor.
4. Make sure that "BAC Transceiver" appears in the left list below "Connected devices".



5. Press and hold the black backlight button (on the digital display) until the display reads "Service" and then shows the battery percentage. This takes about 6-7 seconds.



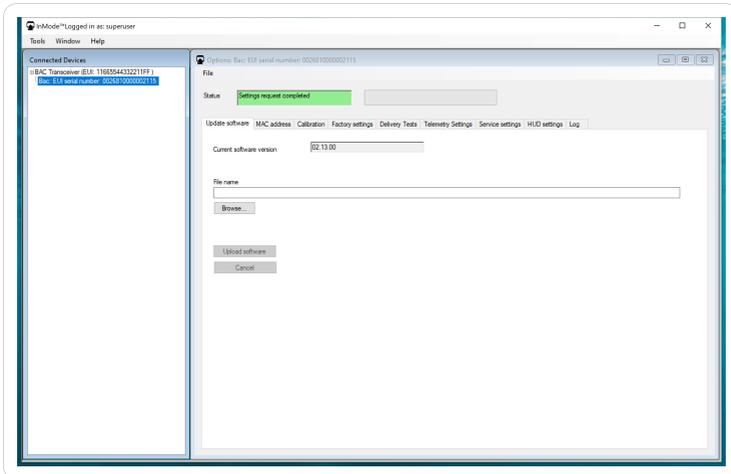
6. The “BAC address” of the unit appears in the “Connected Devices” window in Inmode.



## Update software

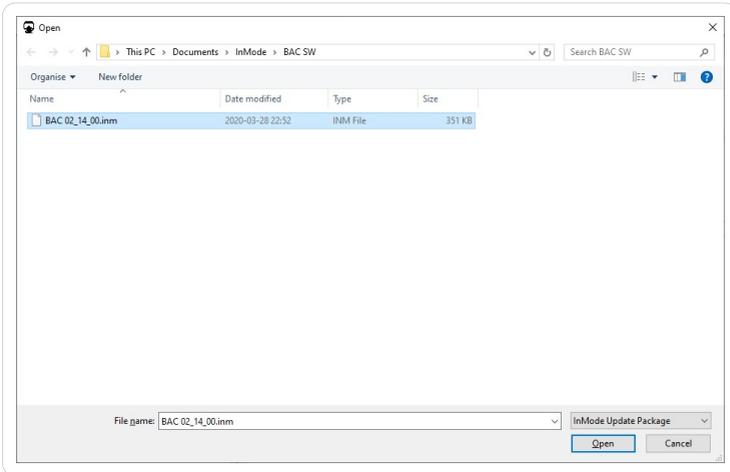
Important! Save any log data before updating the software or else it will get lost.

1. Click "Browse".

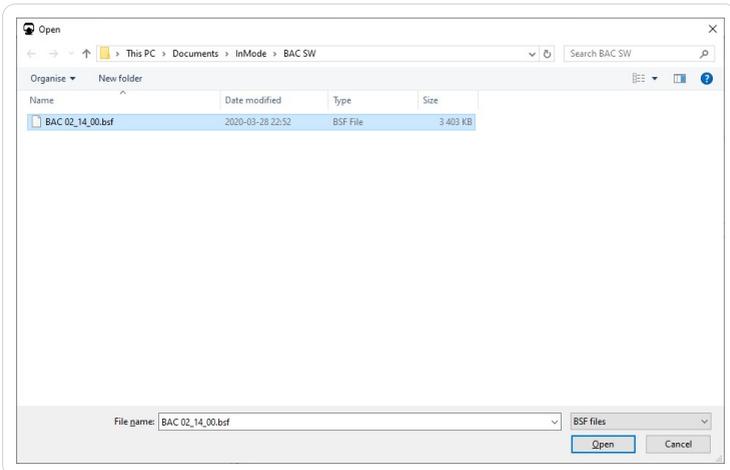


## Inmode

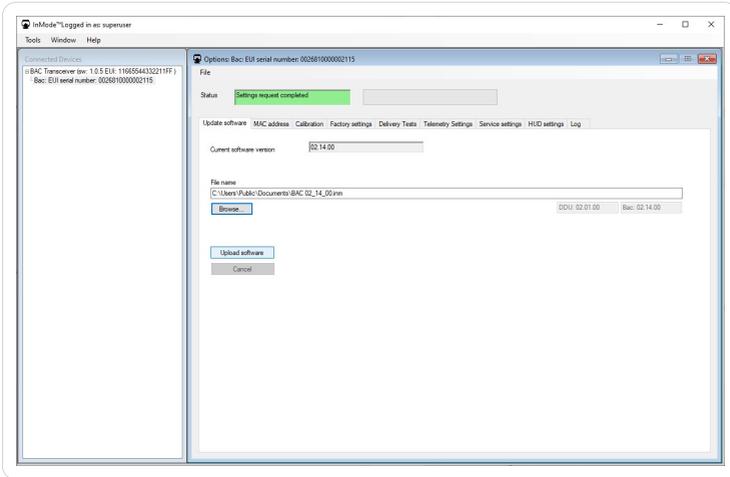
2. Open the INM file. The INM file contains both BAC and DDU software (recommended).



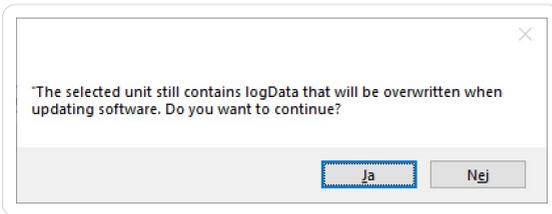
3. To only update BAC or DDU use the BSF file (optional).



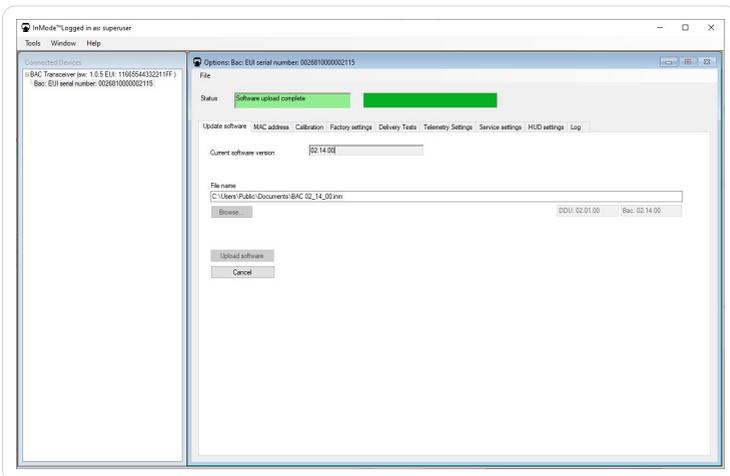
#### 4. Click on "Upload software".



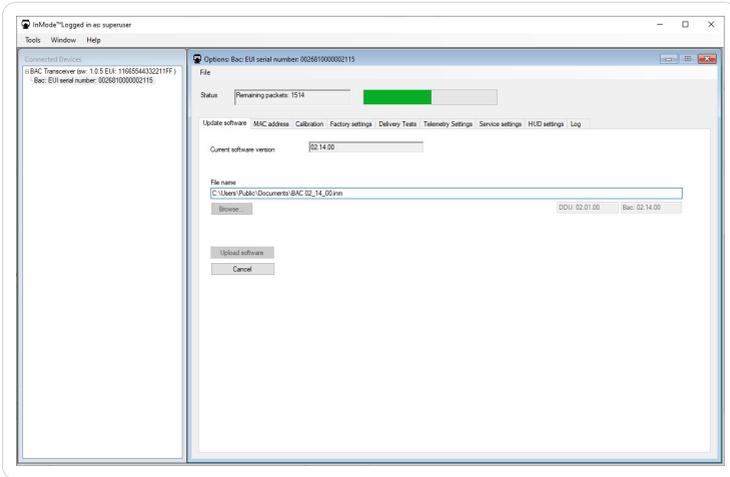
#### 5. Make sure all log data has been saved. Click on "Yes".



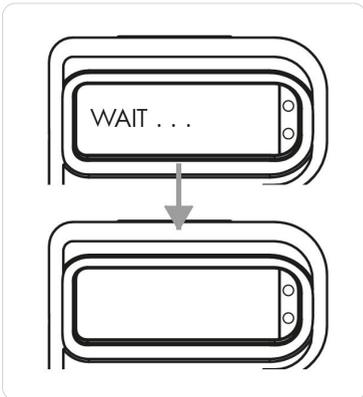
#### 6. Wait.



## 7. Wait.

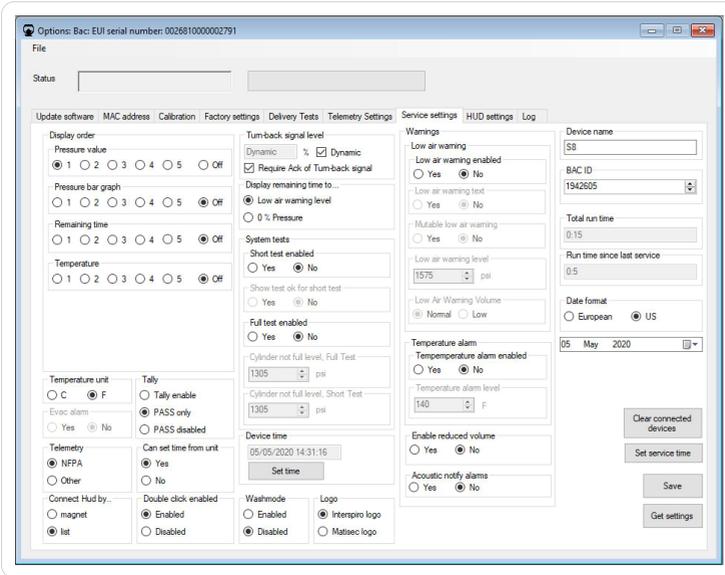


## 8. Then wait until the BAC has shut down completely.



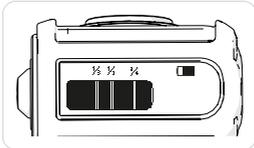
# Service Settings

- Click on the “Service Settings“ tab and “Get settings” to upload the current settings from the BAC.



To save changed settings, click "Save".

The current settings are shown:

Display Order	Sets which values that shall be shown in the display unit and in which order they will be shown when pushing the black backlight button.
Pressure value	Cylinder pressure.
	
Pressure bar graph	Cylinder pressure as a cylinder shaped graph divided in quarters.
	

## Inmode

Remaining time	Shows the estimated time left until low air warning is activated or to zero pressure (Setting). Time calculation is based on the actual consumption.
Temperature	Shows the internal temperature in the Digital display unit. Not ambient temperature! Both ambient temperature and time affect the absorbed temperature.
TAP REF X/ETAP (UK only)	Estimated Turn Around Pressure with possibility to create reference points.
Require Ack of TAP REF (UK only)	Requires the user to press the black button on the DDU to acknowledge the TAP REF signal.
TAP REF X (UK only)	Tick to enable creation of Turn Around Pressure reference points.
Max number of TAP REF points (UK only)	Sets maximum number of Turn Around Pressure reference points.
Temperature Unit	Set temperature unit to Celsius (C) or Fahrenheit (F).
Evac Alarm	Optional evacuation alarm activated by pressing the black backlight button + panic button. BAC will alarm in a special signal for evacuating the team.
Tally	Tally activated or pressure activated motion alarm. PASS = pressure activated, PASS disabled = Motion alarm deactivated.
Telemetry	Defines for which market the telemetry is for.  UK/EU units should be set to "Other", this due to certain alarm functionalities required.
Connected HUD by	Defines how the linking between HUD and BAC is done.  Magnet: The HUD is linked to BAC by using magnet to put the HUD in linking mode. Described in user manual.  List: HUD is linked manually by choosing the correct HUD in a list of HUD units in close distance to the BAC.
Can set time from unit	Enables or disables the user to set the time in the BAC from the DDU when in service mode.
Double click enabled	Enables or disables the user to use double click on the black backlight button for same functions as the black backlight button + panic button.
Turn-back signal level	Turn back signal is a notification before the low air warning. Set the activation level for the turn-back alarm. Percentage of full pressure.
Dynamic	Automatically calculating the turn-back level to be right in the middle of the starting pressure and the low air alarm level.
Require Ack of Turn-back signal	Requires the user to press the black button on the DDU to acknowledge and stop the turn-back signal.
(Require Ack of 50% WD (UK only)	Requires the user to press the black button on the DDU to acknowledge and stop the 50% WD signal.
Display Remaining Time To...	Set remaining time to Low Air Warning Level or empty cylinder (0% pressure).
System Tests	Optional Short and/or Full test.

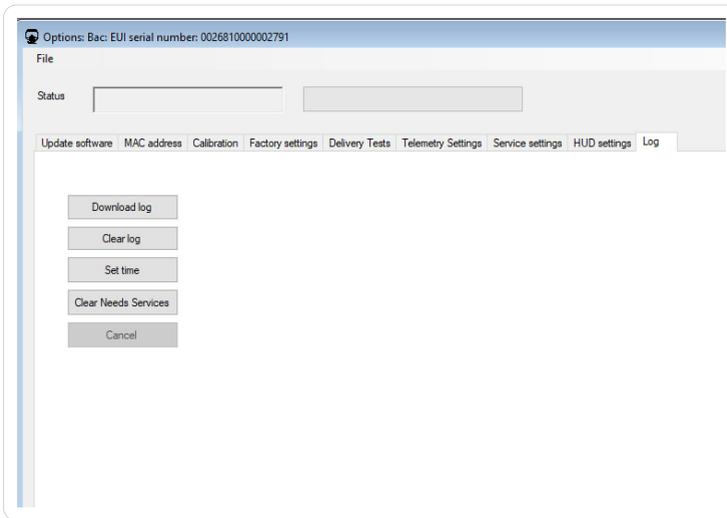
## Inmode

Cylinder Not Full Level, Full Test	Set warning level for cylinder pressure in the full test.
Cylinder Not Full Level, Short Test	Set warning level for cylinder pressure in the short test.
Device Time	Set time. Click on "Set time" to use the computer time and date in the BAC.
Washmode	<p>Disables the alarms during washing of SCBA.</p> <p>Enabled: Allows unit to be washed while SCBA is pressurized without alarms going on.</p> <p>Disabled: Wash function is disabled (if unit is pressurized and washed when disabled the SCBA alarms will be activated).</p>
Logo	Shows the chosen company logo in the DDU when pressurized.
Low Air Warning	Low pressure alarm.
Low Air Warning enabled	Enables the user to mute the low air warning.
Low air warning text	<p>"Low Air" is shown in the DDU.</p> <p>BAC is activated to show "Evacuate" in DDU when the low air level is reached.</p> <p>BAC shows valid pressure in DDU when the low air level is reached.</p>
Mutable low air warning	
Low air warning level	
Low Air Warning Volume	
Temperature Alarm	Alarms when the absorbed temperature reaches the pre-set level.
Enable Reduced Volume	Enables the user to reduce the sound volume of the alarm signals. Suitable when working in gastight suits.
Acoustic Notify Alarms	Acoustic alarm signal for notifications, e.g. Turn-back level.
Device Name	An ID label can be added for the BAC unit.
BAC ID	Serial number from Interspiro (can not be changed).
Total Run Time	Total time that the unit has been pressurized.
Run Time Since Last Service	Time that the unit has been pressurized since last service.
Date Format	Displays date format.

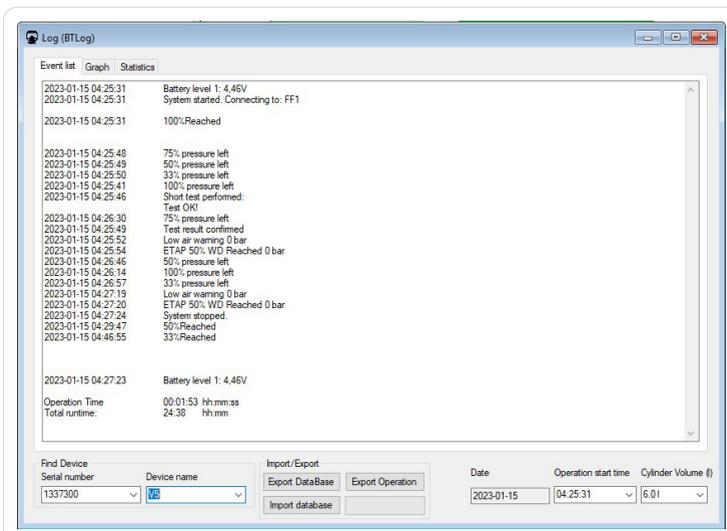
## Downloading and viewing the event log and graph

1. Click on the "Log" tab.

- Click on “Download Log” to download the log file or “Clear Log” to erase the log file.

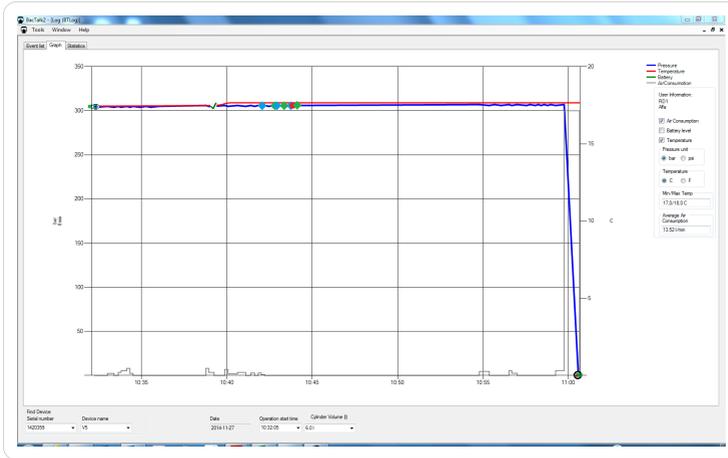


- To read a log and graph, open the “Window” menu in the menu bar and click on “Log Book”.
- The “Event list” appears.  
Choose between events from the downloaded logfiles in the drop menus in the bottom of the window.  
Dates with events are highlighted in bold numbers.

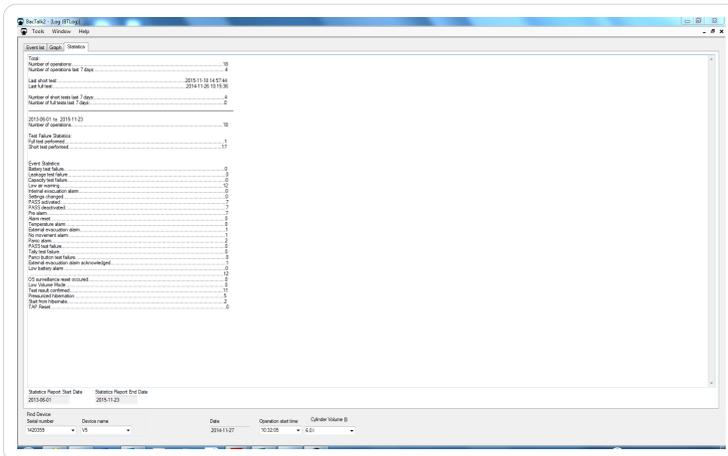


# Inmode

- To see a graph click on the “Graph” tab.  
The events are shown as symbols along the blue pressure graph. Move the mouse pointer over each symbol to see type of event and time.  
To show accurate air consumption the correct cylinder volume needs to be added in the drop menu at the bottom of the window.



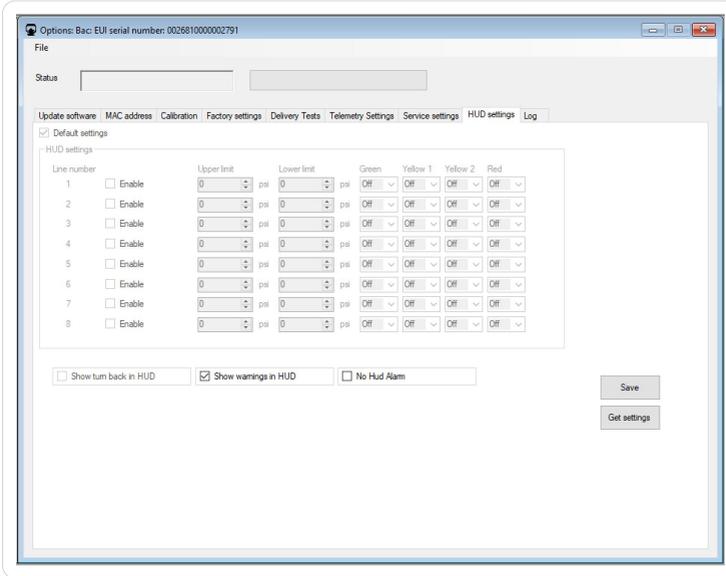
- To see full log click on the “Statistics” tab.



# HUD

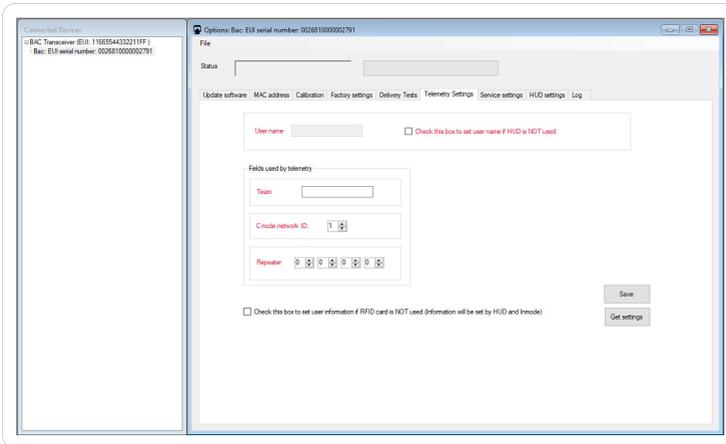
- Click on the “HUD Settings“ tab and “Get settings“ to upload the current HUD settings. Change HUD settings by first unchecking the box “Default Settings“.

To save changed settings, click "Save".



# Telemetry settings

1. Click on the "Telemetry settings" tab.



2. If not using a HUD, click the checkbox to set the User name, it will show up in DDU unit when SCBA and Incharge 50 is started. Check box on the right should then be marked other wise the information is taken from HUD.



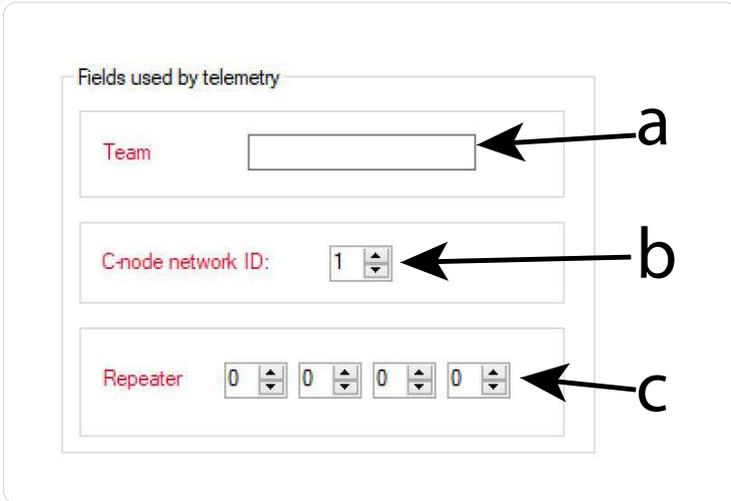
## 3. Possible telemetry settings:

Fields used by telemetry

Team

C-node network ID:

Repeater

The image shows a screenshot of a telemetry settings interface. It is titled "Fields used by telemetry" and contains three main sections. The first section is labeled "Team" and has a text input field. The second section is labeled "C-node network ID:" and has a spinner control showing the value "1". The third section is labeled "Repeater" and has four spinner controls, each showing the value "0". Three arrows labeled "a", "b", and "c" point to the Team input field, the C-node network ID spinner, and the first Repeater spinner respectively.

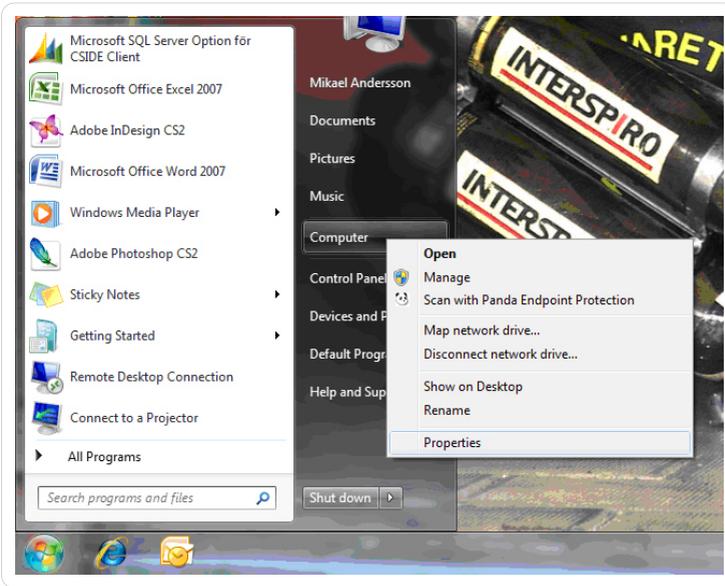
- Choose which team the unit shall belong to.
- Choose which C-node the unit shall be connected to.
- Choose which repeaters the unit shall be connected to.

# Manual installation of the USB radio adaptor

1. Copy the Inmode folder to the computer.
2. Insert the USB radio adaptor.
3. If the “Found New Hardware Wizard” pops up, choose “No, not this time” and click “Next”. Skip the next three steps below.



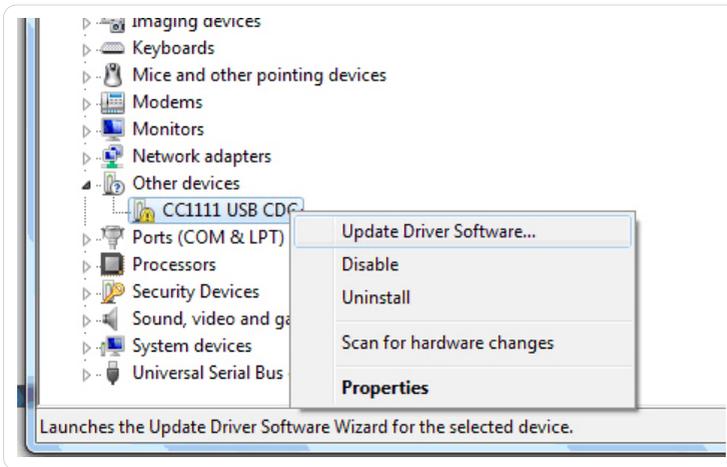
4. Right click on "Computer" or "My Computer" in the "Start" menu or on the desktop. Select "Properties".



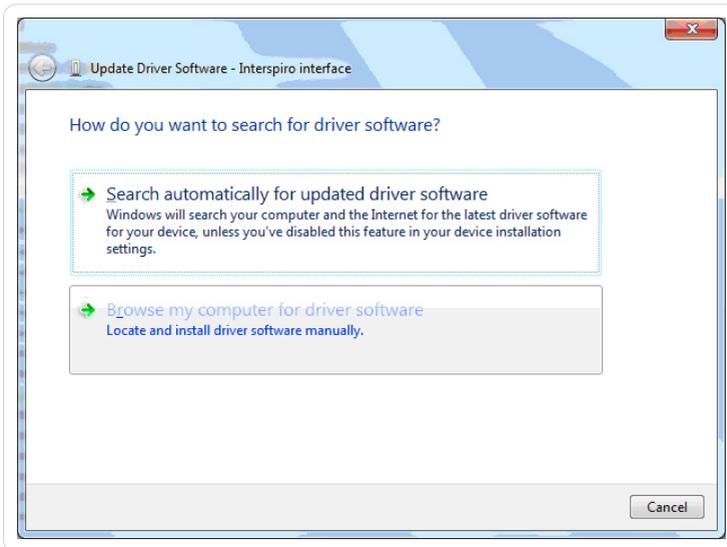
5. Click on "Device manager".



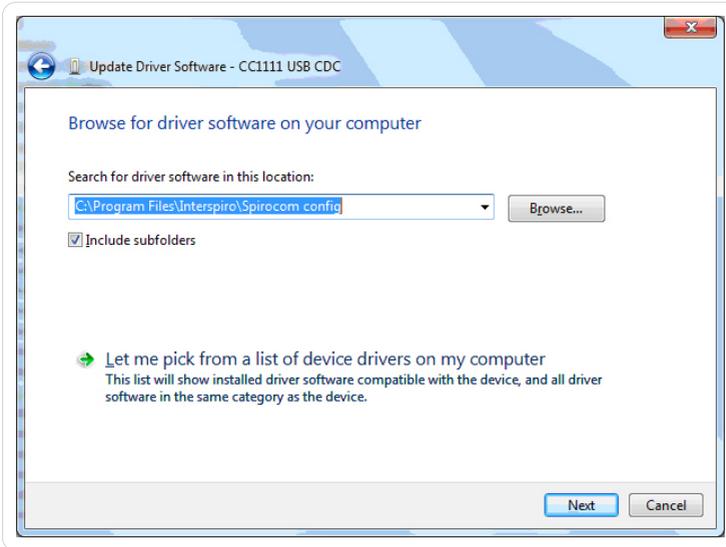
- Expand the item “Other devices” and right click on “CC1111 USB CDC”. Select “Update Driver Software...”, alternatively “Update Driver...”.



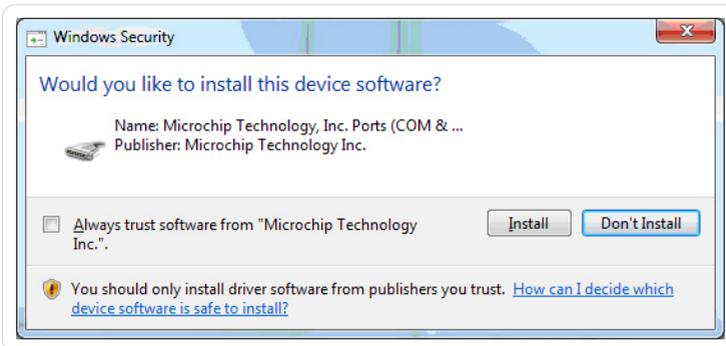
- Select the option “Browse my computer for driver software”.



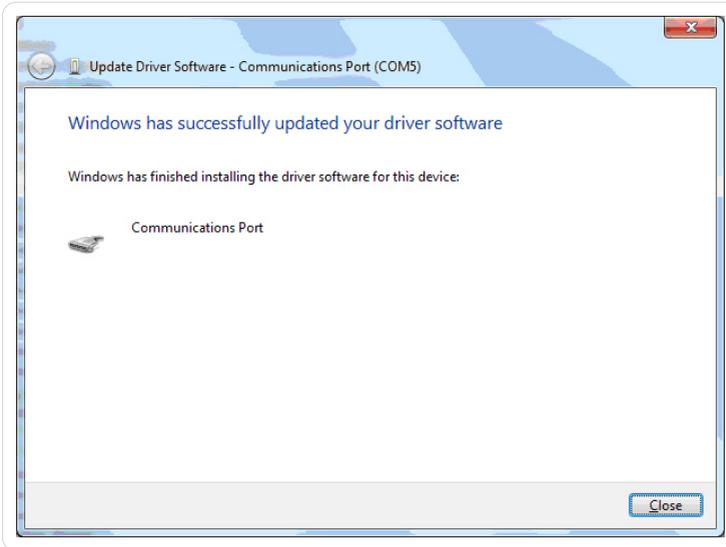
8. Browse to the "Inmode Config" folder. Click "Next".



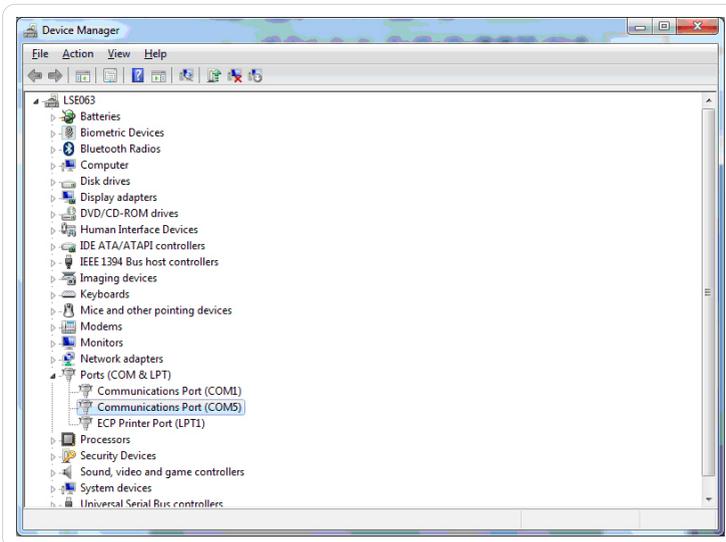
9. Click "Install".



## 10. Click on "Close"



## 11. The Inmode USB Radio adaptor should now appear in the "Device Manager" as a "Communications port".







Keeps You Breathing