Firmware Updater Manual

MTi MkIV and MTw

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Revisions

Revision	Date	By	Changes
A	December 2008	PRI MMI	First version.
B	February 2009	PRI MMI	Added update for standalone MTs, Xbus Master, Xbus Master MTs and Xbus Kit
C	February 2009	HBE	Editorial changes
D	April 2009	HBE	Name change to MVN
E	May 2009	MHA	Added preferable mode Xbus system New corporate design
F	August 2009	PRI	Number of update options reduced to 3
G	October 2010	MHA	Minor editorial changes
H	November 2011	CMO	Added update for MTw/Awinda System
I	7 May 2013	MHA	Updated for MT SW Suite 4.1.5

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1 Introduction

Using the Firmware Updater, it is possible to update the firmware of your Xsens product. Always follow the instructions given by the Firmware Updater very carefully.

NOTE: Do NOT run other programs while updating MT firmware. Do NOT run the Firmware Updater in a Windows emulation environment or virtual PC environment. Do NOT disconnect the device during an update in progress.

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2 Firmware update overview

The following sub-sections show the steps needed to update the firmware of the current Xsens products as shown in the overview.
In section 3, a *detailed description* of how to update Xsens' products is given.

In the standard Firmware Updater, it is possible to update Standalone Motion Trackers, the Xbus Kit or MVN. These are also the recommended update procedures. For the update procedure of the Xbus Master and the Xbus Master Motion Trackers individually, refer to section **Error! Reference source ot found.** and go to www.xsens.com/support

Legend:
U = User action
S = Software action

2.1 MTi MkIV

1. U – Select 'Standalone Motion Tracker' in firmware updater
2. U – Select the COM port detection method (Auto-detect, or manual)
3. S – Update Motion Tracker
4. U – Disconnect and reconnect the Motion Tracker before using it.

2.2 MTw Development Kit

1. U – Select 'Awinda System' in firmware updater
2. U – Select the COM port detection method (Auto-detect, or manual)
3. S – Update Awinda System

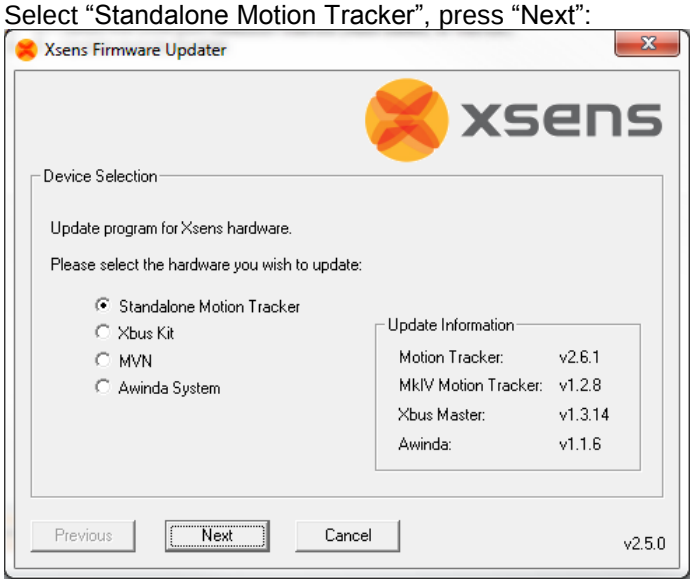
3 Firmware update details

NOTE: Do NOT run other programs while updating MT firmware. Do NOT run the Firmware Updater in a Windows emulation environment or virtual PC environment. Do NOT disconnect the device during an update in progress.
When updating the firmware in your device, please make sure to use the latest Firmware Updater (as part of the MT Software Suite or MVN), which are all available at our website www.xsens.com. Not using the latest Firmware Updater can render your sensor inoperable in which case the sensor may need to be returned to Xsens for recovery.

To start the Firmware Updater, go to Start→ All Programs → Xsens → MT Manager.
In MT Manager, go to Tools Menu → Firmware Updater…

3.1 MTi MkIV

Select “Standalone Motion Tracker”, press “Next”:



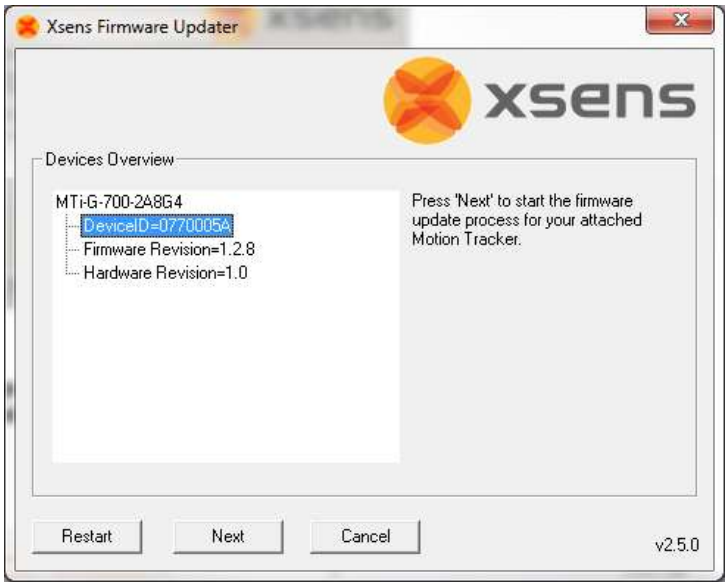
Ensure that the system is set up as the instructions detail. When this is the case, press “Next”:

Press “Next” or manually select a COM port number where a device configured at 115k2 has been attached.

Note: If the Firmware Updater does not find a Motion Tracker attached during an auto detect, it does help to manually select the COM port number. For the COM port number, connect your Motion Tracker and read out the COM port number in the Device list.

Wait while the software is scanning for your Motion Tracker:

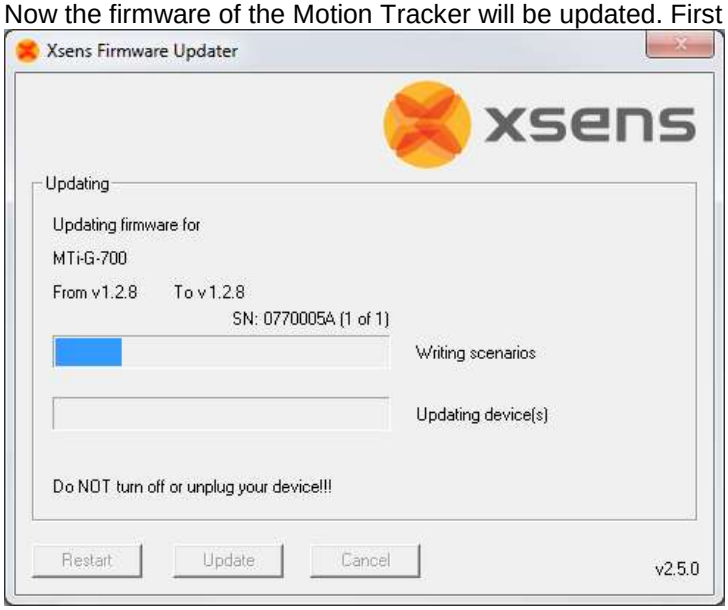
An overview is shown of all detected hardware. If one Motion Tracker was found, the “Next” button is enabled. If no hardware was found, the previous dialog is shown again.
Click “Next”:



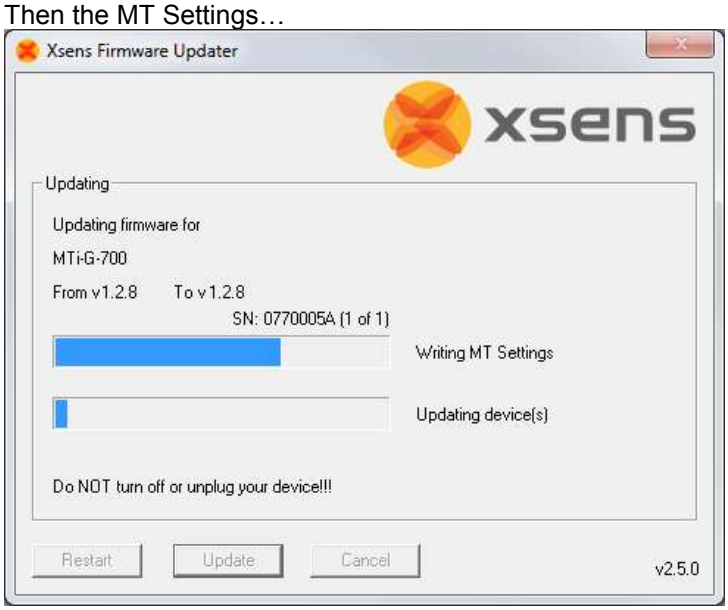
…then press “Update” to start the actual upgrading:

Important: Do NOT turn off or unplug your device during the update!

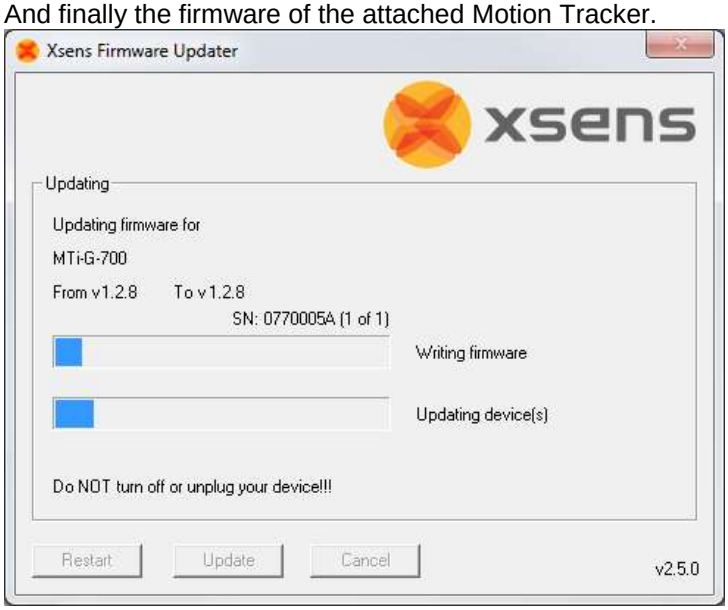
Now the firmware of the Motion Tracker will be updated. First the filter setting profiles…



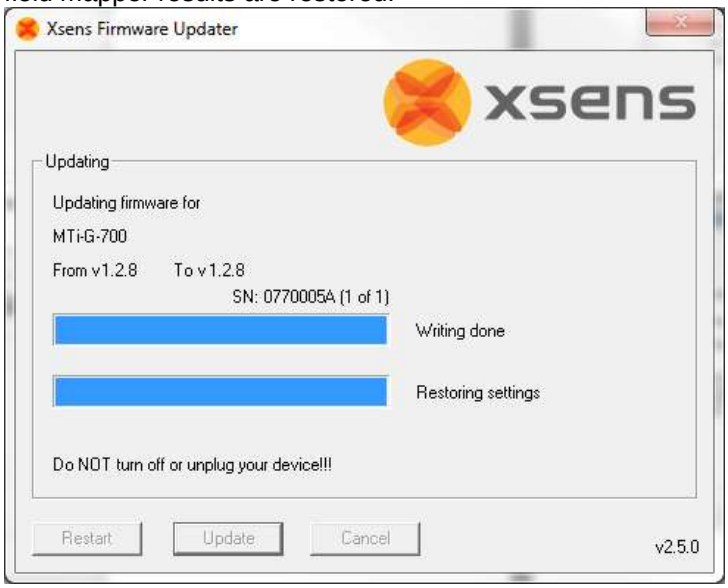
Then the MT Settings…



And finally the firmware of the attached Motion Tracker.



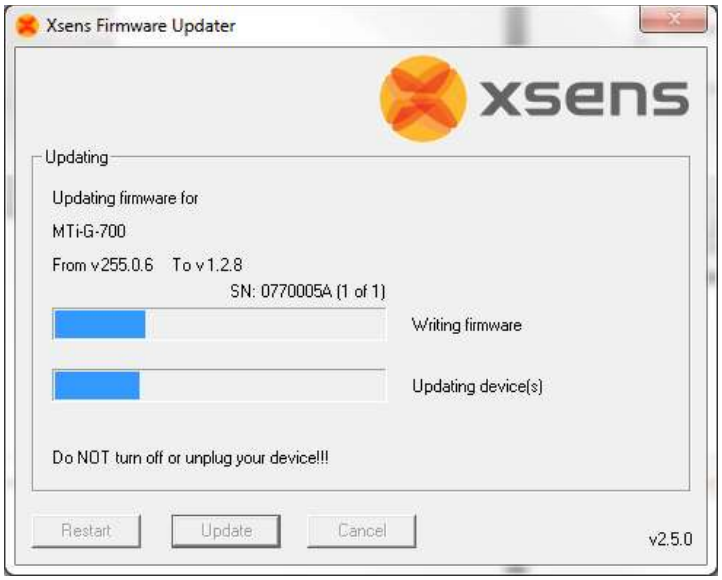
When all Motion Trackers have been updated, baud rate, location ID, alignment matrix and magnetic field mapper results are restored:



Upon successful update, press “Finish” to conclude the Firmware Update.

When you receive an error (see below), try to run the Firmware Updater again.

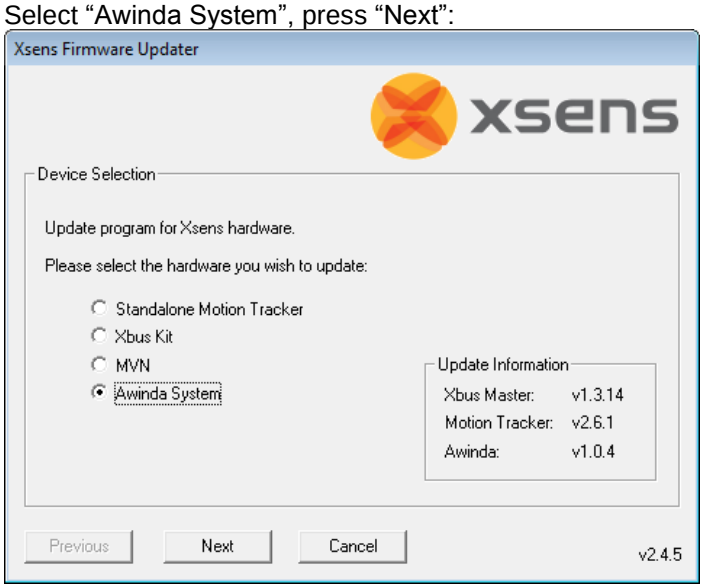
When an error occurred, it can happen that the firmware in the device is a rescue firmware (version 255.0.x):



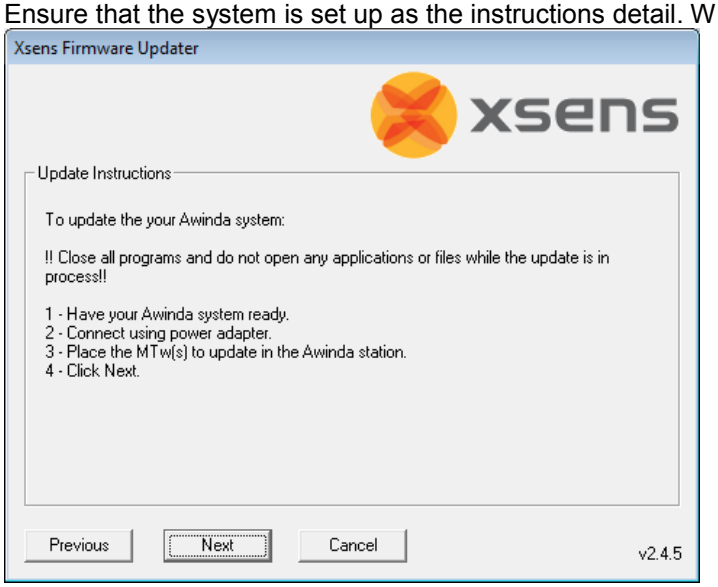
If the problem persists, please go to www.xsens.com/support.

3.3 MTw Development Kit

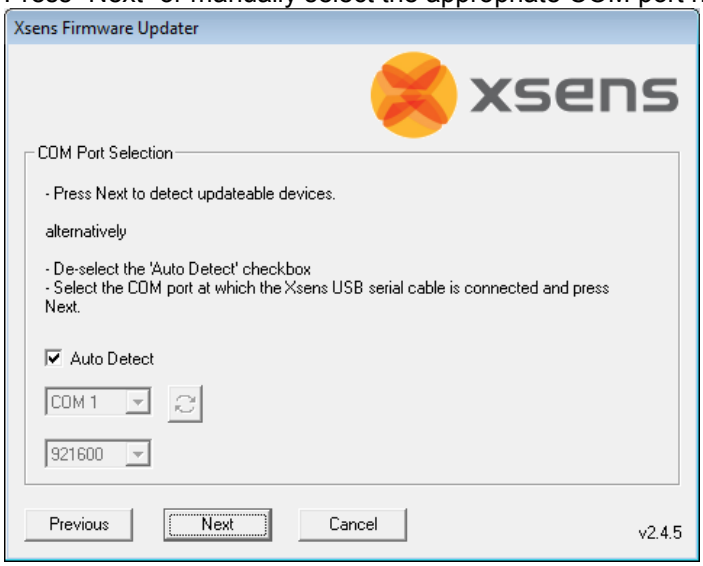
Select “Awinda System”, press “Next”:



Ensure that the system is set up as the instructions detail. When this is the case, press “Next”:

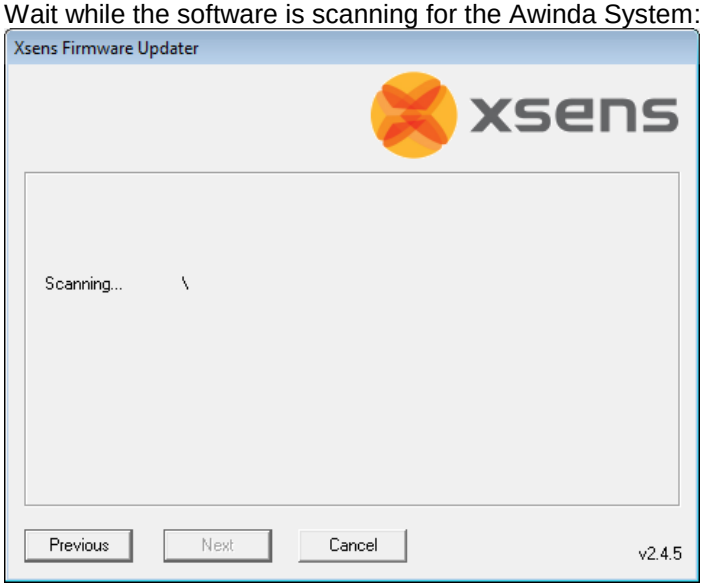


Press “Next” or manually select the appropriate COM port number.

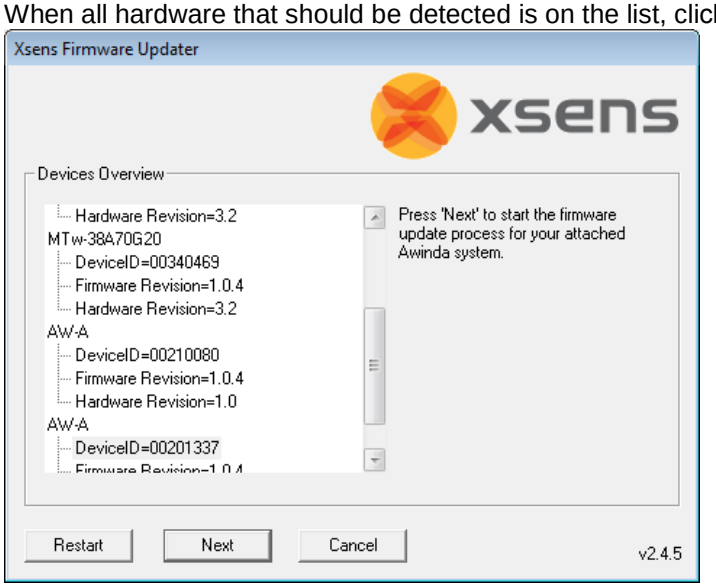


Note: Usually selecting AutoDetect is sufficient. However, if the Firmware Updater does not find a component of the Awinda System, manually select the COM port number. To determine the appropriate COM port number, check the Device list.

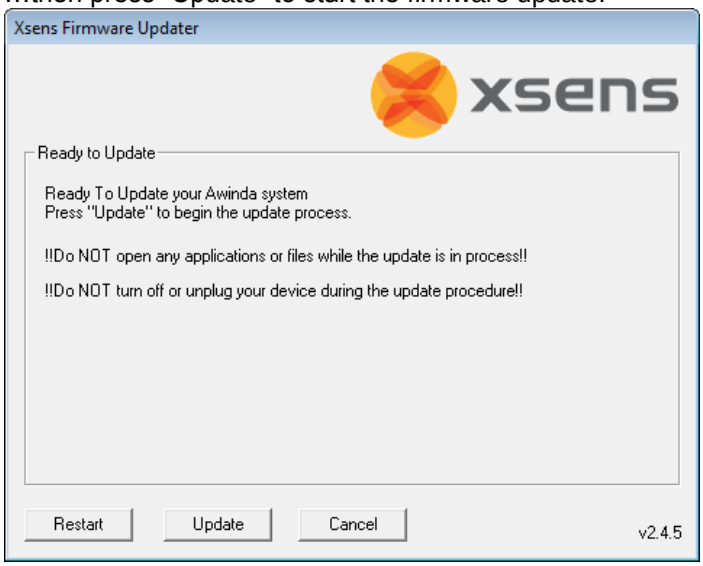
Wait while the software is scanning for the Awinda System:



An overview is shown of all detected hardware. When hardware is detected, the “Next” button is enabled, however it is advised that the user checks that all hardware has been correctly detected. If no hardware was found, the previous dialog is shown again.
When all hardware that should be detected is on the list, click “Next”:

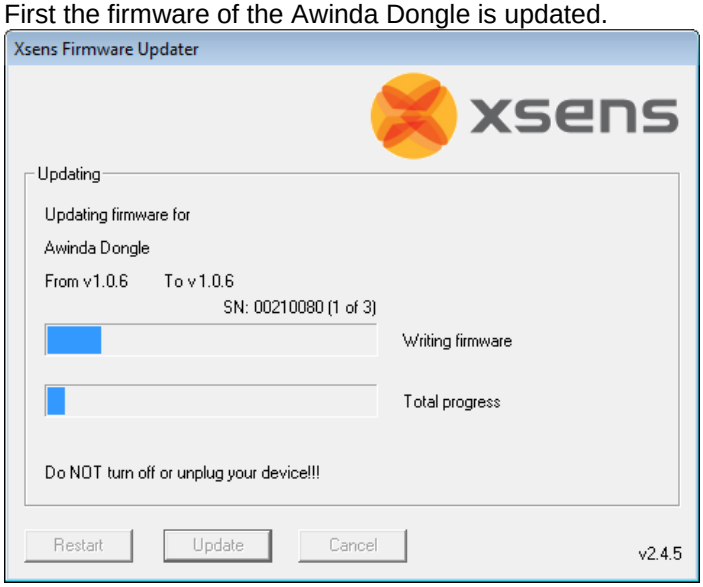


…then press “Update” to start the firmware update:

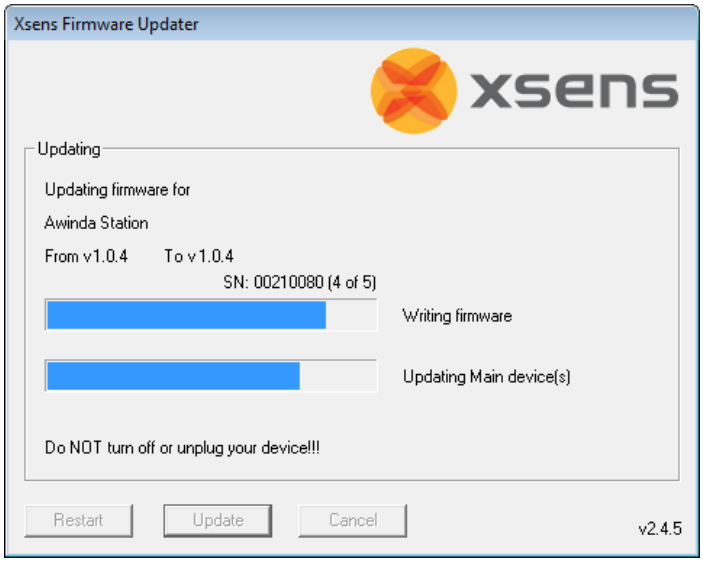


Important: Do NOT turn off or unplug your device during the update!

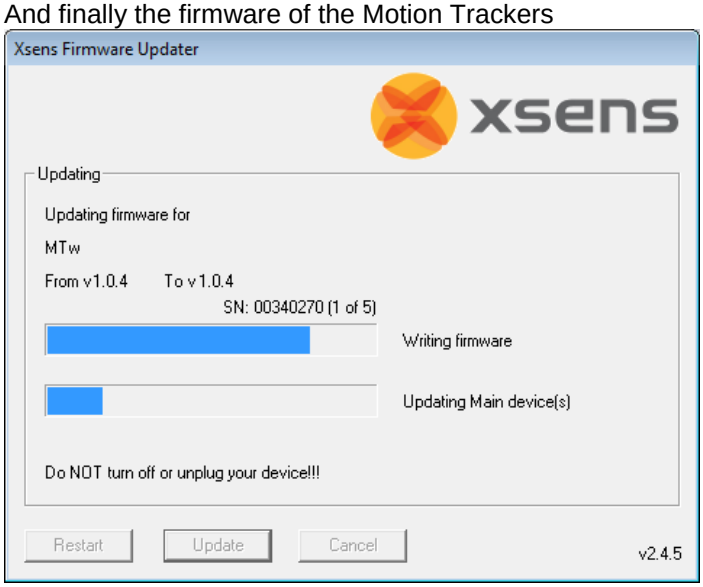
First the firmware of the Awinda Dongle is updated.



Then the Awinda Station



And finally the firmware of the Motion Trackers



4 Technical Support

Xsens Technologies B.V. is glad to help you with any questions you may have about the firmware updater or about the use of the technology for your application. Please contact Xsens' Support Team:

- ➔ by e-mail: www.xsens.com/support
- ➔ telephone: Xsens HQ +31 88 97367 00 / Xsens US office 310-481-1800

To be able to help you, please mention your **Firmware Updater version number** and **software license registration number** in your e-mail. In case of a Xsens MVN system please mention the **8-digit number** on the Xsens Sticker, you can find this between the latches of the Suitcase.

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