# Coach 6 Installation Guide



**CENTRE FOR MICROCOMPUTER APPLICATIONS** 

http://www.cma-science.nl

# Table of content

1. System requirements for Coach 6	3
2. COACH 6 INSTALLATION	3
2.1. Standalone installation of Coach 6	3
2.2. Coach 6 shortcuts	6
2.3. Repairing Coach 6 installation	7
2.4. Uninstalling Coach 6	7
2.5. 'Silent' Coach 6 installation	8
2.6. Run Coach 6 installation with a log-file	8
2.7. Distribution of Coach 6 standalone installations via the network	8
3 COACH 6 NETWORK INSTALLATION	Q
3.1. Sarvar Satun	9
3.2 Client Setup	ر 10
3.3 (Silont' client setup	10 11
3.4 Updating the Coach 6 installation on a network	
5.4. Opdaling the Couch o installation on a network	12
4. INSTALLATION OF CMA HARDWARE DRIVERS	
4.1. Installation of CoachLab $II^{\dagger}$ driver	
4.2. Installation of the €Motion driver	
4.3. Installation of the MoLab driver	14
4.4. Installation of the VinciLab driver	14
4.5. Network installation of hardware drivers	
5 Updating an interface internal software	15
5.1 Undating firmware of ULAR CoachLab $II^+ \in I$ ab and $\in$ Sense interfaces	
5.7 Undating MoLah data-logger	10 16
5.3 Undating Vincil ab data-logger	10 16
0.5. Spaanne , mei Dao aana-1055er	

Revision: 12/06/2014

# 1. System requirements for Coach 6

For Coach 6 Installation	For Coach 6
<ul> <li>&gt; 300 MB on System Drive</li> <li>Under Win XP/Win Vista/Win 7/Win 8 administrator rights needed</li> </ul>	<ul> <li>Coach 6 can be installed on a PC with at least the following requirements:</li> <li>A processor which can be compared with Pentium 4, 2.4 GHz;</li> <li>200 MB of free disk space;</li> <li>512 MB RAM (1 G recommended);</li> <li>Recommended screen resolution 1024 x 768 (at least 800x600), 16 bit colors;</li> <li>Windows operating system: Win XP/ Win Vista/ Win 7/ Win 8.</li> <li>DirectX version 9.0c,</li> <li>Internet Explorer version 6.0 of higher.</li> </ul>

For use of the LEGO NXT the installations of LEGO MINDSTORMS Education NXT v2.0 driver software<sup>1</sup> and Microsoft .NET  $2.0^{2,2}$  are required.

# 2. Coach 6 installation

Coach 6 can be installed both on a standalone computer and on a network. For both types of installation, you must start with a standalone installation of coach 6. This process is described in this chapter.

To configure Coach 6 for use on a network, two additional steps are required following the standalone installation. This is described in chapter 3, page 9.

# Warning:

During installation of Coach 6 all CMA hardware has to be disconnected from your computer. If accidentally during the Coach installation the CoachLab  $II^+$  interface or  $\notin$  Motion are connected to your PC read chapter '4. Installation of CMA hardware drivers'.

# 2.1. Standalone installation of Coach 6

- Close down any programs that may be running on your computer.
- Click Coach 6 Setup.exe.
- Or:
- Download the latest Coach 6 installation file via the CMA web site (www.cma-science.nl/english/downloads/installcoach6.html).
- Double-click the downloaded file, click **OK** and **Setup**.

<sup>&</sup>lt;sup>1</sup> Not delivered by CMA. This driver is included in LEGO MINDSTORMS Education NXT v2.0 software.

<sup>&</sup>lt;sup>2</sup> For Win 2000 and Win XP only.

CMA Coach 6 (English) - InstallShield Wizard       ×         Welcome to the InstallShield Wizard for CMA       Coach 6 [English]         The InstallShield® Wizard will install CMA Coach 6 [English] on your computer. To continue, click Next.       Cancel         (MA Coach 6 (English) - InstallShield Wizard       ×         Choose Destination Location       Select folder where setup will install files.         Setup will install CMA Coach 6 (English) in the following folder.	<ul> <li>The CMA Coach 6 installer will start.</li> <li> ^⊕ Click Next.</li> </ul>
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.           Destination Folder           C:\Program Files\CMA\coach6\Full.EN\           Browse           InstallShield           < Back	<ul> <li>Select a folder where the Coach 6 files will be installed. Accept the given default folder or click Browse to select another folder.</li> <li>Click Next.</li> </ul>
Identify this copy of Coach 6       Image: Comparison of Coach 6         Enter your license name and license code.       Image: Comparison of Coach 6         License name:       Image: Comparison of Coach 6         License code:       Image: Coach 6         Image: Comparison of Coach 6       Image: Coach 6         Image: Coach 7       Image: Coach 7         Image: Coach 7	<ul> <li>∠ Type in your License name and License code (not case sensitive) exactly as they appear in your <i>Site license</i> document.</li> <li>Click OK.</li> </ul>

Your License name and code are unique identifiers that are required in order to successfully install this software.

You can find your License name and password on the *Site License* document that accompanied this product. You must keep your license identifiers confidential from anyone outside your school or organization.

InstallShield Wizard	
	The installation is complete. If you want to configure Coach 6 for use on a network please press the button Server setup Server setup Yes, I want to restart my computer now. No, I will restart my computer later. Remove any disks from their drives, and then click Finish to complete setup.
	Finish

- Select whether you want to restart your computer now or later.
- Click **Finish** to complete the installation on the standalone machine.
- For network installation continue with chapter 3 on page 10.

The Coach 6 standalone installation is completed now and you can connect your interface to the computer. Read chapter '4. *Installation of CMA hardware drivers*' for specific driver installation information.

Notice that the installation of MediaLooks QuickTime Source Filter is not a part of Coach 6 installation anymore (starting from version 6.21). This filter can be installed separate and can be downloaded via CMA web site, see www.cma-science.nl/english, under Support > Software > Coach 6.

# Warning for Windows XP users!

It is possible that during the installation Windows XP gives warnings (see below) that the software you are installing has not passed Windows Logo testing.

Softwar	e Installation	Hardware Installation
1	The software you are installing has not passed Windows Logo testing to verify its compatibility with Windows XP. ( <u>Tell me why</u> this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the software vendor for software that has passed Windows Logo testing.	The software you are installing for this hardware: Universal Serial Bus controllers has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway STOP Installation	Continue Anyway STOP Installation

• To successfully install Coach 6, you *must* click Continue Anyway in this dialog.

If you want this warning not to appear during the Coach 6 installation you can turn it off in the following way:

- From the Windows Start Menu choose Settings > Control Panel.
- In Control Panel select System.
- Select the Hardware tab and then press the Driver signing button.
- Select Ignore and  $\mathcal{A}$  click OK.

ties		<u>? ×</u>	1
estore Automa	tic Updates	Remote	
Computer Name	Hardware	Advanced	
lager			
ne Device Manager lists all I n your computer. Use the De operties of any device.	the hardware devic evice Manager to c	es installed hange the	
	Device M	anager	Driver Signing Options ?
river Signing lets you make : ompatible with Windows, Wi ow Windows connects to W	sure that installed d indows Update lets /indows Update for	rivers are you set up drivers.	During hardware installation, Windows might detect software that has not passed <u>Windows Logo testing to verify</u> its compatibility with Windows. ( <u>fell me why this testing is important</u> .)
Driver Signing	Windows I	Update	What action do you want Windows to take? C Ignore - Install the software anyway and don't ask for my approval
rofiles			Ways Descent we and time to change to action
ardware profiles provide a w Iferent hardware configurati	vay for you to set up ons.	) and store	C Block - Never install unsigned driver software
	Hardware	Profiles	
	estore Automa estore Automa computer Name ager ne Device Manager lists all your computer. Use the De operties of any device. iver Signing lets you make a mpatible with Windows. Wi Driver Signing ofiles ardware profiles provide a w ferent hardware configurati	estore Automatic Updates astore Automatic Updates Automatic Updates Automatic Updates Automatic Updates Automatic Updates Automatic Updates Automatic Update Automatic Update Its all the hardware device your computer. Use the Device Manager to coperties of any device. Device Manager Ists all the hardware device Manager Ists all the Device Manager Ists	estore Automatic Updates Remote Computer Name Hardware Advanced ager ne Device Manager lists all the hardware devices installed your computer. Use the Device Manager to change the operties of any device. Device Manager iver Signing lets you make sure that installed drivers are impatible with Windows. Windows Update lets you set up w Windows connects to Windows Update lets you set up w Windows connects to Windows Update lets you set up ofiles ardware profiles provide a way for you to set up and store ferent hardware configurations.

Warning for Windows Vista, Window 7 and Windows 8 users!

During installation under Windows Vista and Window 7 or 8 a question about trusting CMA drivers can appear. You have to accept that you trust the CMA drivers. To be able to install the Windows-drivers (low-level drivers) for CoachLab II+<sup>+3</sup> and  $\in$ Motion without such warning you have to install first the CMA certificate. You can download the installation file at CMA website www.cma-science.nl/english, under Support > Software > Coach 6.

# 2.2. Coach 6 shortcuts

After installation the group **CMA Coach 6** will be created in the Windows Start menu. It has the following shortcuts:

 Author: Starting Coach 6 via this icon opens Coach 6 in Author mode. To enter Author mode, you need to log in with the Author key. The default Author key upon delivery is '0000'. You can change the Author key for your school via de the Coach menu Tools > Change Author key.

*Student:* Starting Coach 6 via icons under the Student folder opens Coach in Student mode. The Activities open in Senior-student level.

#### 1. Measurement

This shortcut starts Coach 6 with the CMA exemplary projects for Measurement. *2. Control* 

This shortcut starts Coach 6 with the CMA exemplary projects for Control. *3. Data Video* 

This shortcut starts Coach 6 with the CMA exemplary projects for Data Video.

<sup>&</sup>lt;sup>3</sup> This is valid for CoachLab II<sup>+</sup> interfaces purchased before February 2011. CoachLab II<sup>+</sup> interfaces purchased from February 2011 make use of the standard Windows HID (Human Interface Device) USB driver.

#### 4. Modeling

This shortcut starts Coach 6 with the CMA exemplary projects for Modeling. *5. Animations* 

This shortcut starts Coach 6 with the CMA exemplary projects with Animations.

#### Utilities:

#### Firmware Update

This shortcut starts the program to update internal software (firmware) of CMA interfaces.

#### Mount VinciLab

This shortcut starts the program, which mounts VinciLab as network location and creates the access to the VinciLab's user folder 'My Files' in Windows Explorer under Network Location.

#### **RCX** Control

This shortcut starts the program to upload the firmware for the LEGO Dacta RCX. *ULAB View* 

This shortcut starts the program, which displays an image of ULAB's screen on the computer's screen.

#### Unmount VinciLab

This shortcut starts the program, which remove the access to the VinciLab's user folder 'My Files' in Windows Explorer.

#### To start Coach 6:

- Click on the Start button (Windows Start menu).
- Select All Programs and hence CMA Coach 6.
- Next click on one of icons.

For MoLab data-logger there are two additional programs available, *MoLab View* and MoLab Update, which are not part of the Coach 6 Installation. These programs can be downloaded via www.cma-science.nl/english/downloads/index.html under Utilities Installations.

# 2.3. Repairing Coach 6 installation

To repair the installation of Coach 6, proceed as follows:

- Choose Settings > Control Panel in the Windows Start Menu.
- Select Add/Remove programs.
- Select CMA Coach 6 (English) from the list and click Repair.
- The Repair process of the Coach installer will start. Follow instructions on the screen.

# 2.4. Uninstalling Coach 6

To remove Coach 6 from your system, proceed as follows:

- Choose Settings > Control Panel from the Windows Start Menu.
- Select Add/Remove programs.
- Select CMA Coach 6 (English) from the list and click Add/Remove.
- The uninstalling process will start. Follow instructions on the screen.

#### 2.5. 'Silent' Coach 6 installation

During installation, it is possible to generate a script that can be used to make a standalone Coach 6 installation on more computers for example on all computers in a network. This can happen 'silently', without any user interaction. To perform 'silent' installation:

• Run the following command from a DOS command line in the Coach 6 installation folder: Setup.exe /r /f1"c:\setup.iss".

The setup dialogs appear as described above for a standalone installation. Enter the required information.

After the installation is completed the script file *setup.iss* will be created in the location given behind the option /f1 (*without space*). If the option /f1 is omitted, the script file is created in the [Windir] folder (standard Windows installation folder).

Run on all other computers the following command (for example from a special folder on a server): Setup.exe /S/v/qn /f1"path to setup.iss>" (again without space behind /f1).

The installation is executed silently, i.e. without any user interaction, *provided that* driver signing warnings is turned off on all computers where you want to run this script (see page 5).

# 2.6. Run Coach 6 installation with a log-file

It is possible to create a log-file during the installation. This file consists of installation report. To create a log-file:

- Run a DOS-prompt and type: setup.exe /verbose"C:\is.log".
- A file C:\is.log is created in the given location.

# 2.7. Distribution of Coach 6 standalone installations via the network

As alternative for the network installation (see next section), you can make a snapshot of a standalone installation of Coach and distribute this snapshot to all clients in your network. In case you want to use CoachLab  $II^+$  or  $\notin$ Motion install the Windows drivers for these hardware on a client machine by connecting them to the client machine **after** the installation on a client but **before** making the snapshot. After distribution of the standalone installation to other clients in the network these hardware will function directly (see chapter 4, page 13).

By using this method the special Coach network facilities like, share network folders for school Coach projects and Coach sensor/actuator library, will not be available.

# 3. Coach 6 network installation

Instructions for System Administrators

Next to the advantage of central management of the Coach installation files, the network installation offers a special **School location** with two folders which are accessible from Coach 6 to all clients:

- A *School Projects* folder to store Projects and Activities created by the school); and
- A *School library* folder to store Sensors/Actuator information created or modified by the school.

The path to the School location (located on the server) is given during the server setup described below. Coach creates the two folders on the school location folder. The easiest way to access the school location from Coach is via the button 'Favorite' in the dialog 'Open file'.

To configure Coach 6 for use on a network, two additional steps are necessary after the standalone installation of Coach 6:

- 1. configuration of the file server (the 'Server Setup') and
- 2. the configuration of the clients (the 'Client Setup') for all clients in the network.

# 3.1. Server Setup

During the Server Setup, the Coach files are transferred from the local machine to a network location which is shared with other computers on the network (a network share).

To do this proceed as follows:

- 1. Run the Coach 6 installation on any machine in the network (preferably the server itself<sup>4</sup>). (see chapter 2, page 4).
- 2. At the end of this installation process, press the button **Server setup** to start the configuration of the server. If the installation was done at an earlier time, you can manually run the utility program **ServerSetup.exe** in the Coach 6 installation folder (default: C:\Program Files\CMA\Coach6\Full.en).
- 3. The Server Setup dialog appears which asks for three paths. Here different server (network-share) locations for Coach installation files should be specified<sup>5</sup>:

Server Setup	
Path to the Coach installation on the server/network share:	Browse
Path for the school location for network access to school-made Coach materials and sensors: (Recommendation: This location should be writable for teachers)	Browse
Path for the settings files (Recommendation: This location should not be writable for teachers)	
1	Browse
Setup	Cancel

<sup>&</sup>lt;sup>4</sup> When running the setup on the server itself, you automatically have writing rights. If running the installation from a client machine, make sure you have writing rights during setup in all locations provided in step 2.

<sup>&</sup>lt;sup>5</sup> Paths can be entered using drive letters or UNC-paths ('\\servername\etc) can be used.

• Path to the Coach installation on the server/network share - select a folder on the server that all the clients can access.

Note: It is strongly recommended that ordinary clients have only read permissions in this folder.

• Path to the school location for network (where the school projects and school library will be stored) - choose any folder on the server that the clients can access.

**Note:** It is strongly recommended that ordinary clients have **read and write** permissions in this folder.

• Path to the settings files (where hardware settings and preferences like 'Favorite' locations, and the Author key file are stored) - choose any folder on the server that all clients can access.

**Note:** It is strongly recommended that ordinary clients have **only read** permissions in this folder.

- 4. Click the button **Setup**.
- 5. After copying the files, proceed with the client setup described in the next section. If a client was used for the Coach installation (see step 1), the installation should be removed first and after that a client setup should be performed on that machine.
- 6. If they already exist, School Projects should be copied manually to the subfolder **Projects** in the School location. This can be done at any time. E.g. when a teacher creates a Project at home which should be available to the whole school, copy the project folder to this location to make it accessible for all clients.

# 3.2. Client Setup

The client setup should be performed on all clients. This is necessary to create a Start menu group with shortcuts to start Coach 6 on the client, and, if necessary, to be able to configure individual clients to specific settings. For simplicity, a so-called 'silent setup' can be done if all clients use the same settings (see section 3.3).

#### Note:

It is strongly recommended to install Windows-drivers for CoachLab  $II^+$  and/or  $\epsilon$ Motion after installation of Coach 6. In this way these drivers will be taken in the snapshot and distributed to all clients, and will work directly on the client machines.

1. On one client machine, first make sure that no local version of Coach 6 or Coach 6 Studio MV is installed.<sup>6</sup> If one of these products is installed on that machine, first uninstall

it. Otherwise the client setup is not possible.

- 2. Open the folder where the Coachinstallation files have been copied to the server and look for a file named **ClientSetup.exe** (in step 3 of the Server Setup).
- 3. A dialog opens. Enter the path<sup>7</sup> to the School location (School Projects and Library) on server. Select the folder on the

stallShield Wizard			1
Enter Location on server/network	k share		
Path for the school location on th	e server/network share		
Z:\School			
🗖 Use local copy			Browse
	Back	Next	Cancel

<sup>&</sup>lt;sup>6</sup> Coach 6 Lite can be installed parallel to another Coach product.

<sup>&</sup>lt;sup>7</sup> Paths can be entered using drive letters or UNC-paths ('\\servername\etc) can be used.

server where the School location has been installed (in step 3 of the Server setup).

If you check the option **Use local copy**, this client will get its own private copy of the School Library and Projects (*not recommended*). This means that changes on the network are not visible by this client and the client cannot make changes on the network.

4. A second dialog appears. Enter the path<sup>4</sup> to the settings files on the server (hardware settings, preferences, 'Favorite locations', and Author key file). Select the folder on the server where the user location has been installed.

There are two additional options:

• when the option **Create local settings** is not marked (default), this client will use the user settings from the server. Otherwise this client's hardware settings and favorite locations are stored locally.

Path for the settings files on the ser	rver/network share	
Z:\User		
Create local settings file		Browse
Create local Author key file.		

- when the option **Create local Author key** is marked (default is unmarked) a local Author key file will be created. This means that changes of the Author key will be visible to this machine only.
- Click Next.
- 5. The installation of the client will start. Files will be created according to the settings in the previous steps. After installation, the client will have a program group with shortcuts to the Coach on the network location. Obviously, the network mount should stay valid in order to be able to start Coach with such a shortcut.
- 6. If you want to make changes in the configuration of Coach 6 afterwards, log in with administrator rights on a client and enter the changes from Coach (for examples changes of the Author password or the folder where the Coach 6 starts.

#### 3.3. 'Silent' client setup

During installation, it is possible to generate a script that can be used to automatically configure all other clients on the network. This setup can be performed 'silently'. To do this:

- on one client run the following command from a DOS command line in the Coach 6 installation folder on the server location: ClientSetup.exe /r /f1"c:\setup.iss". The script file given behind the option /f1 will be created. If this option is omitted, the script file is created in the [Windir] folder (standard Windows installation folder).
- The client setup dialogs appear as described above. Enter the required information. After installation is completed, the installation script file *setup.iss* will be created in the location given behind the option /f1 (*without space*). If the option /f1 is omitted, the script file is created in the [Windir] folder (the standard Windows installation folder).
- Copy this script to a location on the server where all clients can read.
- On other network clients, run ClientSetup.exe /s /v/qn /f1"<path to setup.iss>" from the Coach 6 installation folder on the server. Then installation of the client will be done silently, i.e. without any user interaction, *provided that* driver signing warnings are turned off on all clients where you want to run this script (see page 5). By running the script file from another script file, it is possible to configure multiple clients at once.

#### Note:

- If you want to have different settings on a few clients, it is possible to configure all clients automatically, and then run the Client setup on those clients where you want to have different settings. To be able to do this, it is necessary, however, to first uninstall the CMA Coach 6 Client setup from these machines.
- In the same way, it is possible to repair or uninstall clients 'silently'. When running clientsetup.exe after it is installed already, the dialog to repair or uninstall the client setup will appear. If clientsetup.exe is started from a command line with the same options as above, also a script file will be generated for the repair or uninstall process. This script file can be applied to all clients automatically.

#### 3.4. Updating the Coach 6 installation on a network

If any updates of Coach are available, it is in general only necessary to run the update installer on one machine. Before installation, remove all files that have been copied onto the server for an earlier server setup. At the end of the update process, again press the button **Server setup**, to transfer the new files to the server (or run **ServerSetup.exe** manually).

For a major or minor update in which the drivers of the interfaces are renewed it will be needed to also update the clients.

# 4. Installation of CMA hardware drivers

#### Warning:

During installation of Coach 6 all CMA hardware should be **disconnected** from your computer! To avoid problems always first install Coach 6 or Coach 6 Lite software and then connect your interface to the computer!

Many of CMA interfaces are equipped with HID<sup>8</sup> USB for which a standard driver is available in Windows. The driver installation is automatically executed the first time such an interface is connected to the computer and no administrator rights are needed to install these interface drivers under all Windows versions.

In some special cases special driver installations are needed; these cases are described below.

#### **4.1. Installation of CoachLab II<sup>+</sup> driver**

There are two models of the CoachLab II<sup>+</sup> interface available on the market, older models sold before February 2011 and newer models sold after February 2011. Both models look the same from outside.

The newer model is equipped with HID<sup>9</sup> USB for which a standard driver is available in Windows.<sup>9</sup> There are no administrator rights needed to install the driver under all Windows versions. This interface is supported in Coach version 6.32 and higher.

For an older model of CoachLab  $II^+$  a low-level driver has to be installed. This driver is copied to the Window system during the Coach 6 installation. After Coach 6 installation is completed and CoachLab  $II^+$  is connected to the computer for the first time (be sure that Coach 6 does not

<sup>&</sup>lt;sup>8</sup> Human Interface Device

<sup>&</sup>lt;sup>9</sup> This version of CoachLab II+ is recognized as 'CoachLab II++' in Windows.

run at this moment) the driver installation takes place via the Found New Hardware Wizard. This low-level driver is renewed in Coach version 6.42. In this new driver the problem with measurements with higher sampling frequency (above 5000 Hz) is solved. We recommend using this newest driver. This driver is signed, which means that during the driver installation no administrator rights are needed and during the installation under Windows Vista and Windows 7 no any Windows messages appear (provided that the CMA certificate is installed, see page 6). This driver is not WHQL certified because it is not longer possible. This means that for installation under Windows XP administrator rights are needed. Notice that after the driver has been installed the computer has to be restarted.

#### Warning:

If the CoachLab II+ driver for an older model of CoachLab II<sup>+</sup> (sold before February 2011) was already installed on your computer then Windows remains to use this driver even if the Coach 6 or Coach 6 Lite program was uninstalled. To force Windows to use the new driver it has to be reinstalled manually and for this administrator rights are needed. To reinstall the driver:

- Connect your old model of CoachLab II<sup>+</sup> to your computer.
- Go to **Control Panel** and start Windows **Device Manager**.
- Look under the section Ports (COM & LPT) for CoachLab II<sup>+</sup> device and right click it.
- Select **Update Driver Software**.
- Select Browse my computer for driver software.
- Select Let me pick-up from a list of device drivers on my computer.
- Select the newest driver from the list and install it.

## How can I recognize which model of CoachLab II<sup>+</sup> I have?

When a new CoachLab II<sup>+</sup> model (sold after February 2011) is connected to a computer then it is recognized and displayed as HID Device in the section Human Interface Devices of Windows Device Manager. When an old CoachLab II<sup>+</sup> model (sold before February 2011) is connected to a computer then it is recognized and displayed in the section Ports (COM & LPT). To check which model you have:

- Make sure that the CoachLab II<sup>+</sup> driver is installed on your computer.
- Go to **Control Panel** and start Windows **Device Manager**.
- Connect your CoachLab II<sup>+</sup> to your computer.
- Check under which section, Human Interface Devices Look or Ports (COM & LPT), CoachLab II<sup>+</sup> is displayed. If in the section Human Interface Devices then you have a new model of CoachLab II<sup>+</sup>, if in the section Ports (COM & LPT) then you have an old model of CoachLab II<sup>+</sup>.

# 4.2. Installation of the €Motion driver

For  $\in$ Motion also a special driver is used. Similar to the CoachLab II<sup>+</sup> driver is copied to the Window system during the Coach 6 installation. After Coach 6 installation is completed and  $\in$ Motion is connected to the computer for the first time (be sure that Coach 6 does not run at this moment) the driver installation takes place via the Found New Hardware Wizard.

The  $\in$ Motion driver is signed but not WHQL certified. It means that for the installation of  $\in$ Motion driver are under Windows XP administrator rights are needed. This also means that it is possible that during the installation under Windows XP warnings appear.

# 4.3. Installation of the MoLab driver

The MoLab data-logger is supported starting from Coach 6.4.

When MoLab is connected to a Windows 7 computer the first time then it is detected and the computer automatically starts installing the device driver software. After this installation is successfully finished (device name Anchor USB EZ-Link Cable installed) Windows automatically downloads and starts installation of Windows Mobile Device Center needed for communication between MoLab and the computer.

Prior to connecting MoLab to a Windows XP computer, the Windows XP driver for MoLab has to be installed.

- Download the XP driver for MoLab from the CMA web site www.cmascience.nl/english; the driver can be found under Support > Interfaces > MoLab datalogger.
- Unzip this file to a temporary folder on your hard disk.
- Right click the file wceusbsh.inf and select 'Install'. Follow instructions given in the new Find New hardware Wizard.<sup>10</sup>

Notice that to make communication between MoLab and the Windows XP computer possible you also need to install manually Windows ActiveSync program<sup>11</sup>.

#### 4.4. Installation of the VinciLab driver

Before you start to use VinciLab with the computer via the USB cable we strongly recommend to first install the program Coach 6 Lite or Coach 6 (version 6.5 or newer) on your PC. During the Coach installation the USB VinciLab driver setup files are copied to your computer.

In most cases the driver installation is automatically executed the first time VinciLab is connected to the USB port of the computer. After successful installation VinciLab is shown under Network adapters (in Windows Device Manager).

If the driver is not automatically installed or not successfully installed then the driver has to be installed manually in Windows Device



Manager by specifying the location of the USB VinciLab driver setup files.

#### To install USB driver manually

- Go to **Control Panel** and start Windows **Device Manager**.
- Right click not correctly installed VinciLab (marked by yellow exclamation sign) and select **Update Driver Software**.
- Select Browse my computer for driver software.
- Browse to Program Files (x86)\CMA\Coach6\Common\EthernetCableDriver location.
- Click **Next**. The driver software will be installed.
- After successful installation the message **Device driver software installed successfully** will appear.

<sup>&</sup>lt;sup>10</sup> Detailed description can be found at:

http://cma-science.nl/english/downloads/hardware/molab/Computer%20with%20MoLab.pdf

<sup>&</sup>lt;sup>11</sup> http://www.microsoft.com/download/en/details.aspx?id=15

# 4.5. Network installation of hardware drivers

It is recommended to perform all needed driver installations by a network administrator directly after Coach 6 installation. In this way the drivers will be distributed to all clients. For a standalone installation this has to be done after the installation process is finished. For a network installation this happens during the client installation (see chapter 3.3).

# 5. Updating an interface internal software

# 5.1. Updating firmware of ULAB, CoachLab II<sup>+</sup>, €Lab, and €Sense interfaces

To make use of new features available in Coach version 6.3 and higher it is necessary to update firmware of CMA interfaces ULAB, CoachLab II<sup>+</sup>,  $\in$ Lab, and  $\in$ Sense.

The Coach 6 program recognizes automatically when a connected to the computer interface needs to be updated and offers direct update. Firmware update can also be performed via the utility program **Firmware Update**.

🖶 Update CMA I 🔀
Please select an interface
ULAB
CoachLab II+
EuroLab
EuroSense

#### To update firmware when working with Coach 6

• When Coach, version 6.3 or higher, recognizes that a connected interface (ULAB, CoachLab II<sup>+</sup>, €Lab, or €Sense) needs to be updated then the following message is displayed.



- Click Yes to start the Firmware Update program for the connected interface.
- Next steps are similar to updating with the Firmware Update and described below.

## To update firmware with Update Firmware program

- Start the **Firmware Update** program via Start > All Programs > CMA Coach 6 > Utilities > Firmware Update.
- Select the interface for updating by pressing the button with the desired interface. Notice that the CoachLab II<sup>+</sup> and ULAB interfaces should be powered during this process.

# *For CoachLab II*<sup>+</sup>, *€Lab and €Sense*

- Press **Update** to start the update process.
- The program selects the correct version of the firmware file. In case more firmware files are listed select the latest firmware (the highest number) (file name#-\*.hx2)<sup>12</sup>. Click **OK**.

🕹 CoachLab II+ Firmware Update	
Press Update to renew the firmware of your CoachLab II+	Update
	Cancel

• The update process starts. At the end of this process the connected interface will reset itself.

<sup>&</sup>lt;sup>12</sup> name – the short interface name, # - the firmware version number; \* - the firmware language

- When the firmware is updated successfully then the message appears: *The firmware has been update to version #.*
- Click **OK** to accept.

Note: In rare cases the reset of €Lab/€Sense will not work properly, the interface LED remains on and there is no communication between the computer and the interface. In that case you have to restart computer to continue working with €Lab/€Sense.

#### For ULAB

- Under **Communication port** select the port to which the data-logger is connected (USB or COM port).
- Press the **Firmware Update** button.
- From the list of available firmware files select the downloaded firmware file ULAB#-\*.hx2<sup>13</sup>.
- The following message appears Updating the firmware clears all data in ULAB's memory. Update the ULAB firmware using ULAB. hx2?
- Pressing **Yes** starts the update process. At the end of this process ULAB will reset itself.
- When the firmware is updated successfully then the message appears: *The firmware update process has been completed successfully.* **ULAB** *is updated to firmware version* #.
- Click 🖾 to close the window.

# 5.2. Updating MoLab data-logger

To update Coach 6 CE on MoLab *MoLab Update* program is used. The latest information and MoLab updates are available at: www.cma-science.nl/english/downloads/utilities.html#Update.

# 5.3. Updating VinciLab data-logger

The operating systems and all applications of VinciLab can be updated via the VinciLab Update server available via a Wi-Fi connection. The detailed update procedure is included in the VinciLab package and available at CMA website:

www.cma-science.nl/english/support/hardware/vincilab\_update.pdf

ommunication port:	
JSB	L 🜮
LAB is undated to fir	
	imware version 2.03.

<sup>&</sup>lt;sup>13</sup> # - the firmware version number; \* - the firmware language