COACH 7 LITE
INSTALLATION GUIDE

For version 7.7

CENTRE FOR MICROCOMPUTER APPLICATIONS

https://cma-science.nl

TABLE OF CONTENT

I. INSTALLATION ON WINDOWS COMPUTERS

1. System requirements
Coach 7 Lite can be installed on a PC computer with at least the following requirements:
- Windows 7 or higher
- A processor which can be compared with Pentium 4, 2.4 GHz,
- 300 MB of free disk space
- 512 MB RAM (1 GB recommended).

2. License information
Your License name and code are unique identifiers that are required in order to successfully run Coach 7 Lite. You can find your License Name and License Code in your License document that accompanied this product. You must keep your license identifiers confidential from anyone outside your school or organization.

3. Installation for a single user account
For the installation administrator rights are required.
- Close down any programs that may be running on your computer.
- Double-click the installation MSI file or right-click and choose Install.
- The CMA Coach 7 Lite Windows Installer will start. Follow instructions on the screen.
- After the Coach 7 Lite installation is completed the CMA Coach 7 Lite group will be created in the Windows Start menu, see '5. Starting Coach 7 Lite'.

4. Starting Coach 7 Lite
After installation the group **CMA Coach 7 Lite** will be created in the Windows Start menu and a Coach 7 Lite icon will be placed on the desktop. The CMA Coach 7 Lite group has the following shortcuts:
Student: This icon starts Coach and opens Activities/Results in the user level specified in the Activity/Result.
Utilities:

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

To start Coach 7 Lite:
1. Click the Coach 7 Lite icon on the desktop. Coach starts and will open Activities in the user level specified in the Activity.
Or
2. Double-click a Coach Activity file (*.cma7) or a Coach Result file (*.cmr7). Coach directly opens the selected Activity or Result in the user level specified in the Activity.
Or

3. Click on the Start button (Windows Start menu). Select **All Programs** and hence **CMA Coach 7 Lite**. Next click on one of icons as described above.

Starting Coach 7 Lite the first time

When Coach 7 Lite is started the first time it asks to specify:

1. the preferred language of the Coach user interface - select the language from the list. Notice that the user interface language can also be set in Coach via the main menu option **Options > Switch Language** (present only in Senior student and Author mode).

2. the license information - type in your **License Name** and **License Code** exactly as they appear in your **License** document. Confirm with OK. Notice that this is done per user; if another user will start Coach again he/she will be asked to enter the license information again.
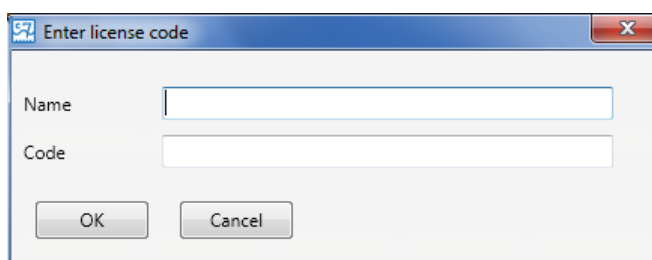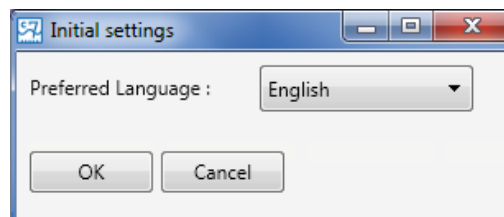
II. INSTALLATIONS ON MAC COMPUTERS

1. System requirements

Coach 7 Lite can be installed on a MAC computer with at least the following requirements:

- OS® X 10.10 Yosemite or newer
- 300 MB of free disk space
- 512 MB RAM (1 GB recommended).

2. License information

Your License name and code are unique identifiers that are required in order to successfully run Coach 7 Lite. You can find your License Name and License Code in your License document that accompanied this product. You must keep your license identifiers confidential from anyone outside your school or organization.

3. Coach 7 Lite installation for a single user

- Open the Coach 7 Lite DMG installation file.
- Drag the Coach 7 Lite icon to the Applications icon, or copy the Coach 7 Lite icon manually to the place of your choice.
- If necessary, approve Coach 7 Lite App in the 'System Preferences' => 'Security & Privacy' => 'General'.
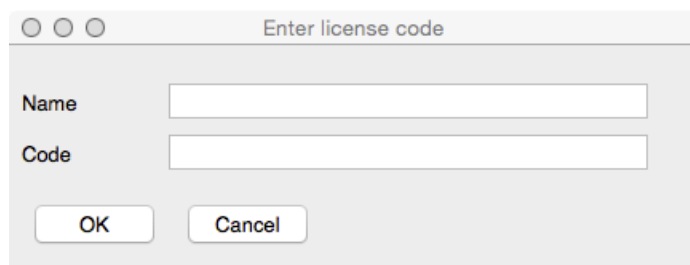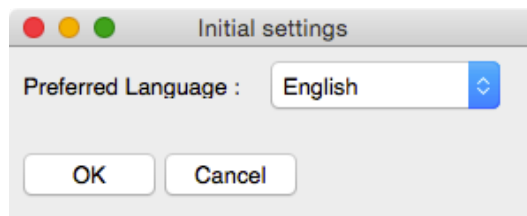
4. Starting Coach 7 Lite

To start Coach 7 Lite
- Click the Coach 7 Lite App (by default located) in Applications.

Starting Coach 7 Lite the first time

When Coach 7 Lite is started the first time it asks to specify:

1. the preferred language of the Coach user interface - select the language from the list. Notice that the user interface language can also be set in Coach, via the main menu option **Coach 7 Lite > Switch Language** (present only in Senior student and Author mode).

2. the license information - type in your **License Name** and **License Code** exactly as they appear in your **License** document. Confirm with OK. Notice that this is done per user; if another user will start Coach again he/she will be asked to enter the license information again.

III. COACH 7 LITE DASHBOARD

After opening Coach 7 Lite displays Dashboard with a number of buttons that let you quickly do some tasks.

Get Started

 Measurement
with options **Time-based**, **Event-based** and **Manual** – to open an Activity (Type: Measurement) offering measurement environment with predefined measurement settings.

Control
with options **Programming with CoachLab II+** and **Programming with WiLab** – to open an Activity (type: Measurement with Program) offering control instructions for creating measurement and control programs for the selected interface.

Spectrometer
with options **Recording Emission Spectrum** and **Recording Absorption Spectrum** – to open an Activity (type: Spectrometer) offering environment for recording and analyzing

Emission and Absorption spectra respectively.

Quit

Quit Coach 7 - to close Coach 7.

Open

Activity or Result – to open an Activity (*.cma7) or Result (*.cmr7) file. By default this is the folder `..\Users\`*User Name*`\Documents\Coach 7 Lite`.

CMA Tutorials – to open a CMA Tutorial provided in Coach 7 Lite.

CMA Projects – to open an Activity or Result from CMA Projects.

Recent Activity or Result – to open a recently opened Activity or Result.

Tools

Switch Language – to switch a Coach interface language.

Hardware Settings – to specify some hardware settings e.g. an IP address for wireless communication with VinciLab.

Firmware Update – to check and update the firmware of interfaces.

IV. HARDWARE SUPPORT FOR WINDOWS COMPUTERS

1. CLab, €Lab and €Sense

CMA interfaces such as CLAB, €Lab and €Sense are equipped with HID[1] 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.

2. CoachLab II⁺

There are two models of the CoachLab II⁺ interface available on the market:
- older models, sold before February 2011, with no sticker or sticker with SAG08XXXXX or SAG09XXXXX, and
- newer models sold after February 2011, with sticker SAG10XXXXX or higher.

The newer model is equipped with HID[2] USB for which a standard driver is available in

---

[1] Human Interface Device

Windows.[2] There are no administrator rights needed to install the driver under all Windows versions.

For the older model of CoachLab II⁺ a low-level driver has to be installed. For this purpose, separate MSI installations are available, see '4. Installation of low-level drivers'.

If a recent Coach 7 Lite or Coach 6 version was installed on your PC and the old model of CoachLab II⁺ has already been used before, you do not have to install the low-level drivers.

How can I recognize which model of CoachLab II⁺ I have?

When a new CoachLab II⁺ model (sticker SAG10XXXXX or higher) 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⁺ model (with no sticker or sticker with SAG08XXXXX or SAG09XXXXX) 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⁺ driver is installed on your computer.
- Go to **Control Panel** and start Windows **Device Manager**.
- Connect your CoachLab II⁺ to your computer.
- Check under which section, Human Interface Devices Look or Ports (COM & LPT), CoachLab II⁺ is displayed. If in the section Human Interface Devices then you have a new model of CoachLab II⁺, if in the section Ports (COM & LPT) then you have an old model of CoachLab II⁺.

3. €Motion

Also for €Motion a low-level driver has to be installed. For this purpose, separate MSI installations are available. see '4. Installation of low-level drivers'.

If a recent Coach 7 Lite version was installed on your PC and €Motion has already been used before, you do not have to install the low-level drivers.

4. Installation of low-level drivers

The low-level drivers are digitally signed with the CMA license certificate. This certificate must be installed prior to the installation of low-level drivers.

1. Download the public CMA certificate at www.cma-science.nl/support/cmapublic.zip.
2. Install the CMA public certificate:
   - Extract cmapublic.zip on your local pc. For example, to C:\
   - Run a command prompt as administrator - in the Windows search box type cmd
   - Right-click on suggested "Command prompt" and select "Run as Administrator"
   - Go to the folder with the extracted files in the command prompt:
     cd c:\CMAPublic
   - Run the command "install"
   - After running this command you can delete the extracted files.
3. On Windows 7 on 64-bits systems you also need to install Microsoft hotfix

---

[2] This version of CoachLab II+ is recognized as 'CoachLab II++' in Windows.

KB2921916 (restart your computer after the installation)[3].

4. Download the low-level drivers installation file, at www.cma-science.nl/enCoach7. Choose the correct installation file for your PC. There are three installations for different types of PC processors:

x86 – for Intel based 32 Bits Processors.

x64 – for Intel Based 64 Bits Processors (also known as x64, x86_64 en AMD64).

i64 - for Itanium 64 Bits Processors (also known as IA-64).

Use x86 for 32-bits OS systems and x64 for 64-bits OS systems, unless you are sure that your PC has a 64-bit Itanium processor.

The installation checks itself if it has been installed on a PC with "right processor".

5. Install the low-level drivers (administrator rights needed).

6. For a silent installation, you can specify from a command prompt (run as administrator), the following command:

```
msiexec / i <MSI file> / quiet
```

7. Notice that after the low-level drivers have been installed the computer has to be restarted.

8. Connect an interface to your computer; the driver of the connected interface will be automatically installed (no administrator rights needed).

5. MoLab

When MoLab is connected to a Windows 7 (or higher) computer the first time 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.

6. VinciLab

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).
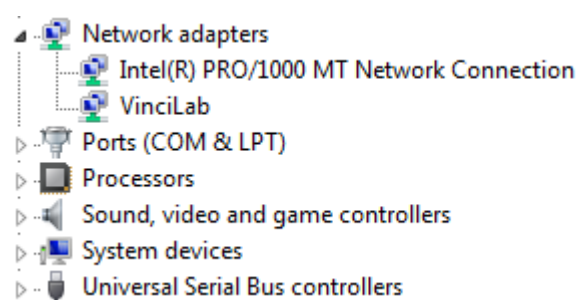
If the driver is not automatically installed or not successfully installed then the driver has to be installed manually in Windows Device Manager by specifying the location of the USB VinciLab driver setup files.

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

---

[3] The KB2921916 hotfix is not installed via Windows Update. This hotfix is an addition to KB3033929, which is installed by Windows Update.

location.
- Click **Next**. The driver software will be installed.
- After successful installation the message **Device driver software installed successfully** will appear.

If you experience problems with communication with VinciLab consult the FAQs on the CMA website or check the on-line document:
https://cma-science.nl/resources/en/interfaces/Problems with VinciLab.pdf.

V. HARDWARE SUPPORT FOR MAC COMPUTERS

Coach 7 Lite for Mac supports the CMA interfaces: CLAB, €Lab, €Sense and VinciLab without driver installation. The first time such an interface is connected to the MAC computer it will work directly.
For old models of CoachLab II⁺: models sold before February 2011, with no sticker (from before 2008) or sticker with SAG08XXXXX or SAG09XXXXX the special driver is needed. Download, at www.cma-science.nl/enCoach7, the low-level drivers for OS X and install it.
The following interfaces are not supported in Coach 7 Lite for Mac:
- Old models of CoachLab II with serial connection,
- €Motion,
- €Lab + €Motion,
- MoLab.

VI. UPDATING AN INTERFACE INTERNAL SOFTWARE

1. Updating firmware of CLAB, CoachLab II⁺, WiLab, €Lab, and €Sense

To make use of new features available in Coach it is necessary to keep the firmware of interfaces updated. Firmware update can be performed via the Dashboard button **Firmware Update**.
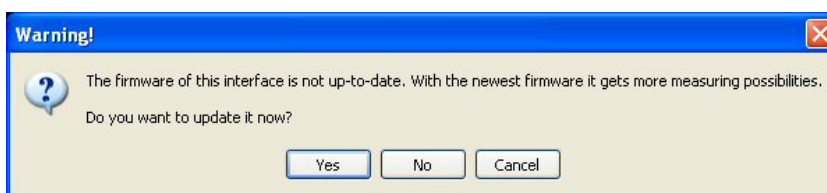
To update firmware via the Firmware Update option
- Connect an interface you want to update to your computer. The CLAB and CoachLab II⁺ interfaces should be powered during updating.
- Start Coach and click the Dashboard button **Firmware Update**.
- Select your interface from the list.
- Press **Update** to renew the firmware of your interface.
- The program selects the correct version of the firmware file. If desired select the firmware file (*.hex) and accept with **OK**.
- The update process starts. At the end of this process the connected interface will reset itself.
- When the firmware is updated successfully then the message appears: *The firmware has been updated 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.

During working with Coach, the program recognizes automatically when a connected interface needs to be updated and offers direct update.

To update firmware when working with Coach 7

- When Coach recognizes that a connected interface needs to be updated then the message is displayed.

- Click **Yes** to start the **Firmware Update** program directly.
- Next steps are similar to updating with the Firmware Update.

2. Updating MoLab

NOTE: This functionality is available **only for Windows** computers.

To update Coach CE on MoLab **MoLab Update** utility program can be used. The latest update is available at the CMA website www.cma-science.nl ((Support > Product Support > MoLab).

3. Updating VinciLab

The operating system 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 https://cma-science.nl (Support > Product Support > VinciLab).