	<i>oXigen system</i>	Doc.
	Base System Description	Pag. 1/ 4

Galileo Engineering – Slot.it self-signed driver installation guide

This guide describes the procedure to follow to install the self-signed drivers released by Galileo Engineering srl – Slot.it

Before going on, it is necessary to say that latest releases of Windows OS (starting from Windows 7) require digitally signed drivers. These files include an electronic fingerprints that indicates the details of the company the driver was produced by and few other parameters. This increases security, as a signed driver that has been modified will no longer have an intact signature. Drivers are signed using code signing certificates. Unsigned drivers can be installed under Windows OS anyway disabling signature verification, getting into the Troubleshooting options from the boot manager. The procedure is well explained in many website but couldn't be result user friendly.

Galileo Engineering currently provides digitally signed drivers for its USB devices: oXigen Dongle and Live Timing Box (LTB). Driver folders can be downloaded directly from <http://www.slot.it> website, download area. The examples in the procedure below refers to oXigen dongle driver installation but can be followed also for LTB device.

The installation process consists of two procedure:

- 1 – Signed certificate installation
- 2 – Driver Installation

1 – Signed certificate installation

This procedure has to be followed the first time the device is installed on the PC or after an earlier uninstall operation. It installs the Galileo Engineering digital certificate used by Windows to complete the driver installation.

Download the driver files from the website and browse to the unzipped folder. Three files are present there:


- 1 : a text file with all the information that device installation components used to install a driver (.inf)
- 2 : a catalog file used as digital signature for the driver file (.cat)
- 3 : company signed certificate (.cer)

To install the certificate, proceed as follows:

- doubleclick on certificate file (GalileoEngineering srl.cer in the example)
- click on **Install Certificate**
- select **Local Machine** → **Next**
- select **Place all certificates in the following store** and browse **Trusted Root Certification Authorities** → **Next**
- click on **Finish**
- confirm with **OK**

The process is shown in five sequential screenshots:

- File Explorer:** Shows the directory `O2_WinDrivers` containing the certificate file `GalileoEngineeringsrl.cer`.
- Certificate Properties:** Shows the 'Certificate Information' tab for `GalileoEngineeringsrl.cer`. It is issued to `Galileo Engineering srl` and is valid from `28/06/2016` to `28/06/2021`. The 'Install Certificate...' button is highlighted.
- Certificate Import Wizard - Welcome:** The 'Local Machine' radio button is selected under 'Store Location'. The 'Next' button is highlighted.
- Certificate Import Wizard - Certificate Store:** The option 'Place all certificates in the following store' is selected. The 'Certificate store' dropdown is set to 'Trusted Root Certification Authorities'. The 'Next' button is highlighted.
- Certificate Import Wizard - Completing:** A summary box shows 'Certificate Store Selected by User' as 'Trusted Root Certification Authorities' and 'Content' as 'Certificate'. The 'Finish' button is highlighted.
- Success Message:** A small dialog box displays 'The import was successful.' with the 'OK' button highlighted.

	oXigen system	Doc.
	Base System Description	Pag. 3/ 4

From this moment on, the PC will be recognized as trusted drivers all the ones associated to the certificate just installed. This means that if the LTB is plugged into the PC, it is enough to install its driver which will be considered by Windows as signed driver.

As said before, the certificate has to be installed again after a device uninstall operation.

2 – Driver Installation

To complete the driver installation, proceed as follows:

- plug the device (oXigen dongle in the example) into the PC
- run to **Control Panel** → **Hardware and Sound** → **Device Manager**
- under **Ports (COM & LPT)**, the device appears as **Serial USB Device (COM xx)**
- click right on **Serial USB Device** → **Update Driver Software**
- select **Browse my computer for driver software**
- select the driver location browsing to the driver folder → **Next**
- flag **Always trust software from “Galileo Engineering srl”** → **Install** on the Windows Security prompt
- click **Close** to confirm the driver software installation
- run again to **Control Panel** → **Hardware and Sound** → **Device Manager**
- under **Ports (COM & LPT)**, the device appears as **oXigen Dongle (COM xx)**
- click right on **oXigen Dongle** → **Properties** → **Driver**
- drivers details: **Drivers Provider : Slot.it**, **Digital Signer : Galileo Engineering srl**
- click **OK** to esc



The image illustrates the step-by-step process of installing a driver for an oXigen Dongle in Windows. The process begins in the Control Panel, where the user navigates to 'Hardware and Sound' and then 'Device Manager'. In Device Manager, the user identifies the 'Dispositivo seriale USB (COM8)' device, right-clicks it, and selects 'Update Driver Software...'. The user then chooses 'Browse my computer for driver software' and selects the folder 'C:\Users\aa\Desktop\O2-WinDrivers'. After selecting 'Let me pick from a list of device drivers on my computer', the user is prompted to install software from Galileo Engineering srl. The user accepts the security prompts and completes the installation. Finally, the user views the 'oXigen Dongle (COM8) Properties' dialog, which displays the following driver details: Driver Provider: Slot.it, Driver Date: 28/04/2012, Driver Version: 1.2.0.0, and Digital Signer: Galileo Engineering srl. The process concludes with the user clicking 'OK' to close the properties dialog.