

# USB Driver (u-blox 5 and ANTARIS 4) for Windows CE

## User's Guide



### Abstract

This document describes the installation of a USB driver for the Windows CE operating system to be used with u-blox5 and ANTARIS®4 receivers.

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# 1 Subject

This document describes the installation of a USB driver for the Windows CE operating system to be used with u-blox5 and ANTARIS®4 receivers. The driver has been derived from a generic USB driver available at <http://www.softclub.jp/zoro/ce/>. It has been compiled with eMbedded Visual C++ 3.0 for platform "WCE ARM" and tested on a Fujitsu-Siemens LOOX 720 (running Microsoft Pocket PC 2003) but it should work on all ARM based USB hosts. Adaptations to other processors or platforms will have to be done directly from the original source code. u-blox assumes no design service for this purpose nor will u-blox be able to support such an endeavor.

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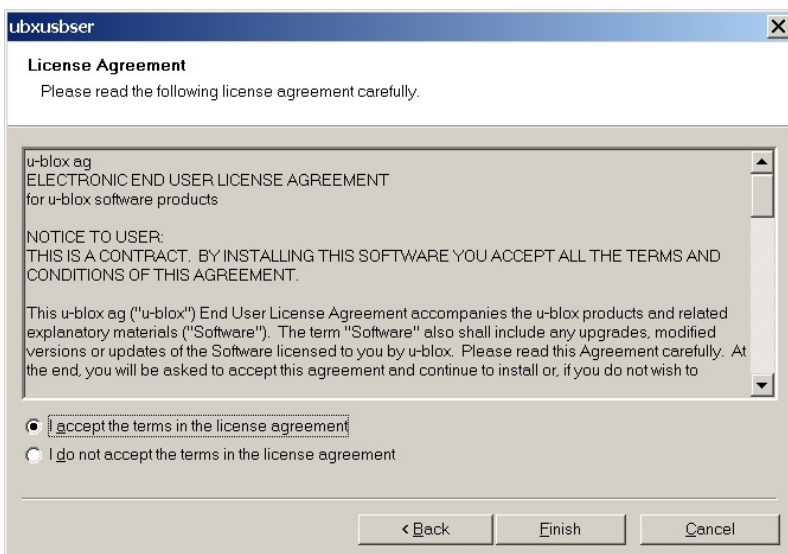
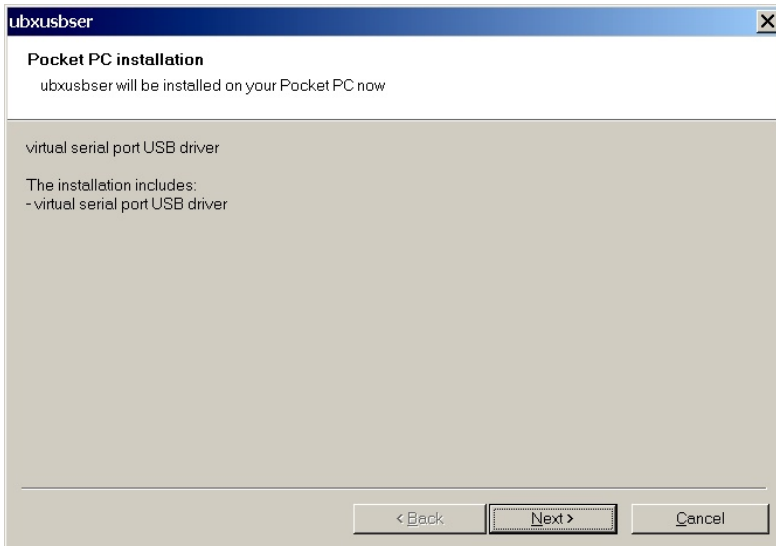
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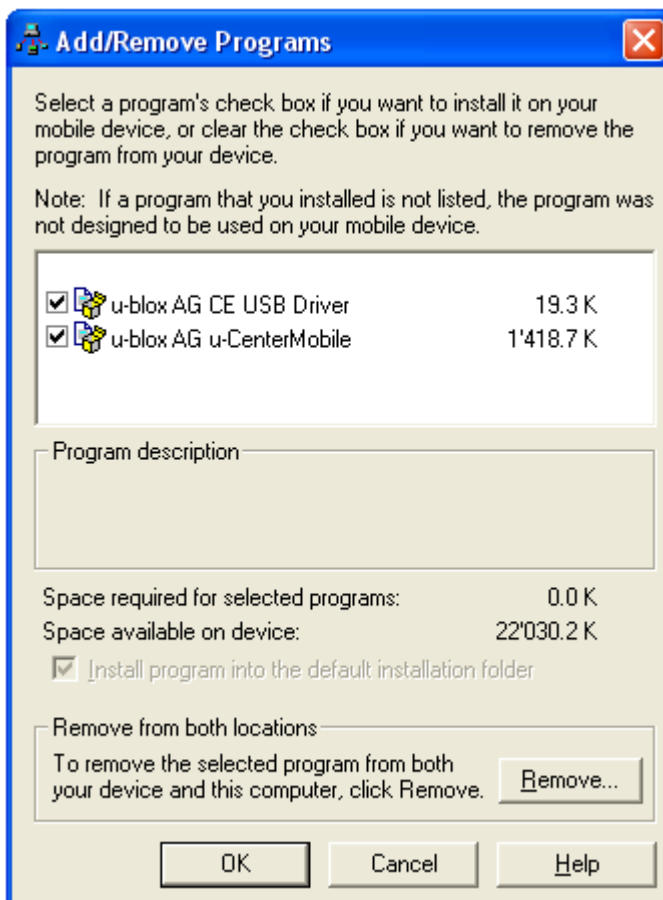
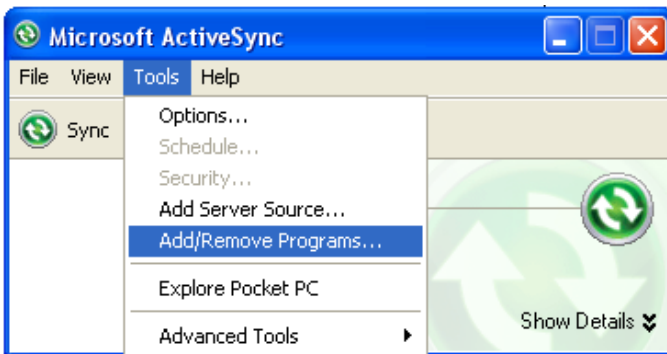
**For the redistribution and use of this driver software, the conditions in Appendix A must be observed.**

## 2 Installation Instructions:

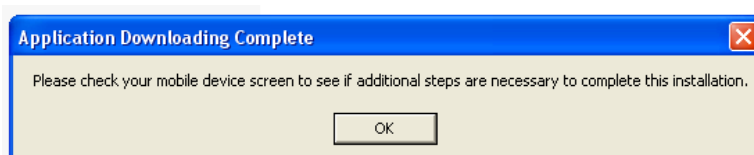
- ActiveSync must be connected to the Pocket PC.
- Run ubxusbser.exe on the workstation.



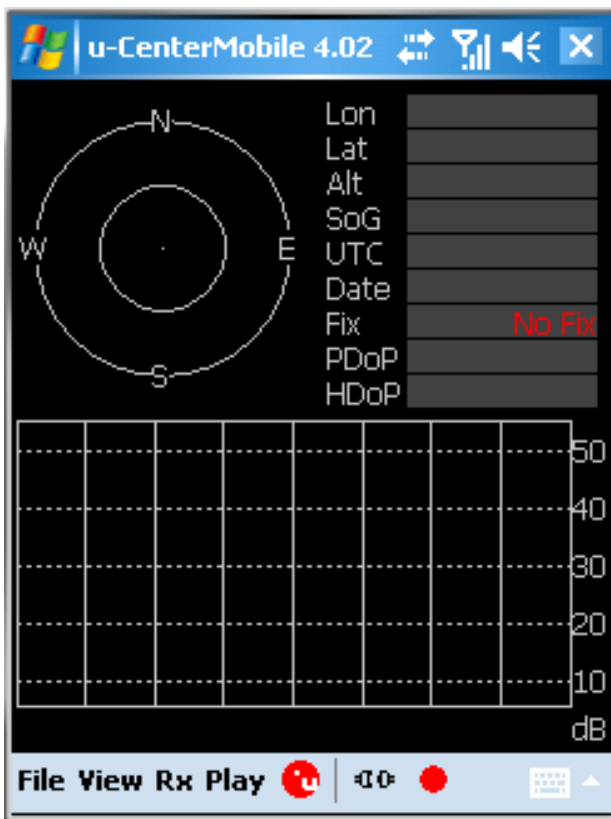
- USB drivers will be installed onto Pocket PC over ActiveSync. Use Add/Remove Programs to install the driver.



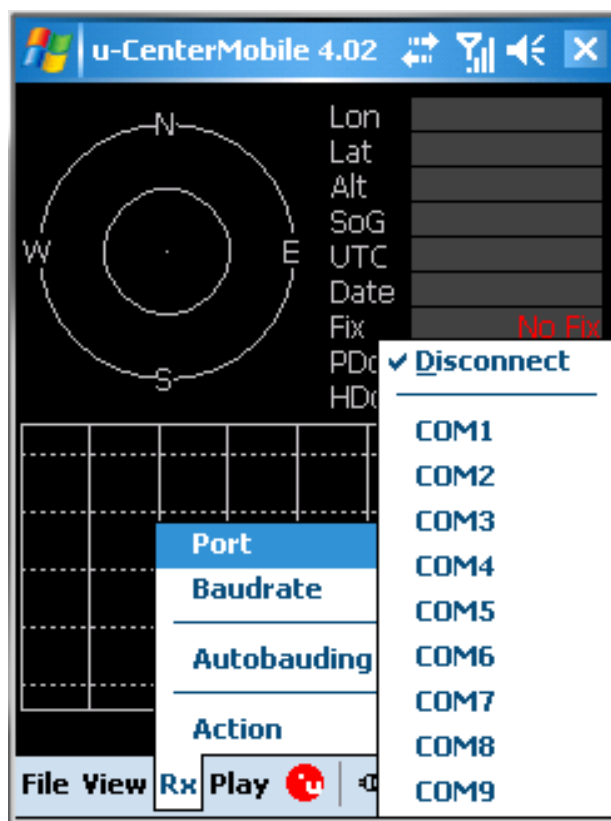
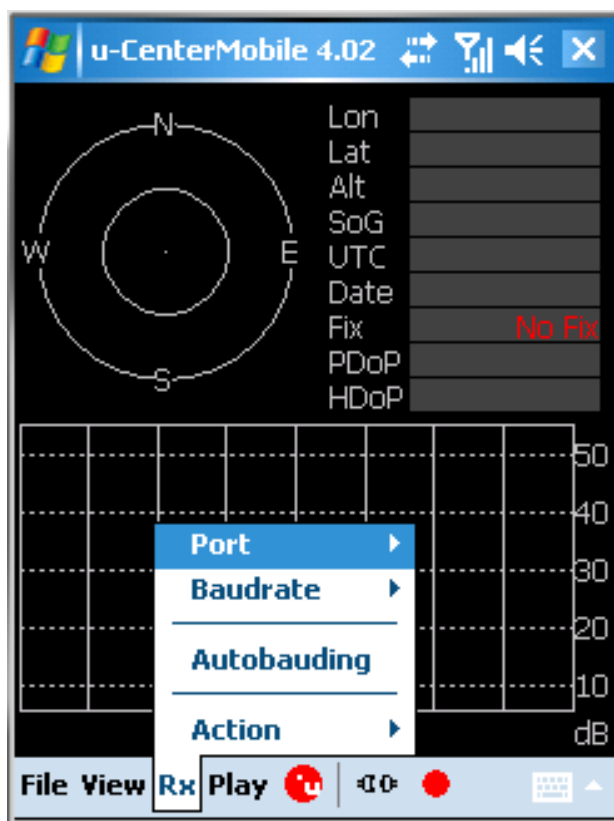
- Restart the Pocket PC.



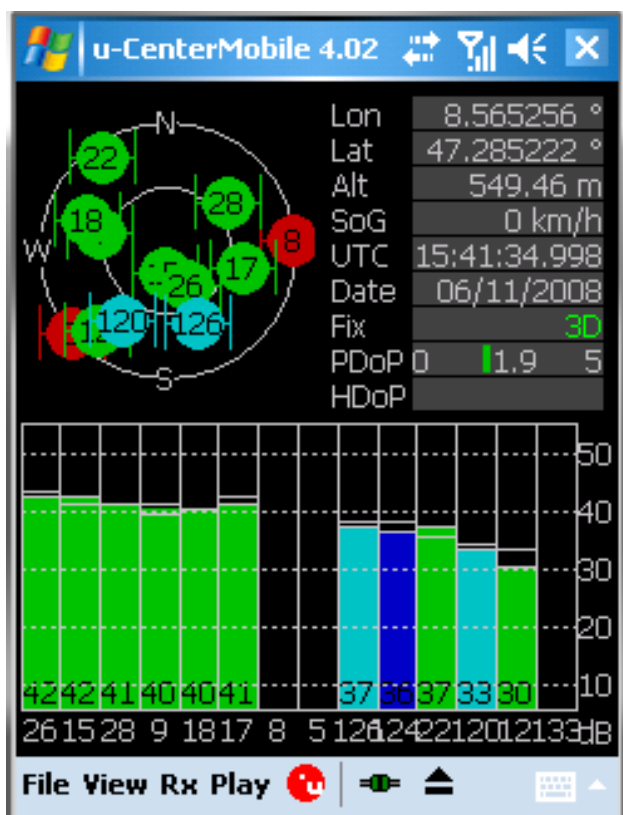
- Connect the u-blox GPS Receiver to the USB host port of the Pocket PC.
- Start the navigation software of your choice, in our example u-centerMobile from u-blox. u-centerMobile is available for download over the u-blox website under: [www.u-blox.com/products/u\\_center\\_mobile.html](http://www.u-blox.com/products/u_center_mobile.html)



- The COM port can now be selected in the navigation software. Windows Mobile does not list the assignment information for the available communication ports, which can make selecting the correct serial port number difficult.



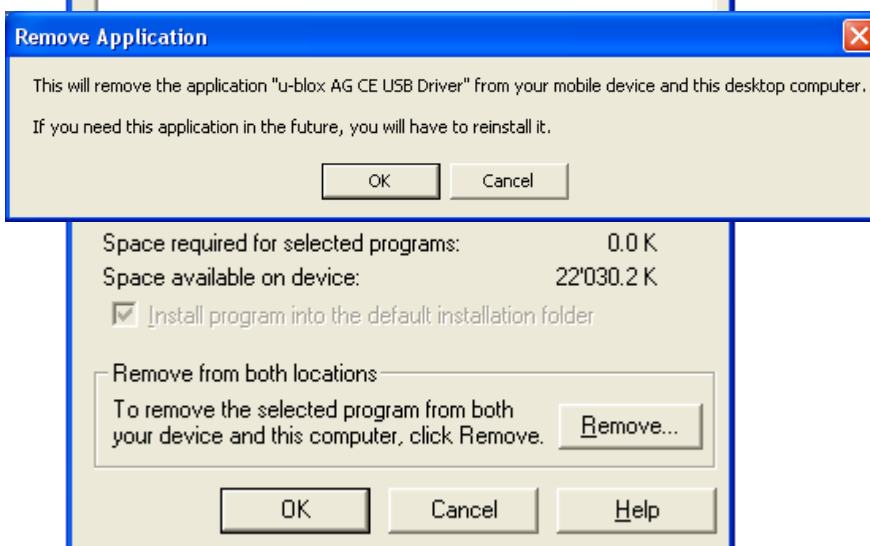
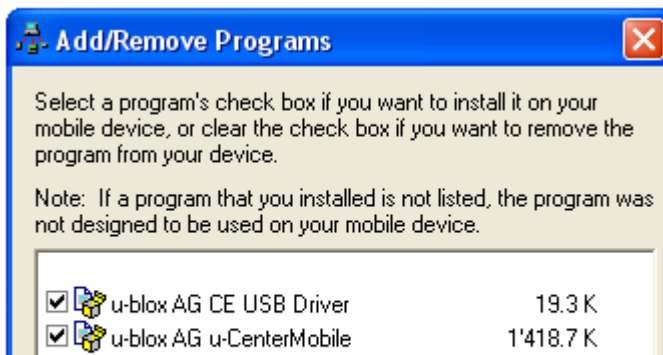
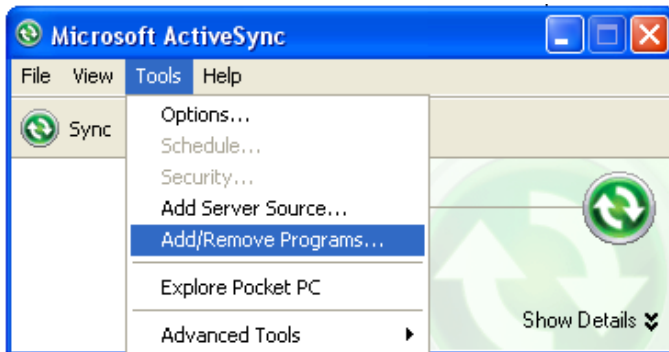
- After a successful installation the position and available satellites will be displayed. (In case the GPS receiver has been able to perform a position fix)





### 3 Uninstall Instructions:

- Close the COM port of the GPS application that uses the u-blox GPS receiver or close the application completely.
- Disconnect the u-blox GPS Receiver from the host port of the pocket pc.
- Delete the UBXUSBSER.dll from the \Windows directory of your Pocket PC over ActiveSync. Use Add/Remove Programs to remove the driver (ActiveSync must be connected to the Pocket PC).

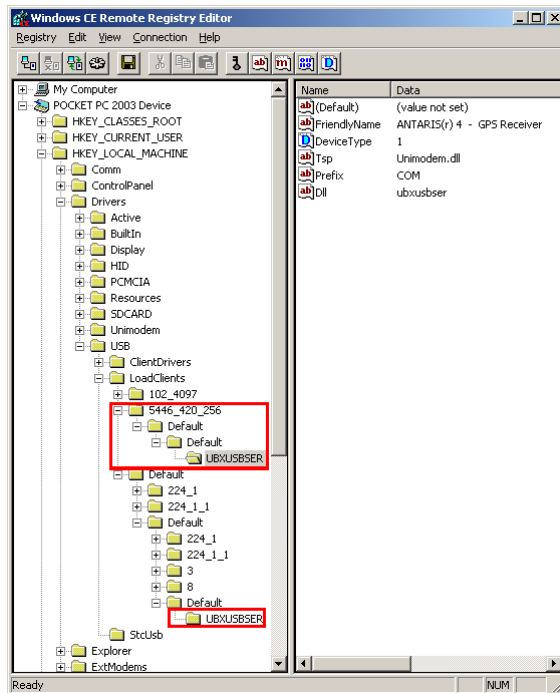


- The driver has made some registry entries, which can be deleted by using the program Windows CE Remote Registry Editor. The following three keys including all the sub keys can be deleted.

HKEY\_LOCAL\_MACHINE\Drivers\USB\LoadClients\5446\_421\_256

HKEY\_LOCAL\_MACHINE\Drivers\USB\LoadClients\5446\_420\_256

HKEY\_LOCAL\_MACHINE\Drivers\USB\LoadClients\Default\Default\UBXUSBSER



**Figure 1: Registry**

## 4 Other Processors and Operating Systems

Use the generic Windows CE USB driver available at <http://www.softclub.jp/zoro/ce/> and adapt the source code to your device. Please note, u-blox cannot offer design services for such an adaptation nor will it be able to support it.



The archive at <http://www.softclub.jp/zoro/ce/232usb040525.lzh> does not work with WinZip. WinRAR, available at <http://www.winrar.de/>, works.

### 4.1 Configuration of the generic Windows CE USB driver

It is necessary to configure the generic Windows CE USB driver. For this purpose, it comes with an executable (232usb.exe). Figure 2 shows the recommended configuration.

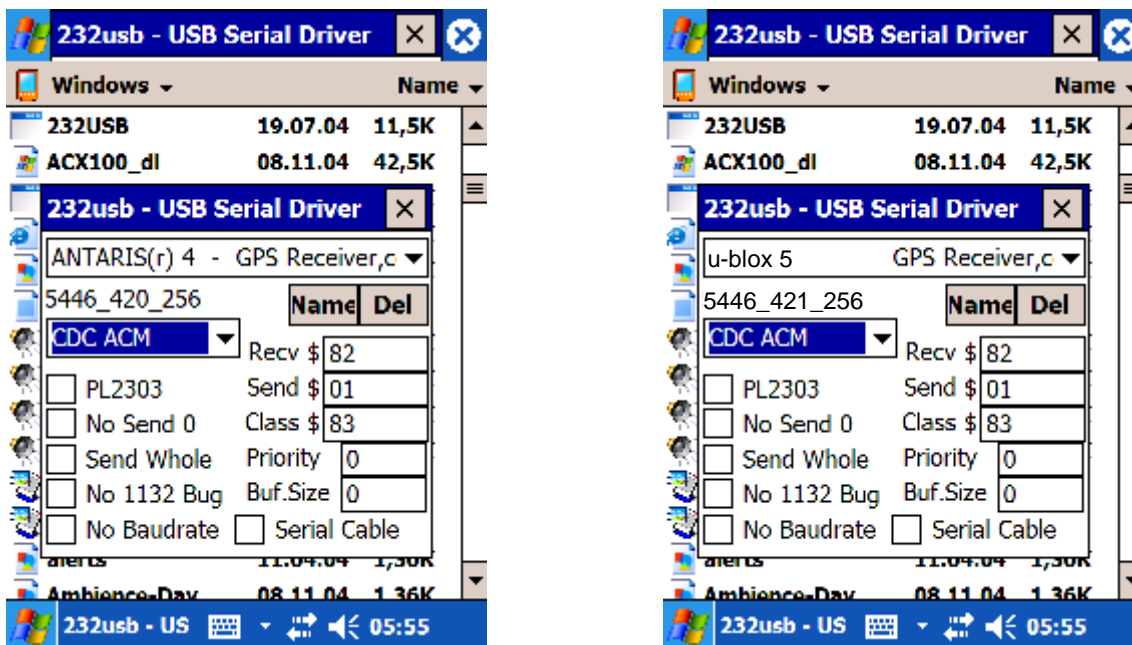


Figure 2: Configuration Window

## A License / Redistribution

The driver has been derived from a generic USB driver available at <http://www.softclub.jp/zoro/ce/>. It can be distributed according to the license disclaimer below.

```
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232usb - RS232 USB driver for WindowsCE  
Copyright (c) 03-04 Zoroyoshi, Japan  
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```

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