

USB Driver for Windows CE (u-blox 5/6 and ANTARIS 4) User Guide

Abstract

This document describes the installation of a USB driver for the Windows CE operating system to be used with u-blox 5/6 and ANTARIS[®]4 GPS receivers.



Document Information

Title	USB Driver for Windows CE
--------------	---------------------------

Subtitle	(u-blox 5/6 and ANTARIS 4)
-----------------	----------------------------

Document type	User Guide
----------------------	------------

Document number	GPS.G4-CS-06003-B
------------------------	-------------------

Document status

This document and the use of any information contained therein, is subject to the acceptance of the u-blox terms and conditions. They can be downloaded from www.u-blox.com.

u-blox makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice.

u-blox reserves all rights to this document and the information contained herein. Reproduction, use or disclosure to third parties without express permission is strictly prohibited. Copyright © 2010, u-blox AG.

Contents

Contents	3
1 Subject	4
2 Installation Instructions:	5
3 Uninstall Instructions:	10
4 Other Processors and Operating Systems	12
4.1 Configuration of the generic Windows CE USB driver	12
A License / Redistribution	13
Revision history	13
Contact	14

1 Subject

This document describes the installation of a USB driver for the Windows CE operating system to be used with u-blox 5/6 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.

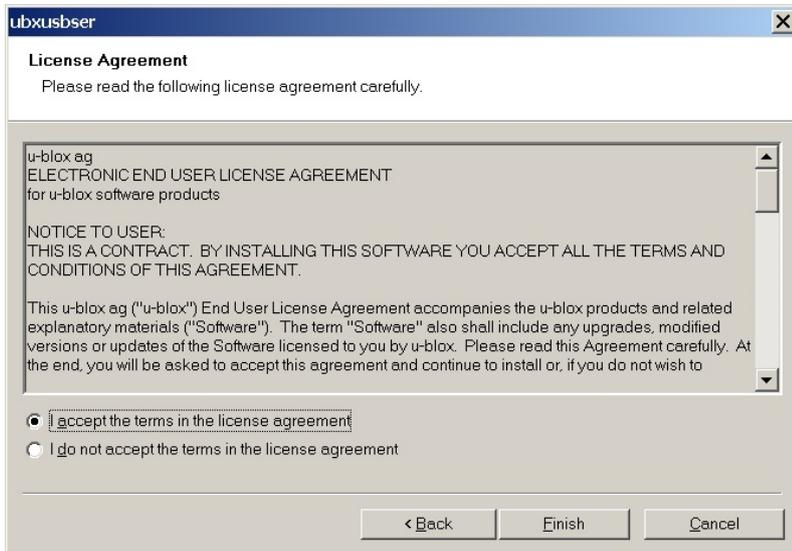
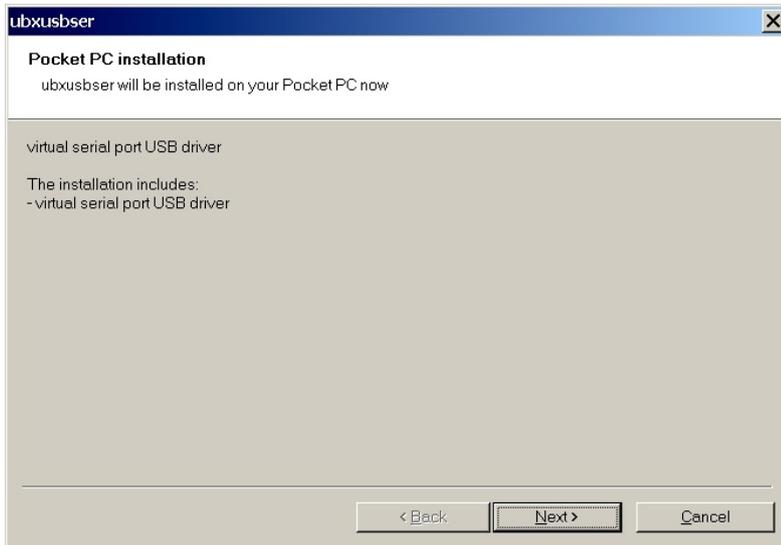
u-blox assumes no responsibility for correctness, manufacturability, comprehensiveness or fit for the purpose of this driver. The Customer agrees that u-blox is not liable for any claims or consequential, incidental, indirect, exemplary, special or other damages arising out of the use of the Windows CE USB Driver for u-blox 5/6 and ANTARIS 4, direct or indirect, or from the drivers based on it, including but not limited to claims or damages based on infringement of patents, copyrights or other intellectual property rights.

The copying, distribution and utilization of this document and the Windows CE USB Driver for u-blox 5/6 and ANTARIS 4 as well as the communication of its contents to 3rd parties without expressed authorization is prohibited.

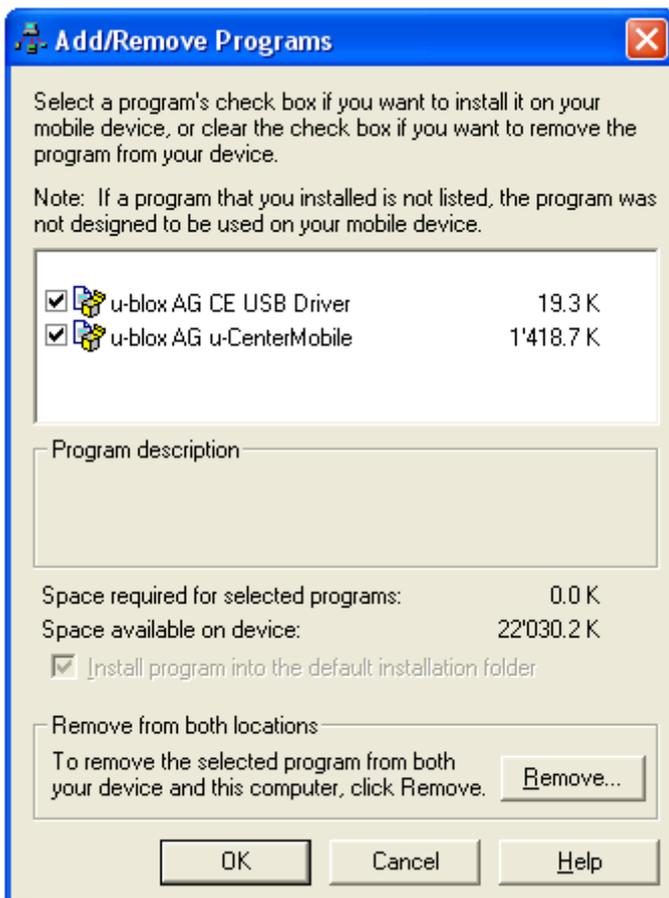
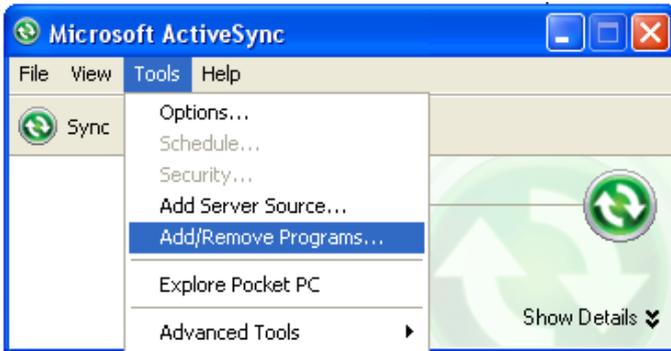
 **For redistribution and use of this driver software, the conditions in Appendix A must be observed.**

2 Installation Instructions:

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



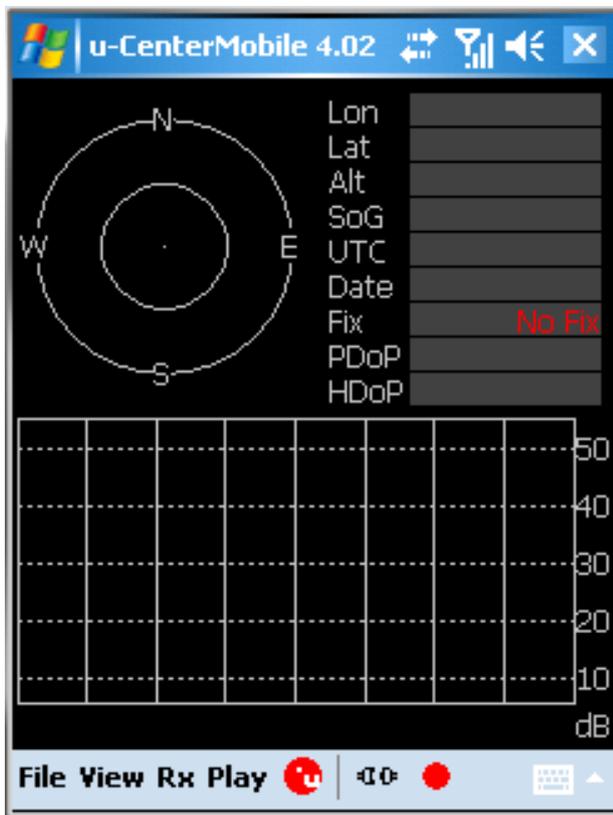
- USB drivers will be installed onto Pocket PC over ActiveSync. Use Add/Remove Programs to install the driver.



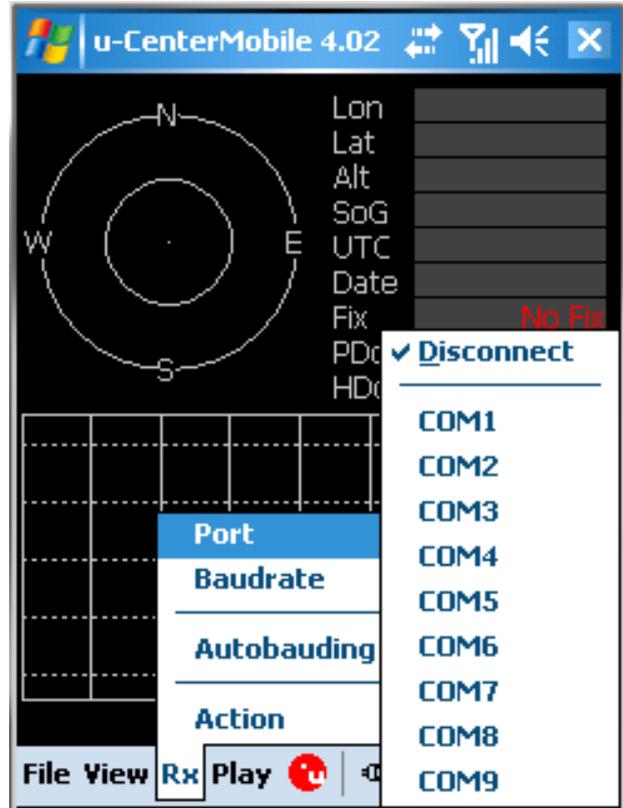
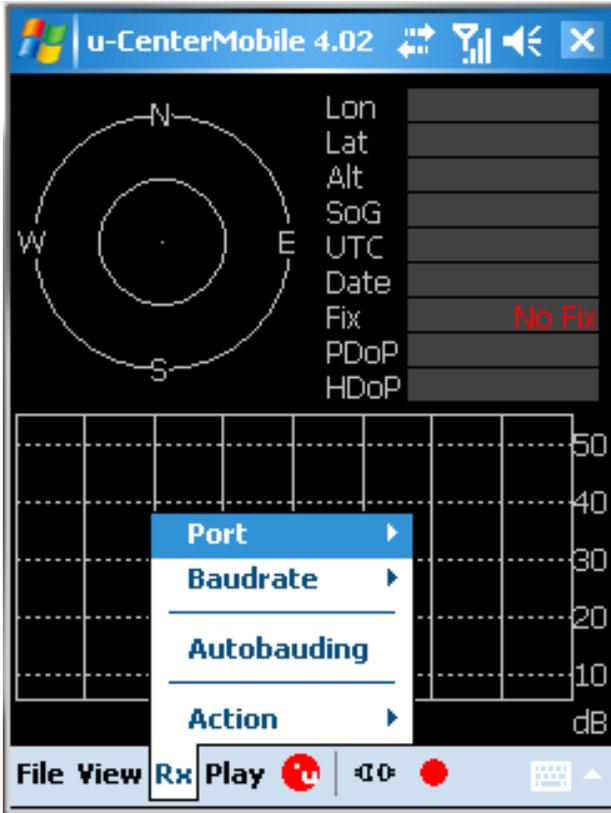
- Restart the Pocket PC.



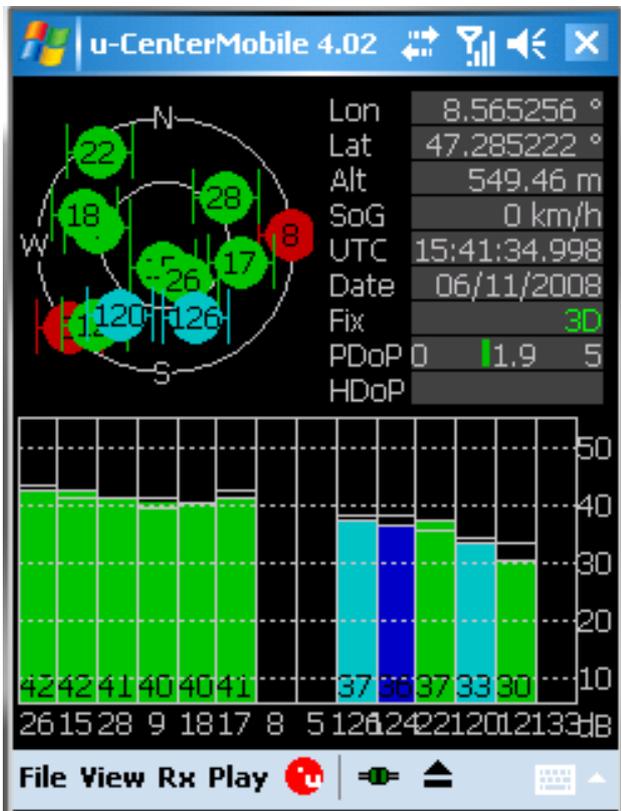
- Connect the u-blox GPS Receiver to the USB host port of the Pocket PC.
- Start the navigation software of your choice, in our example u-centerMobile from u-blox. u-centerMobile is available for download over the u-blox website under: www.u-blox.com/products/u_center_mobile.html



- 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.

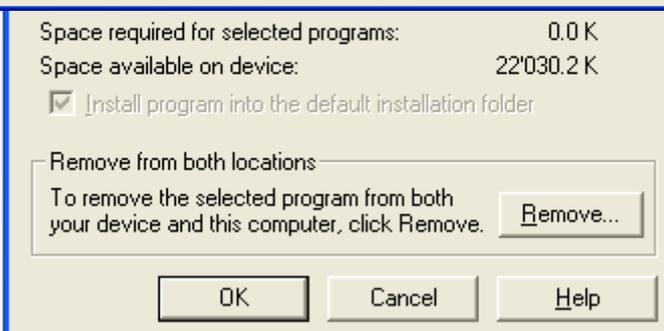
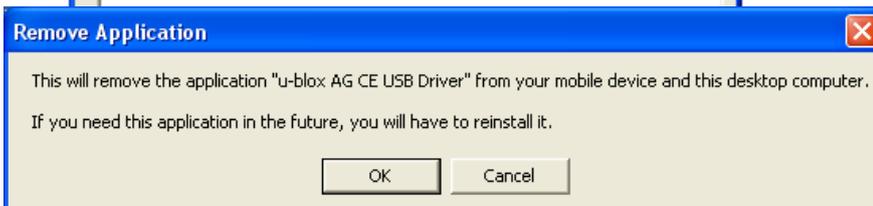
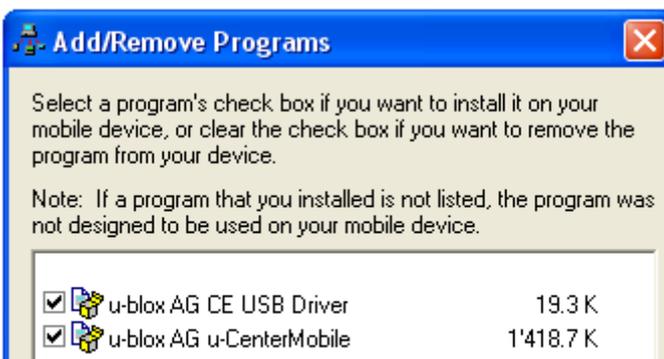
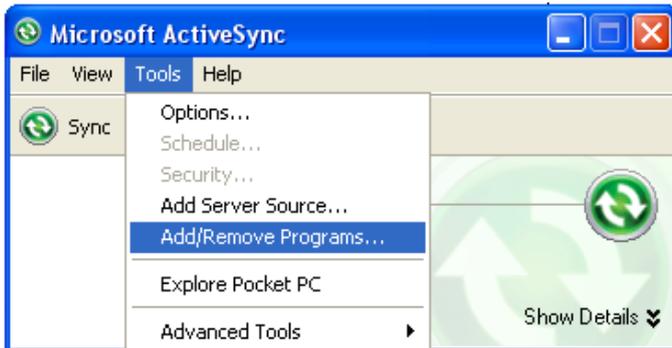


- After a successful installation the position and available satellites will be displayed. (In case the GPS receiver has been able to perform a position fix)



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

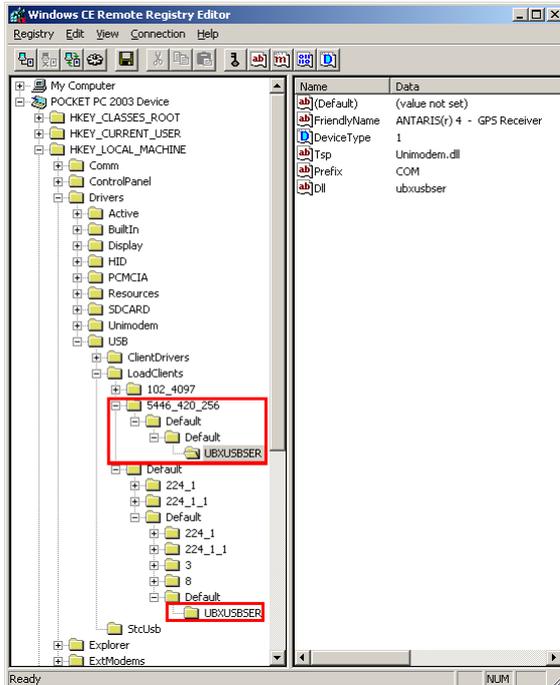


Figure 1: Registry

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.

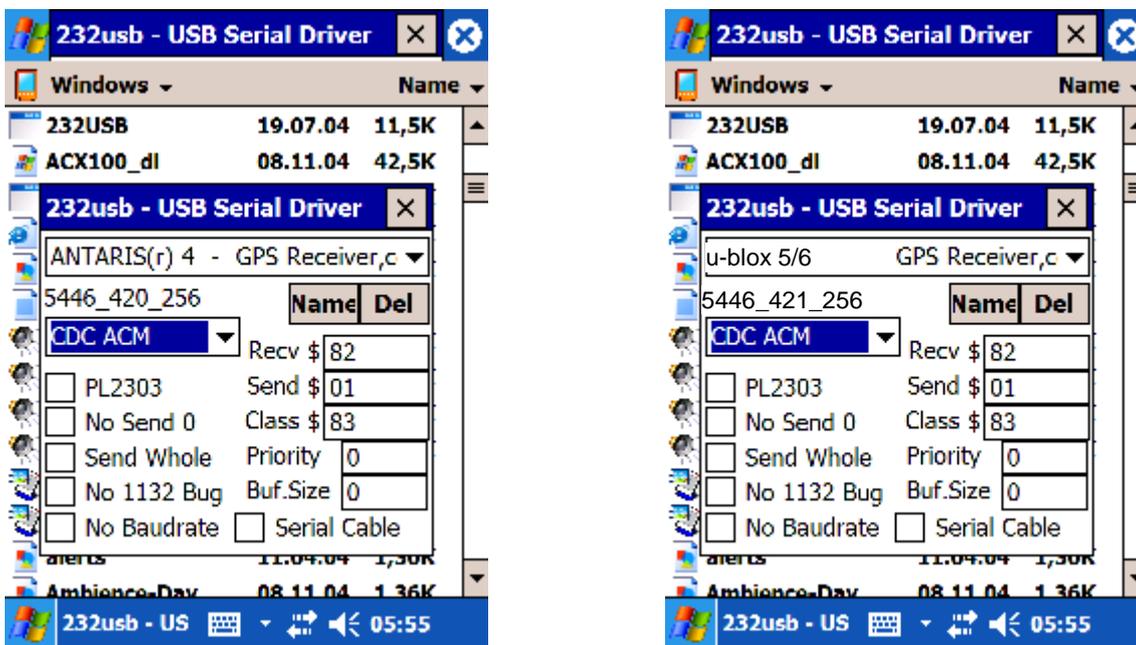


Figure 2: Configuration Window

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.

232usb - RS232 USB driver for WindowsCE
Copyright (c) 03-04 Zoroyoshi, Japan
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Revision history

Revision	Date	Name	Status / Comments
-	7/02/2006	tnig	Initial release
A	5/05/2008	tgri	updated to include u-blox 5
B	12/15/2008	tgri	u-blox 6, new CI

Contact

For complete contact information visit us at www.u-blox.com

Offices

North, Central and South America

u-blox America, Inc.

Phone: +1 (703) 483 3180
E-mail: info_us@u-blox.com

Regional Office West Coast:

Phone: +1 (703) 483 3184
E-mail: info_us@u-blox.com

Technical Support:

Phone: +1 (703) 483 3185
E-mail: support_us@u-blox.com

Headquarters Europe, Middle East, Africa

u-blox AG

Phone: +41 44 722 74 44
E-mail: info@u-blox.com

Technical Support:

Phone: +41 44 722 74 44
E-mail: support@u-blox.com

Asia, Australia, Pacific

u-blox Singapore Pte. Ltd.

Phone: +65 6734 3811
E-mail: info_ap@u-blox.com
Support: support_ap@u-blox.com

Regional Office China:

Phone: +86 10 68 133 545
E-mail: info_cn@u-blox.com
Support: support_cn@u-blox.com

Regional Office Japan:

Phone: +81 03 5775 3850
E-mail: info_jp@u-blox.com
Support: support_jp@u-blox.com

Regional Office Korea:

Phone: +82 2 542 0861
E-mail: info_kr@u-blox.com
Support: support_kr@u-blox.com

Regional Office Taiwan:

Phone: +886 2 2657 1090
E-mail: info_tw@u-blox.com
Support: support_tw@u-blox.com