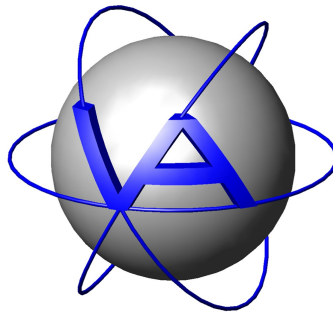


**VECTRONIC Aerospace GmbH**

**Communication • Navigation • Space Applications**



**Project:**

**Handheld Terminal V.6**

**Title:**

**Quickstart Guide**

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## DOCUMENT CHANGE RECORD

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| 1     |      | -                | Initial Issue |
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## 1 Preface

This document describes the installation and setup of the VAS GPS PLUS UHF Handheld Terminal 2013 V.6.

It consists of the 3 parts:

1. Driver Installation
2. Handheld Registration in GPS PLUS X software
3. Firmware Update

Please perform the steps one by one. Needed files can be found on the VECTRONIC CD (accompanying delivery) or can be send by the VECTRONIC Aerospace GmbH.

**This document is only related to the hardware version V.6 of the Handheld Terminal (see figure below):**

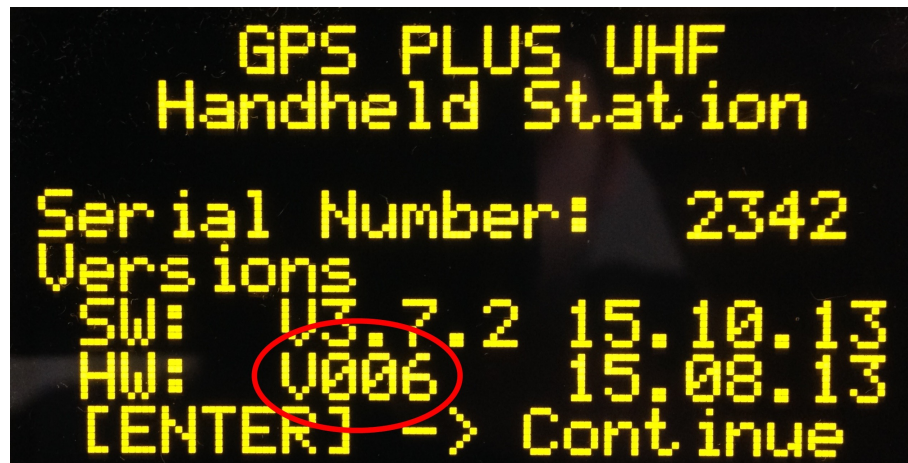


Figure 1: Handheld Terminal hardware version V.6

If you encounter a communication problem (**after having performed the driver installation and terminal registration inside GPS PLUS X software**) working with the GPS Plus X software and the Handheld Terminal device (mainly caused by a lost COM port connection), please perform the following steps to reopen the connection between GPS Plus X and the terminal:

1. Close any open VECTRONIC software application.
2. (Re)connect the Handheld Terminal to the PC via USB.
3. Press 'START' and then 'ENTER' on the terminal's keypad.
4. Restart the GPS Plus X Application.



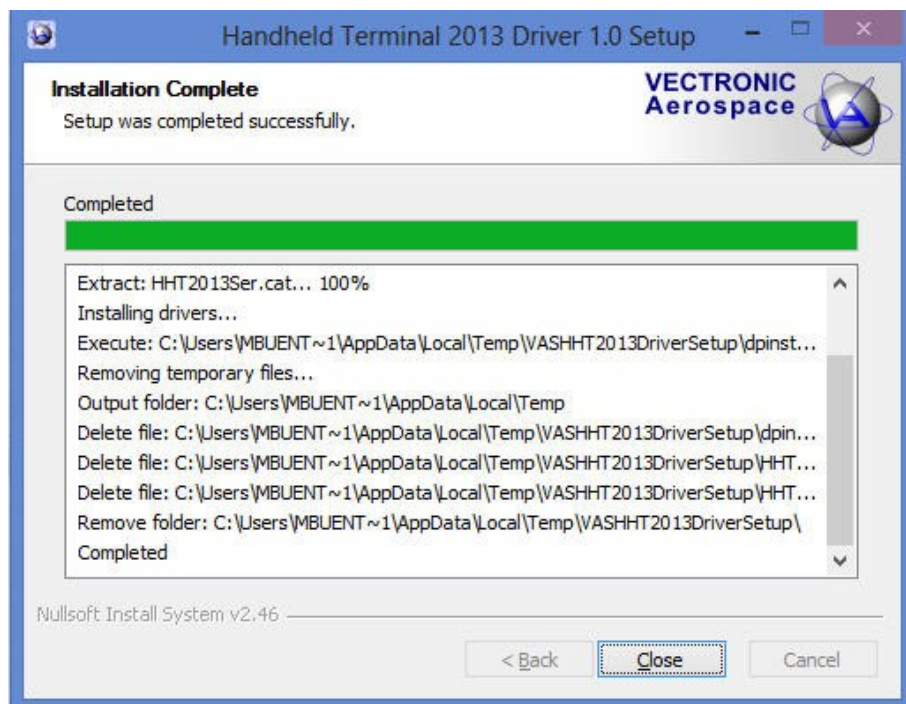
## 2 Windows driver installation

### Files:

- Driver installation application: '*Handheld Terminal 2013 Driver Setup.exe*'

In order to establish a communication between the Handheld Terminal V.6 and a host PC the according drivers have to be installed.

1. Execute the '*Handheld Terminal 2013 Driver Setup.exe*' application.
2. If you're ask to allow the program to make changes to the computer answer with 'Yes'.
3. The driver setup is initiated and the processing status is shown in a pop-up window.

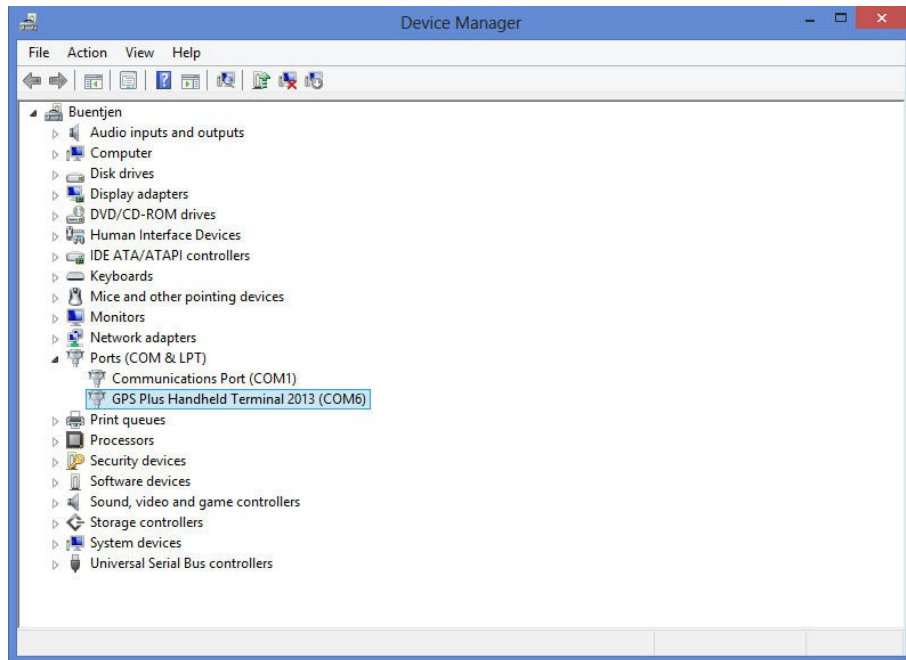


**Figure 2: Handheld Terminal Driver Setup 1.0**

4. After successful completion click the '*Close*' button to exit the installer application.
5. Connect the Handheld Terminal to a PC's USB port, press '*START*' and then '*ENTER*' on the terminal's keypad. WINDOWS will automatically use the installed driver to register the Handheld inside the system and assign a COM port to the Handheld Terminal device.



6. To verify the installation please open the windows device manager (open '*Control Panel* → *System and Security* → *System* → *Device Manager*' ) and expand the '*Ports (COM & LPT)*' entry. The newly installed Handheld Terminal 2013 V.6 and its according COM port should be enlisted there (see figure below). Please note the COM port number, it will be needed later on.



**Figure 3: Handheld Terminal's Device Manager entry**

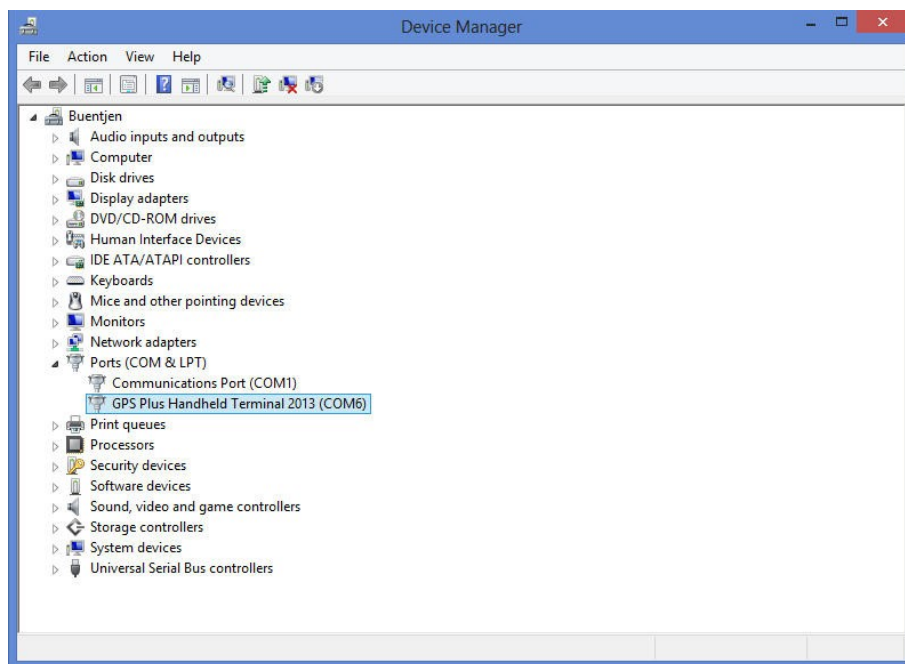




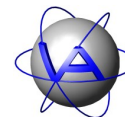
### 3 GPS Plus X Handheld Terminal device registration

In order to use the Handheld Terminal V.6 with the GPS Plus X Software, the terminal has to be registered. Before performing the registration steps described below please ensure that the installation of the according Handheld Terminal's Windows driver has been done (see chapter 2).

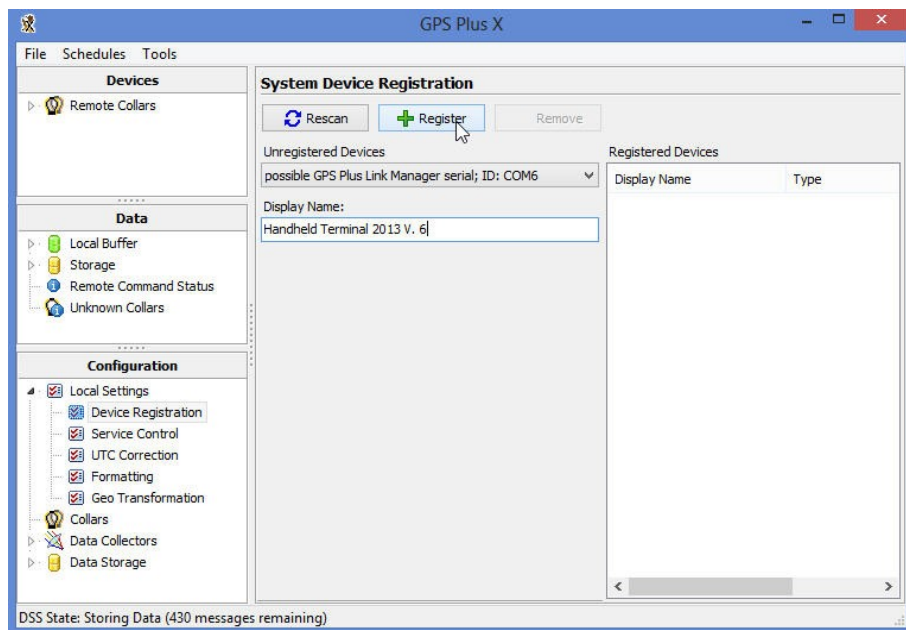
1. Disconnect the Handheld Terminal from the PC.
2. Restart the GPS Plus X software.
3. Connect the Handheld Terminal V.6 via USB to the PC.
4. Press '*START*' and then '*ENTER*' on the terminal's keypad.
5. If you haven't noted the COM port ID yet, please open the Windows Device Manager and expand '*Ports (COM & LPT)*' and note it (sample below shows COM6).



**Figure 4: Handheld Terminal's COM port entry**

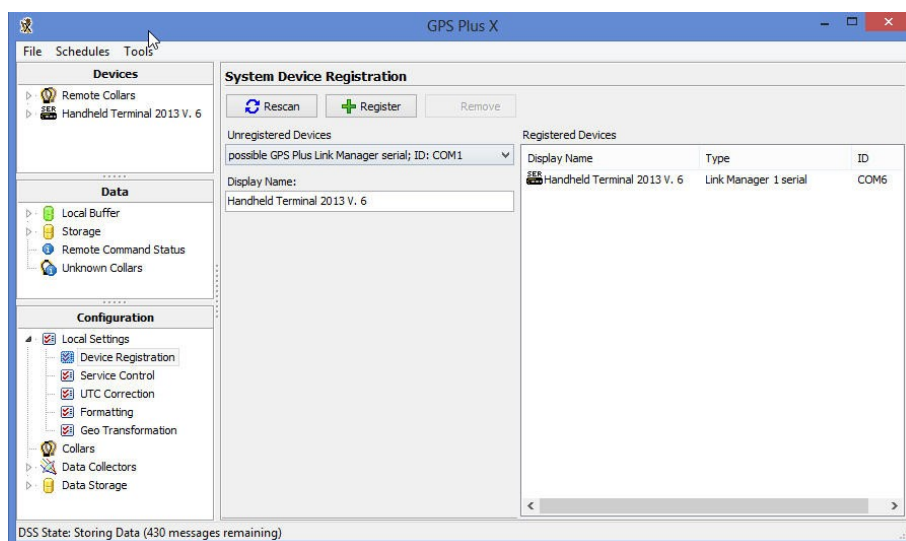


6. Go to the 'Configuration' section in GPS PLUS X main window (left bar) and expand 'Local settings'.
7. Below the 'Local Settings' entry select 'Device Registration'.
8. Open drop down bar at 'Unregistered Devices' and select the device entry including the noted COM port number of the Handheld Terminal (called 'possible GPS Plus Link Manager serial...').
9. Name the new Handheld device in 'Display Name:'.



**Figure 5: GPS Plus X device registration menu**

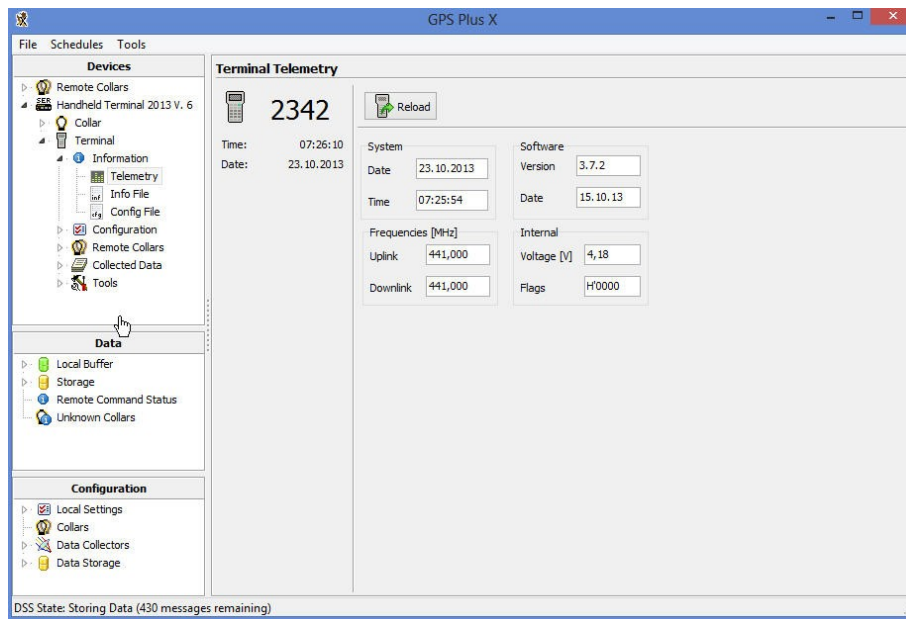
10. Click on the '+ Register' button. The Handheld will now appear in the window for 'Registered Devices' to the right and also in the main window inside the 'Devices' section.



**Figure 6: GPS Plus X registered Handheld Terminal**



10. The Handheld is now registered and can be used. Please go to the main section 'Devices' and expand the newly registered Handheld as shown below.



**Figure 7: GPS Plus X Handheld Terminal communication**

**If you encounter a communication problem during working with the GPS Plus X software and the Handheld Terminal device (mainly caused by a lost COM port connection), please perform the following steps to reopen the connection between GPS Plus X and the terminal:**

5. Close any open VECTRONIC software application.
6. (Re)connect the Handheld Terminal to the PC via USB.
7. Press 'START' and then 'ENTER' on the terminal's keypad.
8. Restart the GPS Plus X Application.



## 4 Handheld Terminal V.6 firmware update

### Files:

- Firmware installation application:  
*'Handheld Terminal 2013 V.6 Firmware Update.exe'*
- Binary firmware file: *'HHT\_V6\_FW\_Vx\_y\_z.bin'*  
(*'\_x\_y\_z'* denotes the version of the terminal's firmware)

To guarantee full usability please check regularly for firmware updates. You will find the latest version on our homepage, find it on the VECTRONIC CD (accompanying the delivery) or can get it via mail from the Support Team. Please make sure that the new binary firmware file is placed inside the same folder as the *'Handheld Terminal 2013 V.6 Firmware Update.exe'* application and that the terminal is otherwise operational (chapter 2 and 3). Perform the following steps for writing the new firmware to the Handheld Terminal.

1. Close any open VECTRONIC applications.
2. Connect the Handheld Terminal via an USB cable to the PC.
3. Press the *'START'* button on terminal's keypad.
4. Press *'F10'* (*'shift' + 'F5/F10'*) on terminal's keypad.
5. Open the windows device manager  
(open *'Control Panel → System and Security → System → Device Manager'*)
6. Inside the device manager expand *'Ports (COM & LPT)'*.
7. Note down the number of the COM port the Handheld Terminal is connected to.
8. Execute the *'Handheld Terminal 2013 V.6 Firmware Update.exe'* application.
9. Enter the Handheld Terminal's COM port number (without letters *'COM'*).
10. Enter the firmware's file name. The firmware data is read subsequently.
11. After pressing any key (PC) the Handheld's flash memory is erased and new firmware data is written to the terminal.

The installation process is illustrated in the figure shown below.

During erasing and writing the firmware, according messages are shown on the terminal's display. After firmware is written successfully to the device, press *'START'* on the terminal's keypad. The checksum of the new firmware is verified (shown on the terminal's display) and the usual start screen is displayed afterwards. Press *'ENTER'* to enter terminal's standard mode of operation.



```
*****
***      VECTRONIC Aerospace GmbH      ***
***      Handheld Terminal V.6         ***
***      Firmware Updater              ***
*****

Please enter COM port number (0 - 255)
of the connected Handheld Terminal: 6

COM6 opened.

Enter firmware file name (e.g. HHT_V6_FW_V3_7_2.bin): HHT_V6_FW_V3_7_2.bin

Reading firmware pages from file ...
.....
Finished reading firmware ...

Press any key to start firmware update ...

Erasing firmware ...
Firmware erased successfully ...

Writing firmware to flash ...
Pagecount : 120 of 120
Firmware successfully written to Handheld Terminal ...

Press any key to exit._
```

Figure 8: Handheld terminal V.6 firmware update