Verfasser: ss	Dokumentenname:	Doku-Art: Documentation	
Datum: 03.05.2010	MCH3 USB Driver Installation	Doku-Nr.: ohne	
Ablage: d:\nat\mch3_usb\doc\mch3 usb drive			

MCH3 USB Driver Installation



Ehlbeek 15a 30938 Burgwedel fon 05139-9980-0 fax 05139-9980-49

www.powerbridge.de info@powerbridge.de

Version:	Letzte Änderung:	Genehmigt am:	durch:	Seitenzahl:
V1.0	03.05.2010			Seite 1 von 14

Verfasser: ss	Dokumentenname:	Doku-Art: Documentation	
Datum: 03.05.2010	Installation	Doku-Nr.: ohne	
Ablage: d:\nat\mch3_usb\doc\mch3 usb drive			

Table of Contents

1	Purpose of this manual	.4
2	Windows XP Installation	. 5
3	Windows 7 Installation 1	10

Version:	Letzte Änderung:	Genehmigt am:	durch:	Seitenzahl:
V1.0	03.05.2010			Seite 2 von 14

Verfasser: ss	Dokumentenname:	Doku-Art: Documentation	
Datum: 03.05.2010	MCH3 USB Driver Installation	Doku-Nr.: ohne	
Ablage: d:\nat\mch3_usb\doc\mch3 usb drive			

Document History

Revision	Date	Author	Description
1.0	04.05.2010	Stefan Sperling	Initial version.

Version:	Letzte Änderung:	Genehmigt am:	durch:	Seitenzahl:
V1.0	03.05.2010			Seite 3 von 14

Verfasser: ss	Dokumentenname:	Doku-Art: Documentation	
Datum: 03.05.2010	MCH3 USB Driver Installation	Doku-Nr.: ohne	
Ablage: d:\nat\mch3_usb\doc\mch3 usb drive	er installation.doc		

1 Purpose of this manual

Starting with version 3.0 the N.A.T. MCH is equipped with a USB debugging port. This permits to connect it to a modern personal computer that usually has no serial port anymore. This manual describes the steps that are necessary to configure Windows XP and Windows 7 for use with the N.A.T. MCH 3.x.

Version:	Letzte Änderung:	Genehmigt am:	durch:	Seitenzahl:
V1.0	03.05.2010			Seite 4 von 14

Verfasser: ss	Dokumentenname:	Doku-Art: Documentation	
Datum: 03.05.2010	MCH3 USB Driver Installation	Doku-Nr.: ohne	
Ablage: d:\nat\mch3_usb\doc\mch3 usb drive			

2 Windows XP Installation

The following steps are necessary to configure Windows XP to work with the N.A.T. MCH USB debug port. (Although we have tested this procedure to work with Windows XP Professional it should work without any changes with a Windows Home as well.)

- 1. Power on your MCH and connect its USB debug port to an unused USB port of your computer.
- 2. Wait until Windows has finished its installation procedures for the new found device. Windows XP will usually detect the new USB device but will be unable to install the proper **usbser.sys** driver. This is where Windows needs some help from the user.
- 3. If Windows has opened the hardware wizard you can continue with step 4.

To open the hardware wizard manually you need to open the **device manager**. Open the **start menu**, and then click on **Control Panel**. In the category view click onto **Performance and Maintenance**, then onto **System**. If in classic view click on **System**.

This opens the system dialog. In this dialog click on the register labeled **Hardware**. Finally click on the **Device Manager** button. This will open the device manager.

Inside the device manager look for the **Ports (COM & LPT)** section. Open it by clicking on the plus sign. You should see a device entry with a black exclamation mark inside a yellow circle. Right click on it and select the command **Update driver**. This opens the hardware wizard.

4. The hardware wizard looks like this:

Found New Hardware Wiz	Found New Hardware Wizard				
	Welcome to the Found New Hardware Wizard				
	Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission). <u>Read our privacy policy</u>				
	Can Windows connect to Windows Update to search for software?				
	○ Yes, this time only				
	 Yes, now and every time I connect a device No. not this time 				
	Click Next to continue.				
	< Back Next > Cancel				

Version:	Letzte Änderung:	Genehmigt am:	durch:	Seitenzahl:
V1.0	03.05.2010			Seite 5 von 14

Verfasser: ss	Dokumentenname:	Doku-Art: Documentation	
Datum: 03.05.2010	MCH3 USB Driver Installation	Doku-Nr.: ohne	
Ablage: d:\nat\mch3_usb\doc\mch3 usb drive			

Select the option **No**, **not this time** to prevent Windows from searching for the new driver by itself. Continue by clicking on the **Next** button.

5. Select Install from a list or specific location (Advanced). Continue with the Next button.

Found New Hardware Wizard
This wizard helps you install software for: USB Device
< <u>Back</u> Next > Cancel

6. Select the option **Don't search. I will choose the driver to install**. Continue with the **Next** button.



Version:	Letzte Änderung:	Genehmigt am:	durch:	Seitenzahl:
V1.0	03.05.2010			Seite 6 von 14

Verfasser: \$\$	Dokumentenname:	Doku-Art: Documentation	
Datum: 03.05.2010	MCH3 USB Driver Installation	Doku-Nr.: ohne	
Ablage: d:\nat\mch3_usb\doc\mch3 usb drive			

7. Select Show all devices and continue with the Next button.

		<u>an</u>
Select a hardware type, and then cli	ck Next.	
Constructions		
Common naroware types:		
Show Air Devices		
C1883 Device Class		
AVC Device Class		
Batteries		
Bluetooth Radios		
Computer		
See Disk drives		(28)
Dienlaw adantere		 ×

8. Click on the **Have disk** button.



Version:	Letzte Änderung:	Genehmigt am:	durch:	Seite	enzahl:
V1.0	03.05.2010			Sei	te 7 von 14

Verfasser: ss	Dokumentenname:	Doku-Art: Documentation	
Datum: 03.05.2010	Installation	Doku-Nr.: ohne	
Ablage: d:\nat\mch3_usb\doc\mch3 usb drive			

9. Locate the **nat_mch_32+64bit.inf** file in your file system and open it. Close the **Install from disk** dialog by clicking the **Ok** button.

Found Sel	l New Hardware Wiza ect the device driver yo	rd ou want to insta	ll for this hardwa	re.	
2	Install From Disk			2	
M	Look in: C mch3_usb			• 🗗 🔁	
(Sta (Sta (Sta (Sta	Name a odoc nat_mch.inf nat_mch_32+64bit.ir	nf	File F 2 KB Setu 1 KB Setu	e Folder p Information p Information	
	File name: nat_mch_	_32+64bit.inf	~	<u>Open</u>	
	Files of type: Setup Info	ormation (*.inf)	×	Cancel	

10. From the model list choose the driver called **NAT-MCH USB CDC Console Version: 1.0.0.0** [15.10.2009]. (If in doubt always try the more recent version first.)

Found New Hardware Wizard
Select the device driver you want to install for this hardware.
Select the manufacturer and model of your hardware device and then click Next. If you have a disk that contains the driver you want to install, click Have Disk.
Show compatible hardware
Model
NAT-MCH USB CDC Console Version: 1.0.0.0 [15.10.2009]
NAT-MCH USB CDC Console Version: 5.0.2153.1 [15.10.1999]
This driver is not digitally signed! <u>I fell me why driver signing is important</u>
< Back Next > Cancel

Continue by clicking the Next button.

Version:	Letzte Änderung:	Genehmigt am:	durch:	Seitenzahl:
V1.0	03.05.2010			Seite 8 von 14

Verfasser: ss	Dokumentenname:	Doku-Art: Documentation	
Datum: 03.05.2010	MCH3 USB Driver Installation	Doku-Nr.: ohne	
Ablage: d:\nat\mch3_usb\doc\mch3 usb drive			

11. The installation process starts. Once in a while Windows is going to complain about the fact that the driver is not signed by Microsoft. Click on **Continue anyway** with a self confident smile.



12. After a few moments the installation has been finished. Terminate it by clicking the **Finish** button.



Now the USB debug port can be used. The COM port being assigned to it can be looked up in the device manager. Go back to point 3 if you are unsure about how to start it.

Version:	Letzte Änderung:	Genehmigt am:	durch:	Seitenzahl:
V1.0	03.05.2010			Seite 9 von 14

Verfasser: ss	Dokumentenname:	Doku-Art: Documentation	
Datum: 03.05.2010	MCH3 USB Driver Installation	Doku-Nr.: ohne	
Ablage: d:\nat\mch3_usb\doc\mch3 usb drive	r installation.doc	•	

3 Windows 7 Installation

The following steps are necessary to configure Windows 7 to work with the N.A.T. MCH USB debug port. It shall also work with Windows Vista (but we have not checked it).

Note: Currently all screenshots show a german Window 7. This shall be changed as soon as possible. To enable non-german to use this documentation the necessary options and commands are described in more detail in the text.

- 1. Power on your MCH and connect its USB debug port to an unused USB port of your computer.
- 2. Wait until Windows has finished its installation procedures for the new found device. Windows 7 will usually detect the new USB device but will be unable to install the proper **usbser.sys** driver. This is where Windows needs some help from the user.
- 3. Our experience is that Windows 7 does not start a hardware wizard (like Windows XP did). Windows 7 will always try to install a new driver on its own. If this fails the only action that is done is to display this message box:

J Gerätetreiberinstallation	x
Die Gerätetreibersoftware	wurde nicht installiert.
Unbekanntes Gerät	🗙 Es wurde kein Treiber gefunden.
Wie soll vorgegangen werden, wer	nn das Gerät nicht korrekt installiert wurde?
	Schließen

(The german text's meaning is "The device driver software has not been installed. Unknown device. No driver has been dound.")

Therefore the user must open the **device manager** and ask Windows to update the device driver.

Version:	Letzte Änderung:	Genehmigt am:	durch:	c x	Seitenzahl:
V1.0	03.05.2010				Seite 10 von 14

Verfasser: ss	Dokumentenname:	Doku-Art: Documentation	
Datum: 03.05.2010	MCH3 USB Driver Installation	Doku-Nr.: ohne	
Ablage: d:\nat\mch3_usb\doc\mch3 usb drive			

4. To open the device manager open the **start menu**, and type "computer" into the **search text box**. You should see several hits with one program called **Computer Management**. Right-click on this entry and choose **Run as administrator** from the context menu. Windows will ask for your administrative credentials.

		Open Mit jEdit Öffnen Open file location Author
	•	Run as administrator
		7-Zip Open with compright.msc nach Viren und Spyware scannen Pin to Taskbar Pin to Start Menu
		7-Zip Restore previous versions
		Send to 🕨
		Cut Copy
		Delete
Programs (2)		Properties
Computer Manag		
Control Panel (60)		
 View recent messa Review your comp Restore your comp 	ages a outer's puter	bout your computer s status and resolve issues to an earlier time
Microsoft Office Ou	utloc	ok (5)
🖂 Zusammenfassun 🖂 Zusammenfassun 🔚 SwyxIt! Anruf an G	gsber gsber irey C	icht für das Netzwerk icht für das Netzwerk omputer
Files (3025)		
🔊 computer.au 🔊 computer.au 퉬 Apple Computer		
♀ See more results		
computer		× Log off >
	Ø	👂 🚱 🚞 ⊿

Version:	Letzte Änderung:	Genehmigt am:	durch:	Seitenzahl:
V1.0	03.05.2010			Seite 11 von 14

Verfasser: ss	Dokumentenname:	Doku-Art: Documentation	
Datum: 03.05.2010	MCH3 USB Driver Installation	Doku-Nr.: ohne	
Ablage: d:\nat\mch3_usb\doc\mch3 usb drive			

5. The following window will show up: the **Computer Management** application. (The german name for Computer Management is indeed "Computerverwaltung".)



6. Look for a section called **Other Devices** (in german "Andere Geräte" – as the Device Manager sorts its entries alphabetically you will find it more likely at the lower part of the device tree).

Click on the black triangle to open the section which should reveal at least one device entries named **Unknown Device** (in german "Unbekanntes Gerät"). Right-click on it and select **Update Device Driver** (in german "Treibersoftware aktualisieren"). This should start the driver installation process.



Version:	Letzte Änderung:	Genehmigt am:	durch:	Seitenzahl:
V1.0	03.05.2010			Seite 12 von 14

Verfasser: ss	Dokumentenname:	Doku-Art: Documentation	
Datum: 03.05.2010	MCH3 USB Driver Installation	Doku-Nr.: ohne	
Ablage: d:\nat\mch3_usb\doc\mch3 usb drive			

7. The next step is to advice Windows not to search for the device driver on its own. Select **Search the computer for driver software** (in german "Auf dem Computer nach Treibersoftware suchen" – I guess that this command is always second).



8. Locate the device driver directory that contains the **nat_mch_32+64bit.inf** file. Make sure that the option **Include subdirectories** is selected (in german "Unterordner einbeziehen").

E Computerverwaltung		
Datei Aktion Ansicht ?		
🗢 🄿 🔰 📰 🛄 🛛 🗖] 👰 😭 🍢 🖏	
Computervervaltung (Loka) If System If System If System If Erignisanzige I	Andere Geräte Data Andere Geräte Andere Geräte Andere Geräte Anschlüsse (COM & LPT) Treibersoftware aktualisieren - Unbekanntes Ge Auf dem Computer nach Treibersoftware An diesem Ort nach Treibersoftware suchen:	rat are suchen
	D:\nat\mch3 usb	
	Violation Violat	ihlen Sie den Ordner, der die Treiber für die rdwarekomponente enthält.
	Aus einer Liste von Gerätetre Diese Liste enthält installiete Treiber aus derselben Kategorie stammen.	Goma Herr Gruber Distinterflex Di
4		OK Abbrechen

Confirm all boxes to start the installation.

Version:	Letzte Änderung:	Genehmigt am:	durch:	Seitenzahl:
V1.0	03.05.2010			Seite 13 von 14

Verfasser: ss	Dokumentenname:	Doku-Art: Documentation	
Datum: 03.05.2010	MCH3 USB Driver Installation	Doku-Nr.: ohne	
Ablage: d:\nat\mch3_usb\doc\mch3 usb drive			

9. Once in a while Windows will complain about the missing driver certificate (like shown below). Tell Windows to continue the installation anyhow. (I don't know how this is expressed in the english Windows version but it should be the second command in this message box. Simply click on the one that tells Windows to continue its work.)



10. Finally the driver installation is done:



Now the USB debug port can be used. The COM port being assigned to it can be looked up in the device manager.

Version:	Letzte Änderung:	Genehmigt am:	durch:	Seitenzahl:
V1.0	03.05.2010			Seite 14 von 14