

TROUBLESHOOTING GUIDE

For Navitar Control Board Windows Software and Drivers

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TROUBLE SHOOTING STEPS

- First try uninstalling all software and re-install. A bad original install would lead to connection issues. Sometimes a bad install will create virtual com ports that are not really being used. An explanation and instructions on how to reclaim the com ports that are not really being used can be found starting on page 3 of this document.
- In the Windows Operating System Device Manager- make sure that the Navitar controller is attempting to connect to a low number Com Port. We believe our device only looks at the first 12 ports but they should try connecting to Com Port's 1-7.
- 3) Update the drivers for USB to the Serial Converter device we have on our control board.

The drivers can be found here: <u>http://www.ftdichip.com/Drivers/VCP.htm</u>

Instructions to update: http://www.ftdichip.com/Support/Documents/InstallGuides.htm

- 4) Try using the serial software and cable. If they are unable to connect serially, the problem may be our device.
- 5) Install on a different PC and try to connect using the USB to rule out bad USB host on the original computer.

WINDOWS XP TIPS

COM PORT IN USE

When a modem that creates a virtual COM port is installed, it will normally be assigned the next unused COM port. If the modem is removed, or if the installation is not completely successful, the COM port assigned with that installation may continue to be identified as 'in use' by Windows, even though it really isn't in use. Each subsequent modem installation removes another COM port from being available.

You can reclaim these 'used' COM ports that really are not in use:

Go to Control Panel /System Properties/Hardware Tab and click Device Manager button under Device Manager.

👺 Control Panel	System Properties 🔗 🔀		
File Edit View	System Restore General Comp	Automatic Updates uter Name Hardware	Remote Advanced
System	Add Hardware Wizard The Add Hardware Wizard helps you install hardware. Add <u>H</u> ardware Wizard Device Manager		
	The Device Manager lists all the hardware devices installed on your computer. Use the Device Manager to change the properties of any device. Driver Signing Device Manager		
	Hardware Profiles Hardware pro different hardw	files provide a way for you to set u ware configurations. Hardware	p and store <u>Profiles</u>
		OK Cance	Apply

In Device Manager, expand the Ports listing. Double-click COMMUNICATIONS PORT (normally COM1).



Click on the Port Settings tab, then, Click the <u>A</u>dvanced button.

In the COM <u>P</u>ort Number drop-down menu, select a COM port that shows 'In Use' that really isn't in use. Click OK, and continue past warning about using a used port.

Repeat for each false 'in use' port.

Then, repeat and change the port back to original (COM1) setting.

Communications Port (COM1) Properties	? 🔀		
General Port Settings Driver Resources			
<u>B</u> its per second: 9600	v		
Data bits: 8	×		
Parity: None	×		
Stop bits: 1	~		
Elow control: None			
Advanced	estore Defaults		
ОК			
Advanced Settings for COM1	? 🛛		
☑ Lee FIFO buffers (requires 16550 compatible UART)			
Select lower settings to correct connection problems.			
Select higher settings for faster performance.			
Receive Buffer: Low (1)	Ueraulis		
Iransmit Buffer: Low (1)	7 High (16) (16)		
COM Port Number: COM1			
CUM2 (in use) COM3 COM4			
COM8 COM8 COM9			
ICOM12 COM13 COM14			
COM15 COM15			

PREVENTING AUTOMATIC DRIVER INSTALLATION

Windows XP comes with (usually outdated) modem drivers for most of the major modem chipsets. Sometimes, the driver will not install successfully, and sometimes, installing the correct, updated driver is difficult as XP may automatically "protect" the original driver - replacing your update with the old one.

Windows automatic hardware identification and installation depends upon files in the hidden folder \windows\inf.

You can use Explorer and XP's Search function to locate these files. Files that begin with OEM....are .inf files not included with XP. Remove any modem-related OEM*.inf files from this folder.

(Recommended: **Move** the files to a backup folder) This will prevent installation based upon any drivers not provided by Microsoft.

All Microsoft-provided modem installation files begin with MDM... Removing (again, Move to a backup folder is recommended) all files beginning with MDM ... will prevent automatic installation of any modem; removing the MDM...file that identifies your modem's CIID will prevent your modem from being automatically installed.