

# BMDS Wand Manual

Model: PNM-P3P-WAND  
Manual: MU00264-001  
Revision 52





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# Overview

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## Introduction

The Bio Medic Data System (BMDS) Wand can be utilized with the P3 Plus software allowing the user to easily enter study information and also select animals when running the study. This is an optional feature and is controlled through the license file.

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## Components

The components are based on the hardware used. Refer to the hardware manual for the required information.

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## Installation

The installation and connection of hardware is done through the documentation that was received with the BMDS hardware. See the BMDS hardware instructions for installation and connection.

Currently the only available BMDS hardware that is compatible is the DAS-6000 series hardware.

All necessary drivers that the P3 Plus software uses to connect to the BMDS hardware are installed when P3 Plus is installed.

# Operation

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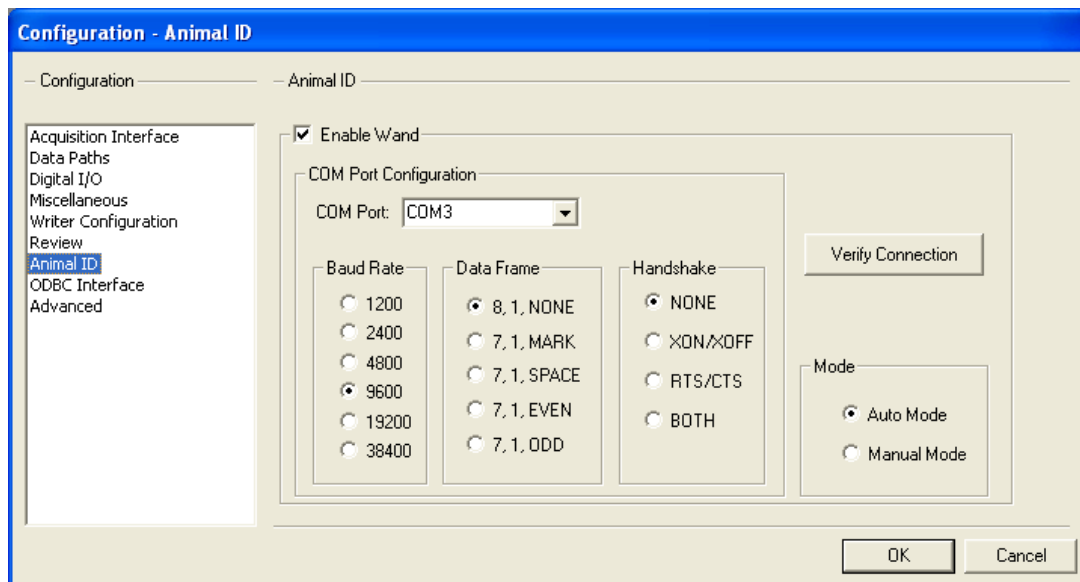
## Introduction

There are two locations where the wand can be utilized with the P3 Plus software. One location is where setting up a study. The other location is when running the study.

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## Animal ID Tab

The Animal ID Tab allows the user to configure the software settings for the wand. This is an optional feature and is controlled through the license file. If the user did not purchase this feature, this option will be grayed out. Select **Application Configuration** from the **Options** menu and click on the **Animal ID** tab. The following will appear.



To enable the wand, enable the **Enable Wand** check box.

## COM Port Configuration

The COM Port Configuration is broken down into four sections: COM Port, Baud Rate, Data Frame, and Handshake.

## **COM Port**

The COM Port is a drop down list box of the available ports on the computer. If the user is using the serial connection from the hardware, the selection will either be COM1 or COM2. If the user is using the USB connection from the hardware, the selection will be COM3. This can be verified by checking the device manager dialog and viewing the properties. See the section "Determining USB COM Port Selection" on how to determine what setting to use if using the USB connection.

## **Baud Rate**

The Baud Rate is the rate at which information will be transmitted back and forth from the computer to the hardware. This should always be set to **9600**.

## **Data Frame**

The Data Frame is the structure of the information that is being transmitted back and forth from the computer to the hardware. This should always be set to **8, 1, NONE**.

## **Handshake**

Handshaking is the way that the information is being transmitted back and forth from the computer to the hardware. This should always be set to **NONE**.

## **Mode**

Two modes are available for the wand, **Auto Mode** and **Manual Mode**.

### **Auto Mode**

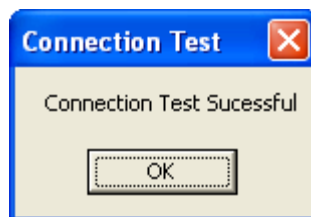
Auto Mode sets the wand into a continuous loop where it is always scanning for a device. If this setting is set, the setting will not take effect until the **Application Configuration** dialog is closed.

### **Manual Mode**

Manual Mode sets the wand so that user intervention is required for every scan. Each time a scan needs to be performed, the user must press one of the **SCAN** buttons on the probe prior to scanning in each animal. If this setting is set, the setting will not take effect until the **Application Configuration** dialog is closed.

## **Verify Connection Button**

The **Verify Connection** button allows the user to make sure the configuration that is set up is valid. If the configuration is valid the following dialog will appear.

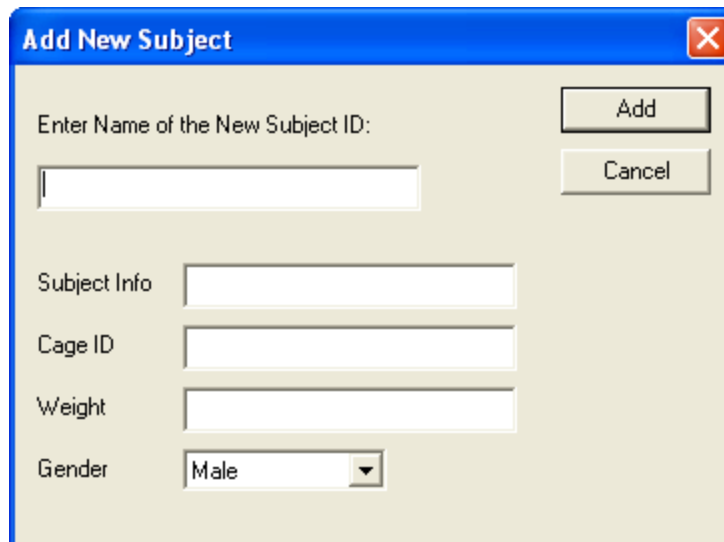


If it does not, check the Troubleshooting section in Appendix A.

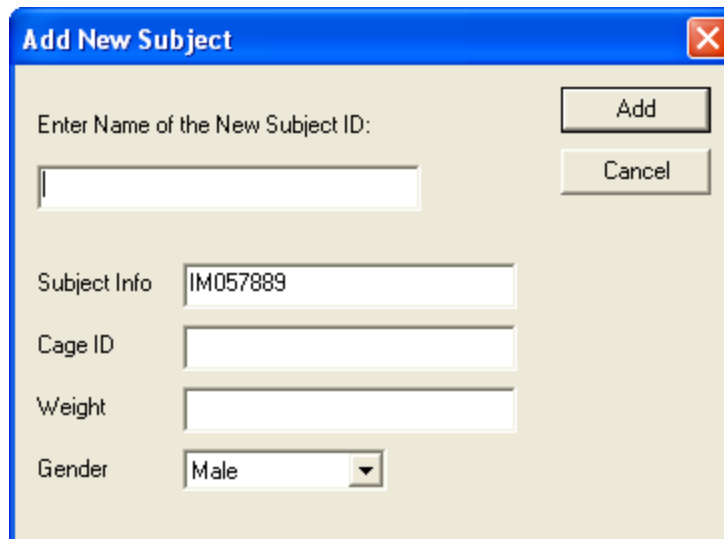
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## Adding Subjects

When a user is configuring a study, they have the ability to enter subject information using the wand. When the **Add New Subject** dialog is open, shown below, and the user scans an animal in with the wand, the information from the tag will appear in the dialog.



Dialog with animal ID scanned in:



Note that no matter where the cursor is, the animal ID will be listed in the **Subject Info** text box.

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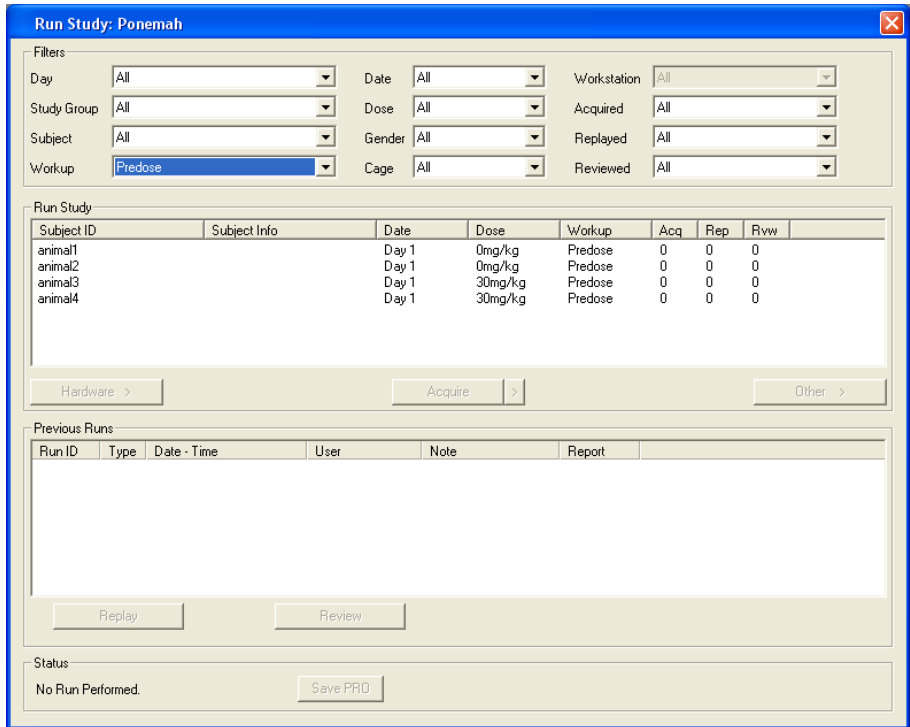
## Run Study

The wand works with both Tox and Non Tox Studies in the Run Study dialog.

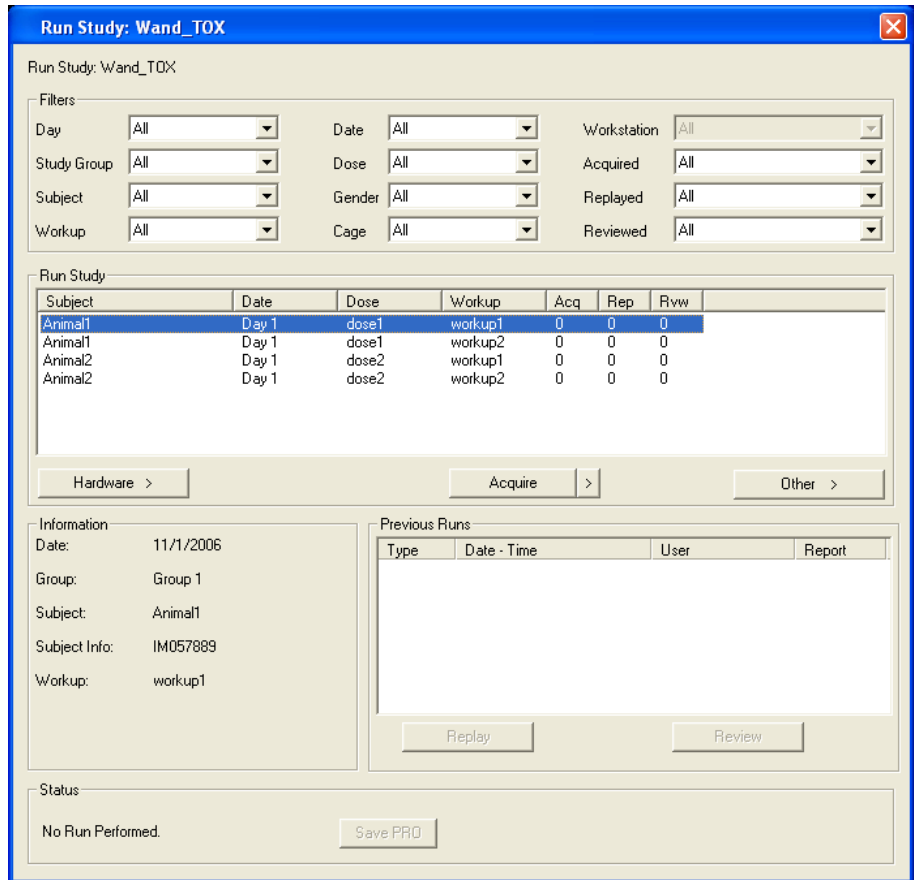
### Tox Studies

Below is an example of the Run Study dialog with a Tox Study.





When an animal is scanned using the wand, the dialog will appear like the one below.

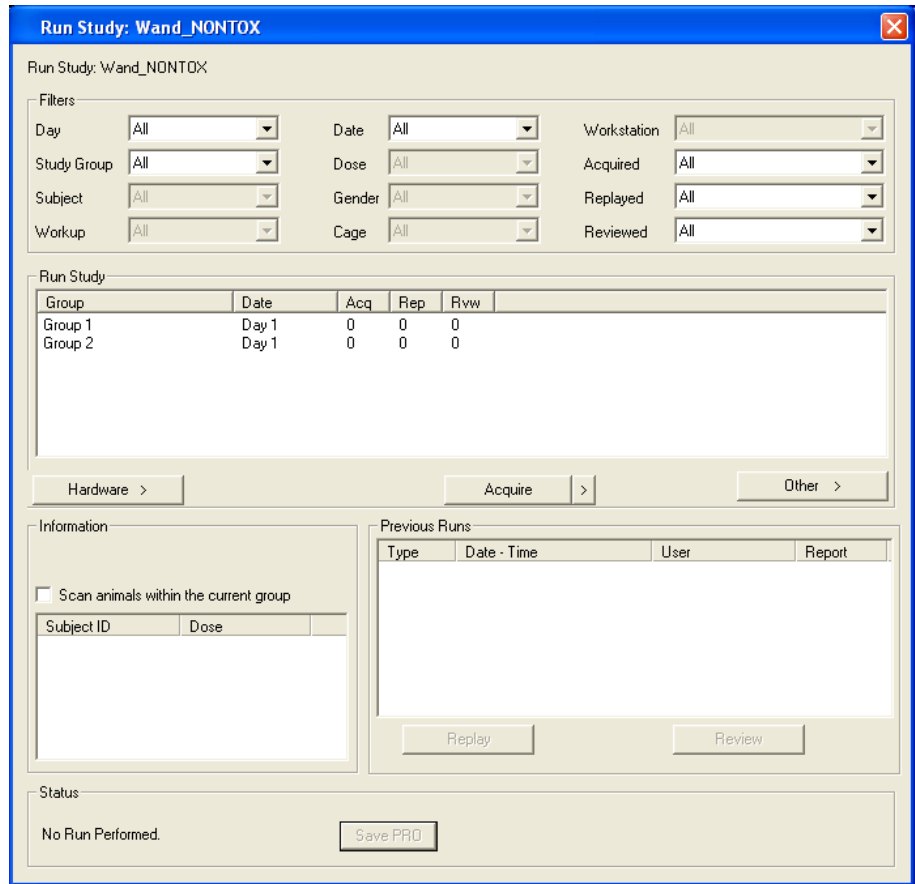


P3 Plus will select the first subject listed in the Run Study section where the animal ID matches the Subject Info that was entered during the creation of the study. Additional information is listed in the **Information** section of the dialog which includes the Subject Info for the animal selected.

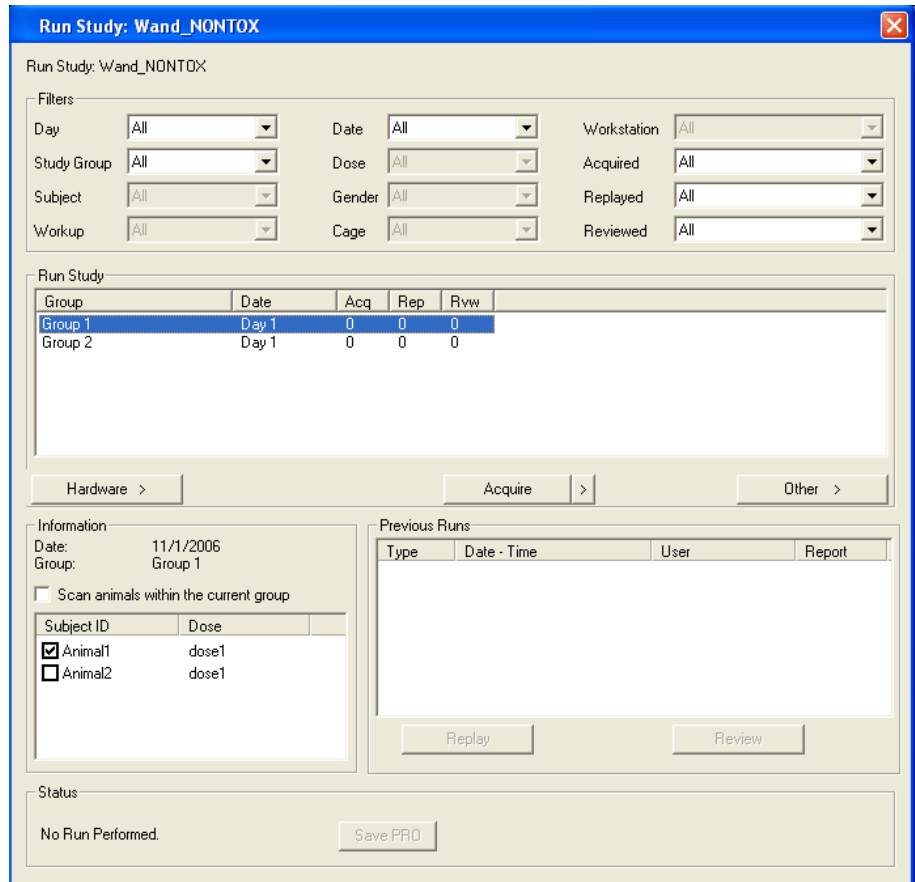
If a scan is performed on an animal that is not in the Run Study list, any currently selected animal will become deselected.

## Non Tox Studies

Below is an example of the Run Study dialog with a Non Tox Study.



When an animal is scanned using the wand, the dialog will appear like the one below.

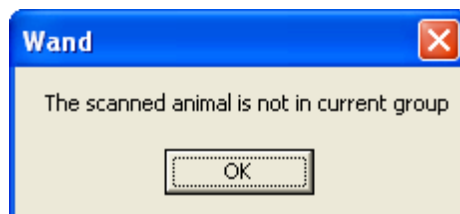


P3 Plus will select the first group listed in the Run Study section where the animal ID matches the Subject Info that was entered during the creation of the study. Additional information is listed in the **Information** section of the dialog.

The animal that was scanned with the wand will be listed with a check mark next to the animal name in the **Information** section. The checks next to the animal names are for user viewing and do not affect acquisition.

The **Scan animals within the current group** check box allows the user to lock which group will be searched when an animal is scanned with the wand. If an animal exists in any other previous groups, only this group will be searched.

If an animal is scanned that does not belong to the current group, the following dialog will appear. This only occurs if the **Scan animals within the current group** check box is enabled.



If the **Scan animals within the current group** check box is disabled and an animal is scanned that is not in any group, any currently selected group will become deselected.

# Appendix A

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## Specifications

Refer to the hardware manual for the required information.

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## Troubleshooting

### Wand not Found at Startup

If the wand is not found when P3 Plus starts up the following dialog will appear.

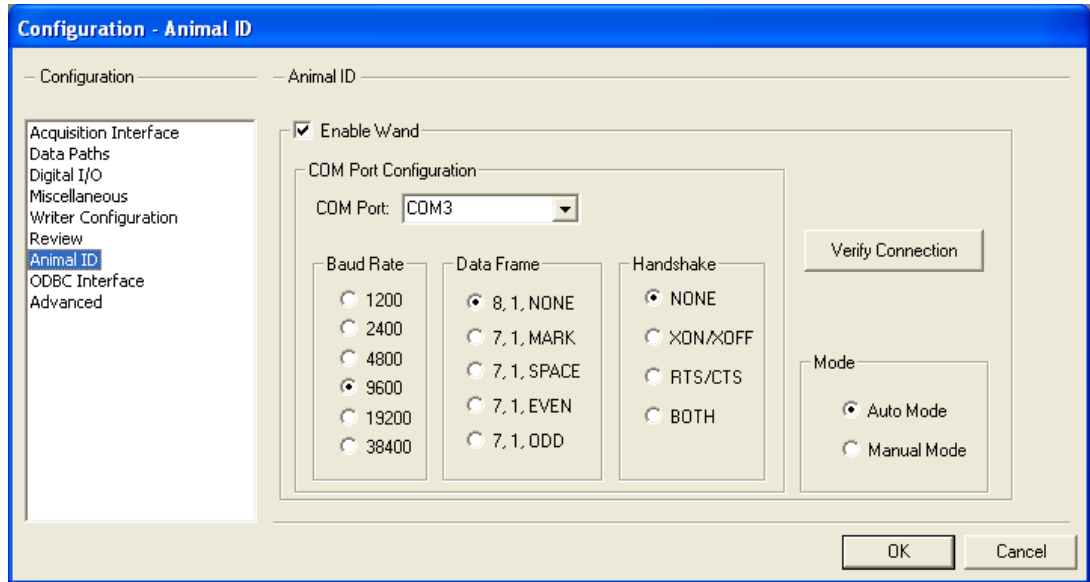


This can be caused by different reasons.

- 1.) The wand is not turned on. Make sure the power is on to the wand and click on the Retry button.
- 2.) Some intermittent interference has caused the wand not to communicate. Remove any devices that could cause problems or move the wand to a location where interference is at a minimum.
- 3.) The communication setup is not correct. Open the Application Configuration dialog, select the Animal ID tab, and check the settings.

### Connection Test Failed

On the **Animal ID** tab of the **Application Configuration** dialog, the user can click on the **Verify Connection** button.



This may cause the following message to appear.



This can be caused by different reasons.

- 1.) The wand is not turned on. Make sure the power is on to the wand and click on the Retry button.
- 2.) Some intermittent interference has caused the wand not to communicate. Remove any devices that could cause problems or move the wand to a location where interference is at a minimum.
- 3.) The communication setup is not correct. Check the settings.

## Intermittent Failure

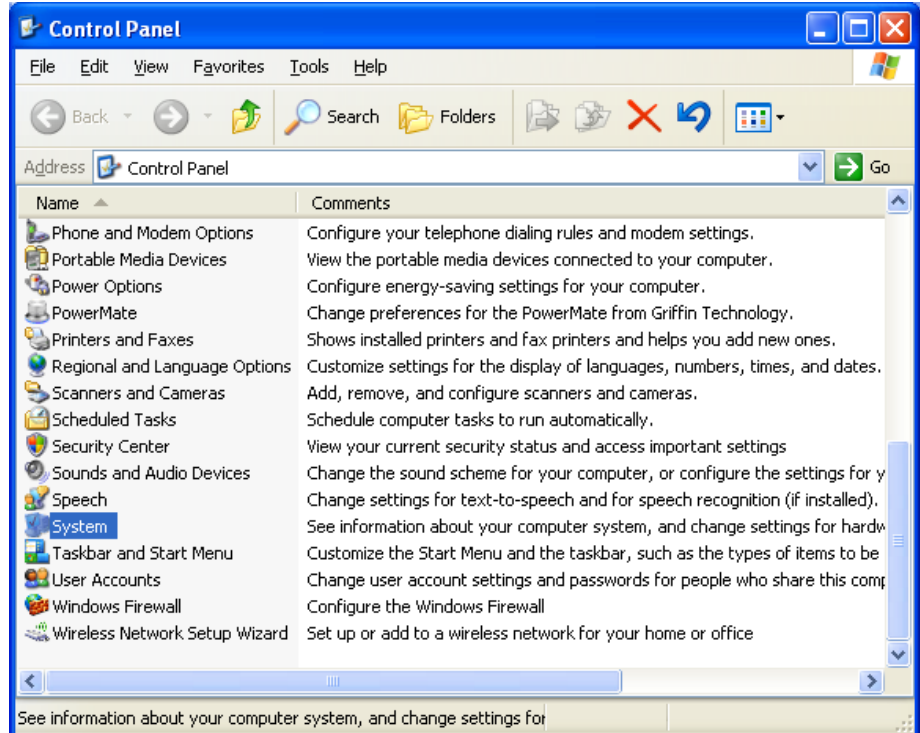
Intermittent failures may occur during the process of using the wand. This may be caused by other devices interfering with the wand.

- 1.) Older or failing monitors (CRTs) may be giving off emissions that can interfere with the wand. A normal monitor will allow the wand to work within 6 inches of the monitor. If repeated failures occur, move the wand further away from the monitor.
- 2.) Certain DSI Transmitters may cause an interruption with the wand. If the wand needs to be used, it is recommended to turn off the DSI Transmitters prior to using the wand.

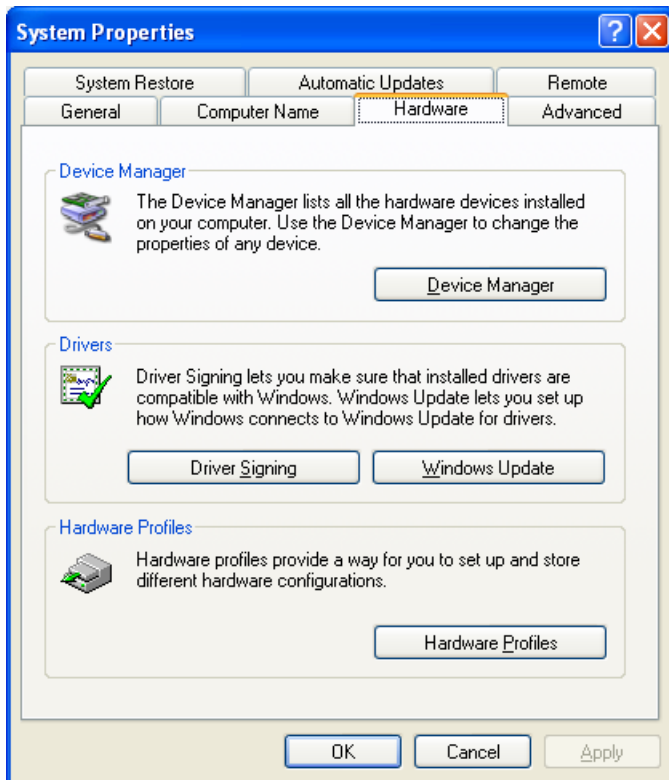
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## Determining USB COM Port Selection

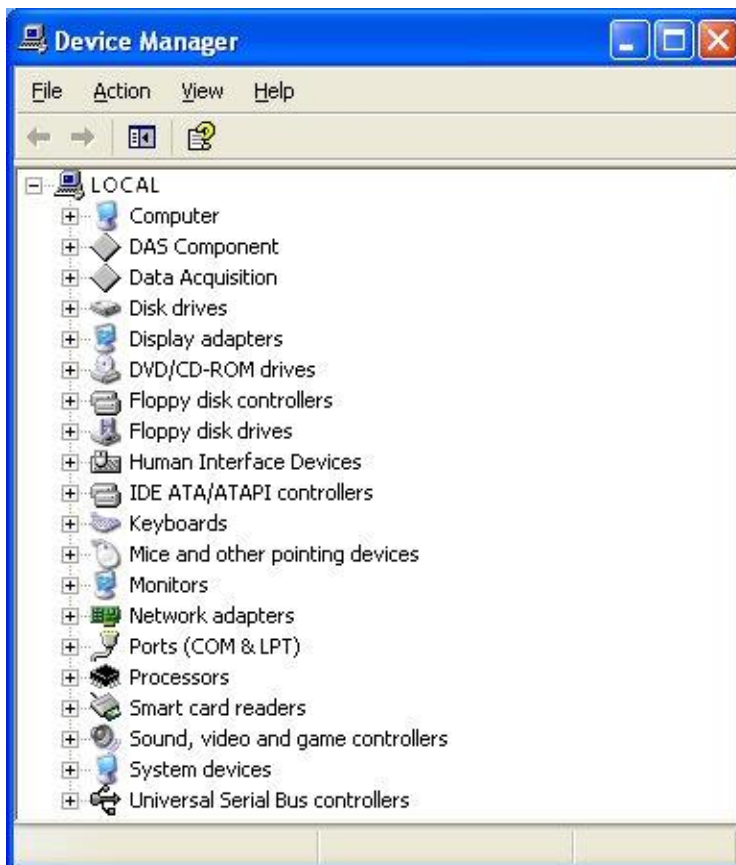
When the USB driver for the wand is installed, Windows automatically selects a com port for the USB connection. To find out which port has been configured, the first step is to open the control panel. The menus listed below are for Windows XP SP2 (If this is not the same operating system that the user is using, the menus may be slightly different). This is done by clicking on the **Start** button and selecting **Control Panel**.



Double click on the **System** icon. The **System Properties** dialog will appear.

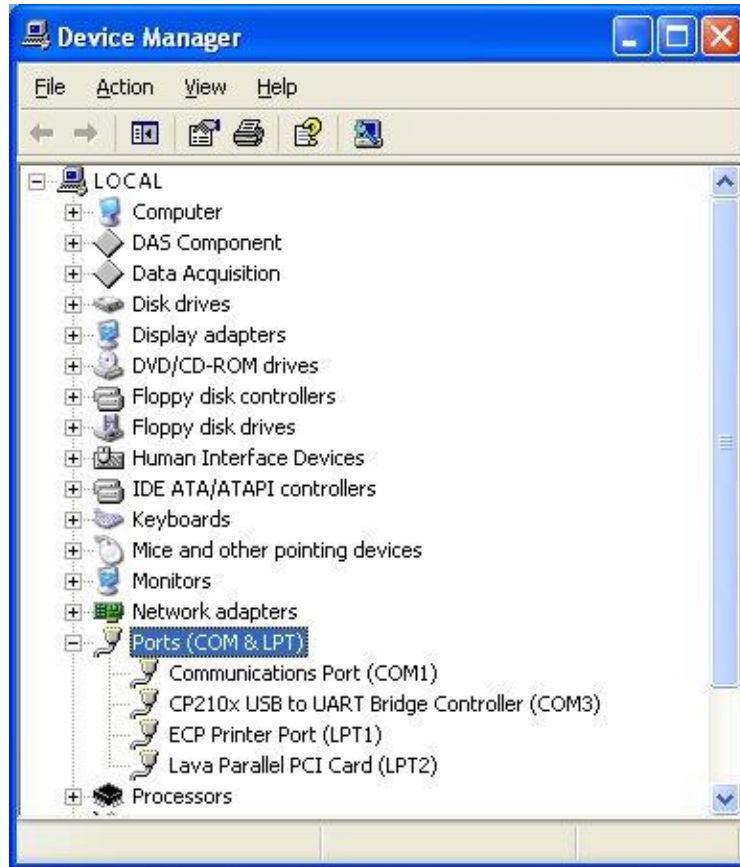


Select the **Hardware** tab. Click on the **Device Manager** button.





Expand the **Ports (COM & LPT)** selection. The COM selection to use in the **Application Configuration** will be the COM listed for the **CP210x USB to UART Bridge Controller** selection. In the case below, **COM3** will need to be used.



# Product Issue Report

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## Product Issue Report Form

Sales Person: \_\_\_\_\_  
Customer Name: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_  
Email Address: \_\_\_\_\_

P3 Plus Version (including Service Pack): \_\_\_\_\_  
Serial Number: \_\_\_\_\_  
Priority: \_\_\_\_\_  
Date: \_\_\_\_\_  
Hardware: \_\_\_\_\_

Status of issue (check one)  
 Unreproduced  Reproduced  
 Needs repair  As intended

Computer hardware/software  
Brand/Model: \_\_\_\_\_  
CPU Speed: \_\_\_\_\_  
RAM: \_\_\_\_\_  
Operating System (including Service Pack): \_\_\_\_\_

Networked  
 Yes  No

Issue: \_\_\_\_\_  
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Steps to Repeat  
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# Feature Request

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## Feature Request Form

Sales Person: \_\_\_\_\_  
Customer Name: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_

Phone Number: \_\_\_\_\_  
Email Address: \_\_\_\_\_

P3 Plus Version (including Service Pack): \_\_\_\_\_  
Serial Number: \_\_\_\_\_  
Priority: \_\_\_\_\_  
Date: \_\_\_\_\_  
Hardware: \_\_\_\_\_

Feature (check one)  
 Unevaluated       Pending  
 Implement       Already Exists

Description: \_\_\_\_\_  
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