Ideal Vacuum Xact Gauge XG-120 & XG-120E: Serial and Ethernet Setup Instruction Manual.

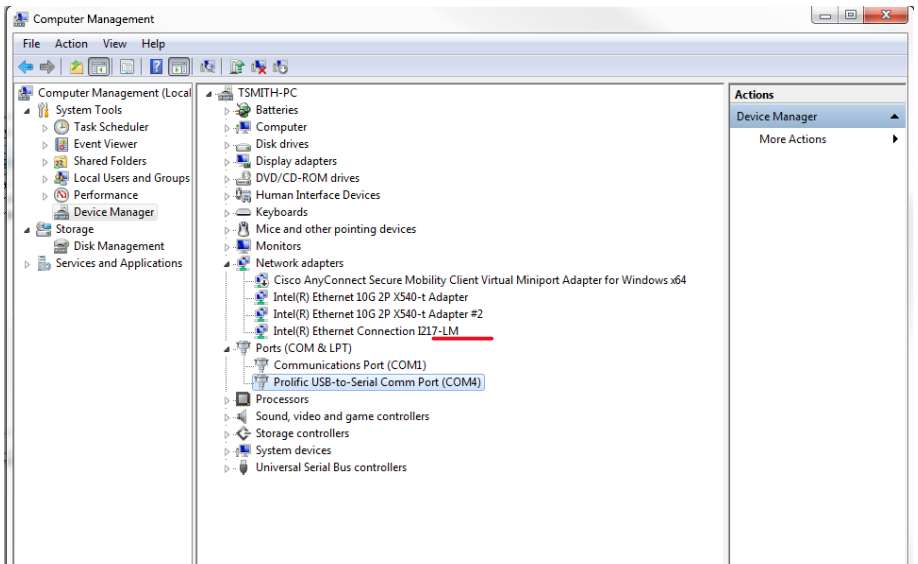
Thank you for purchasing the Ideal Vacuum Model Xact Gauge XG-120 Digital Vacuum Gauge. This manual will help guide you through connecting your vacuum gauge to a computer for either direct or remote monitoring.

There are two ways to connect the Ideal Vacuum Model XG-120 Digital Vacuum Gauge: Via RS-232 Serial Port, or Ethernet.

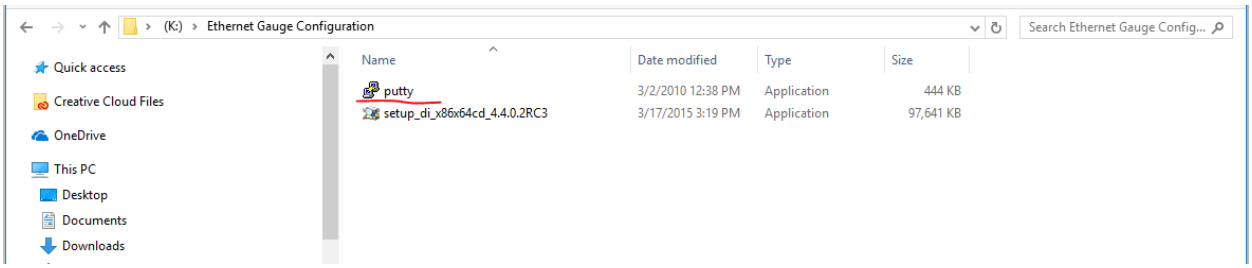
Although you can use either RS-232 or ethernet to set the IP address of your device before remote monitoring, we find that the ethernet to computer method is the most straightforward. Both are detailed below:

Steps for Standard RS-232 Communication between a PC and a Model XG-120 Digital Vacuum Gauge:

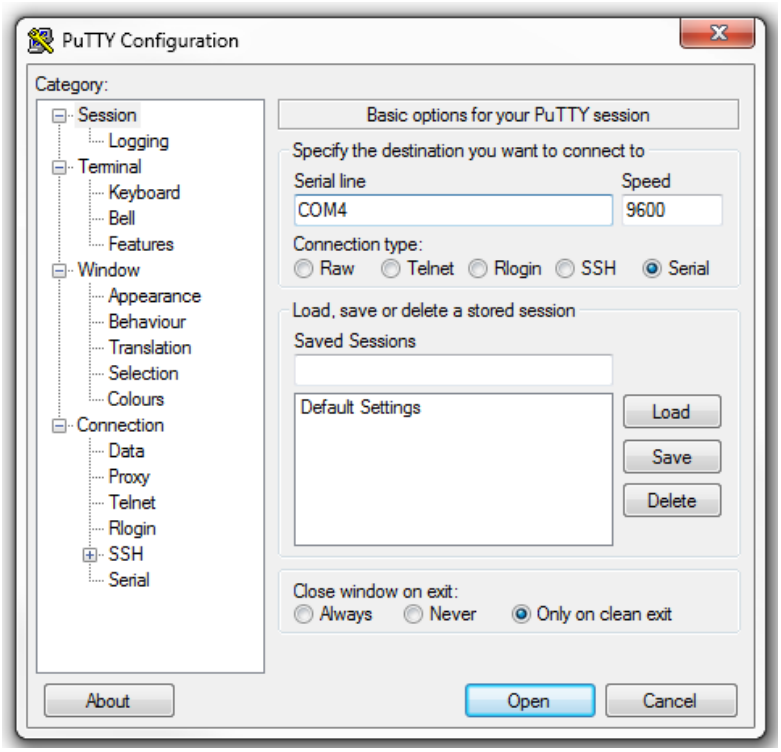
1. Plug in your Ideal Vacuum Model XG-120 Gauge to wall power.
2. Plug in the standard DB9 Male to Female RS-232 serial cable (provided) to the gauge and to the computer.
3. Navigate to “Device Manager” to check which port your gauge is connected through. In the example below, the port is COM4.



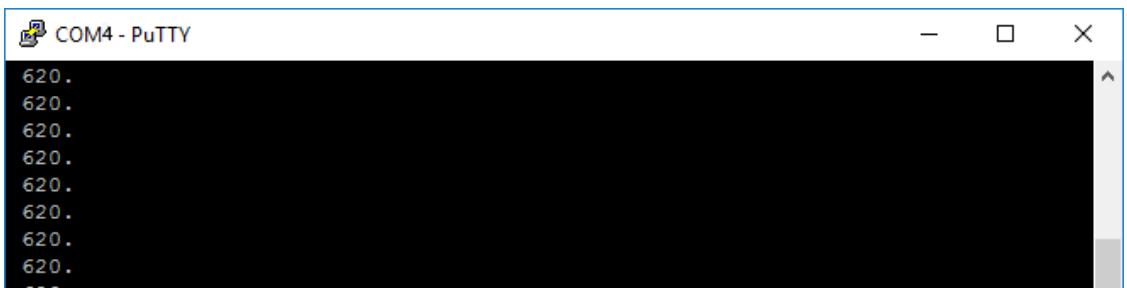
4. Insert the thumb drive provided into your computer and open up the “Putty” application.



5. Once open you will need to select “Serial” and choose the COM port that your computer is connected to. The speed should be set to 9600. Press “Open”



6. If you have a sensor connected to your gauge, you should see a black window open up and the gauges data feed starting to come through.



Steps for Setting up Ethernet Connection for remote monitoring Via RS-232 Serial port.

1. Plug your gauge into your computer via the RS-232 serial port. You MUST bridge the connection using the Null modem.

2. Navigate to “Device Manager” to check which port your gauge is connected through.

3. Open the “Putty” Application provided on the thumb drive. You will need to select “Serial” and choose the COM port that your computer is connected to. The speed should be set to 9600. Press Open

4. A back screen will appear displaying no information (Figure 1). You will now need to cycle the power (unplug, plug) on your gauge while continuously pressing “x.” If executed correctly you will see your screen display the MAC address of your gauge (Figure 2).

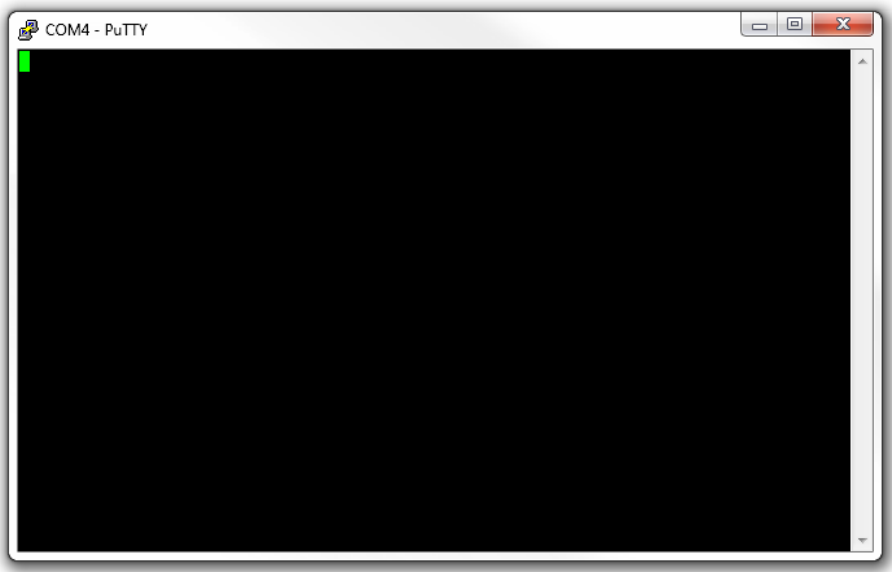


Figure 1: Blank Black Putty Connection Screen

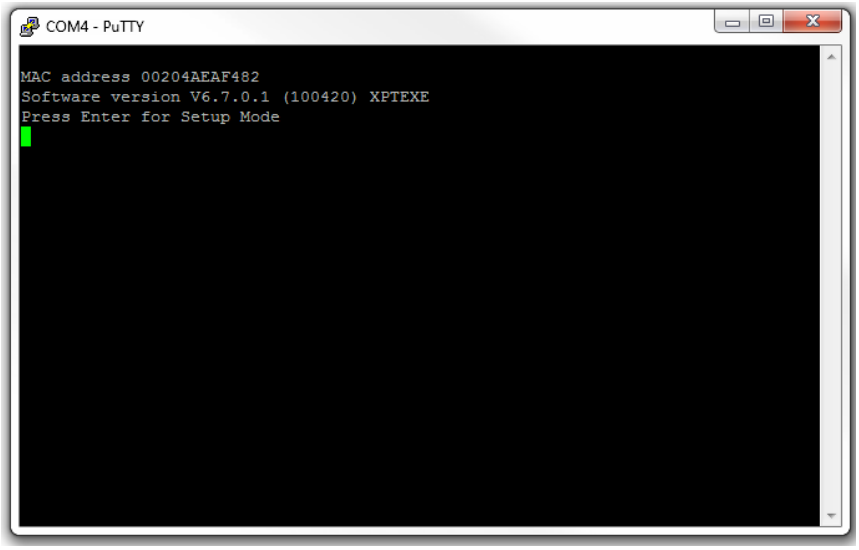


Figure 3: Putty Screen after Cycling power and pressing "x" repeatedly

5. Press Enter Soon after seeing the MAC address displayed and a column of data will process before prompting you with a menu. Press “0” for server, to start setting up the desired network settings for your gauge. Press Enter to progress through the quartets, in () will be the current setting. After each current Quartet is shown you may add the desired change before pressing enter to move forward to the next quartet. Once you have set all of your Network settings appropriately you may press “9” to save and exit. The Network settings have now been changed.

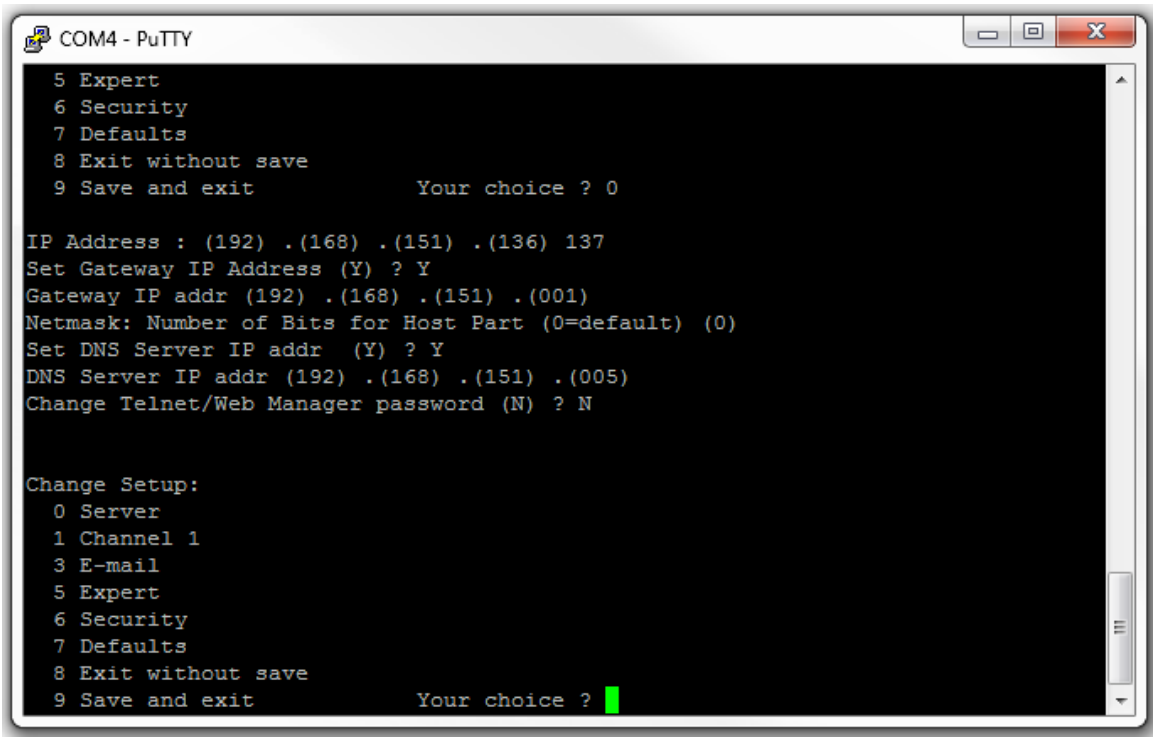


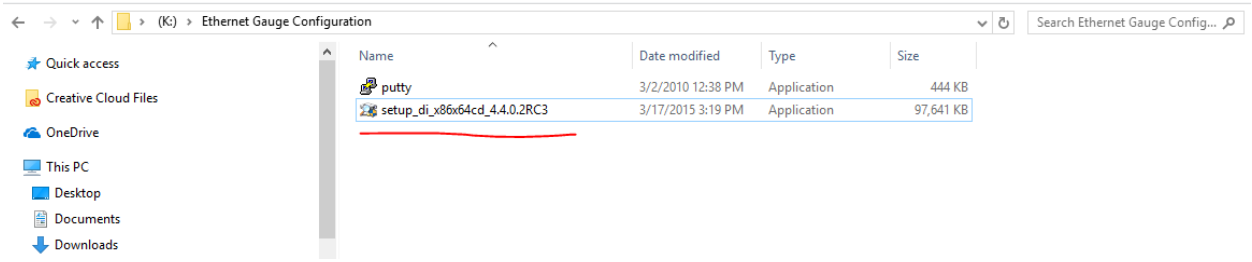
*Figure 4 The IP Address has been changed from 192.168.151.136 to 192.168.151.**137***

6. In order to view your Gauges readings remotely you will need to:
   a. Have your gauge plugged into your network Via Ethernet cable
   b. Have installed the latest Version of Java (https://java.com/en/download/)
   c. Gone into the java configuration manager and made a security exception for the IP address you prescribed to your gauge.—instructions for this are provided at end of this manual

Steps for configuring network settings through an Ethernet to computer connection

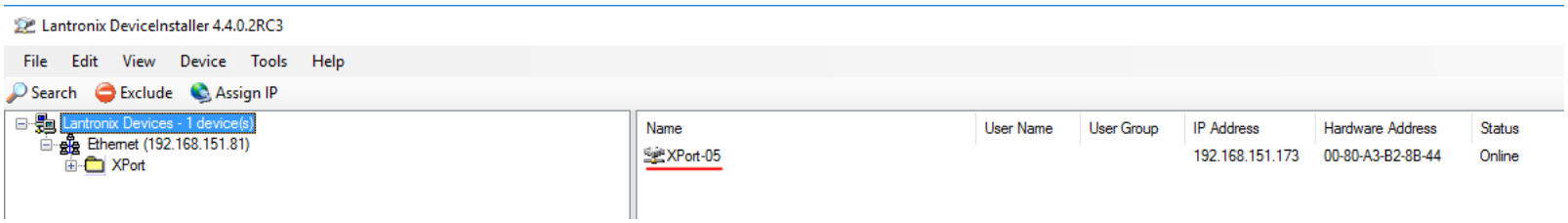
1. Connect your Gauge to your computer using the crossover cable provided.

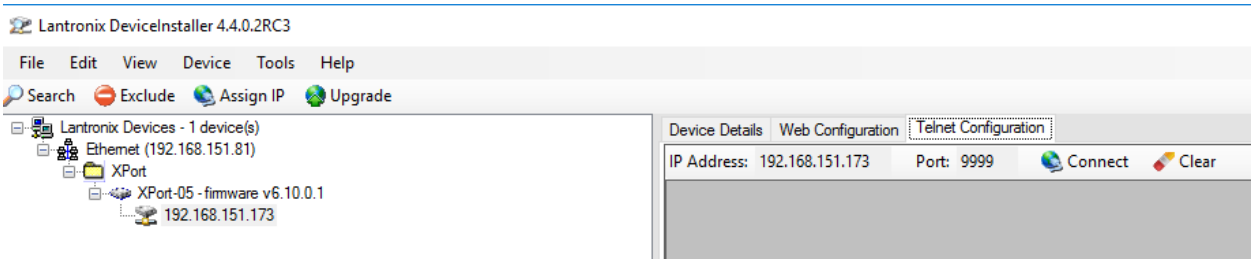
2. Insert the thumb drive provided, and open up the second application entitled “setup_di_x86x64cd_4.4.0.2RC3, and follow the installation instructions.

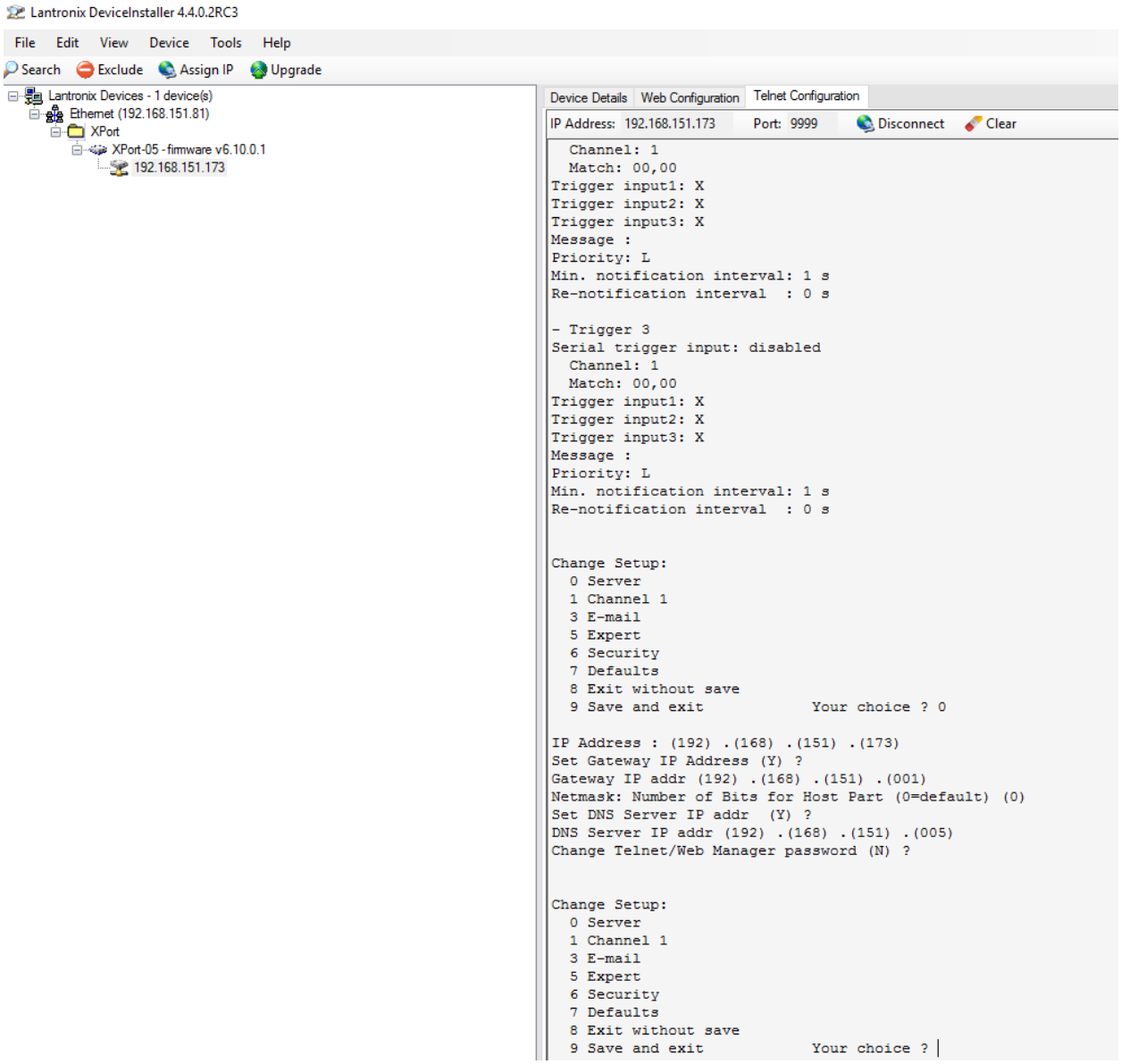


3. When you are finished installing, find and open the application “Lantronix Device Installer”

4. You will see your XG-120 appear as a device connected to your computer. Double Click on the item to the right in order to access it, and navigate to the “Telnet Configuration tab.” Click the “Connect” button and you will access the device’s setup, including network options. The setup is the exact same as through the RS-232 method outlined above.

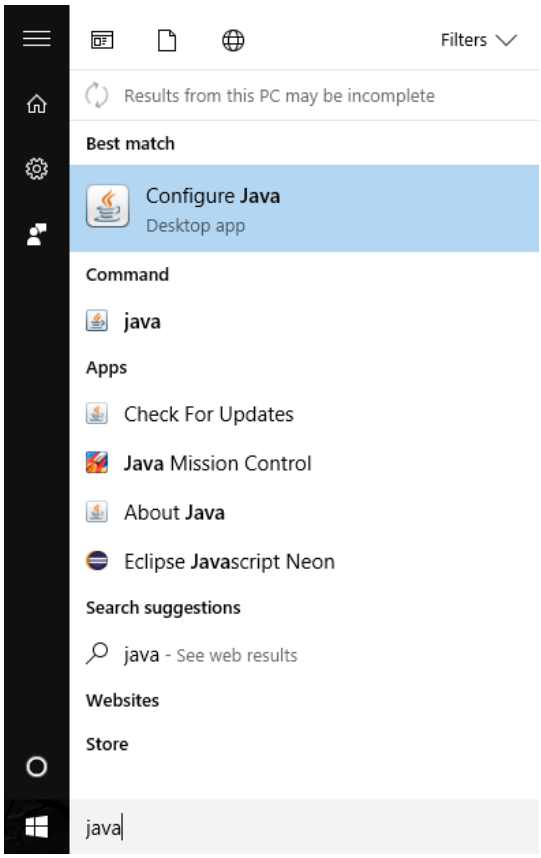




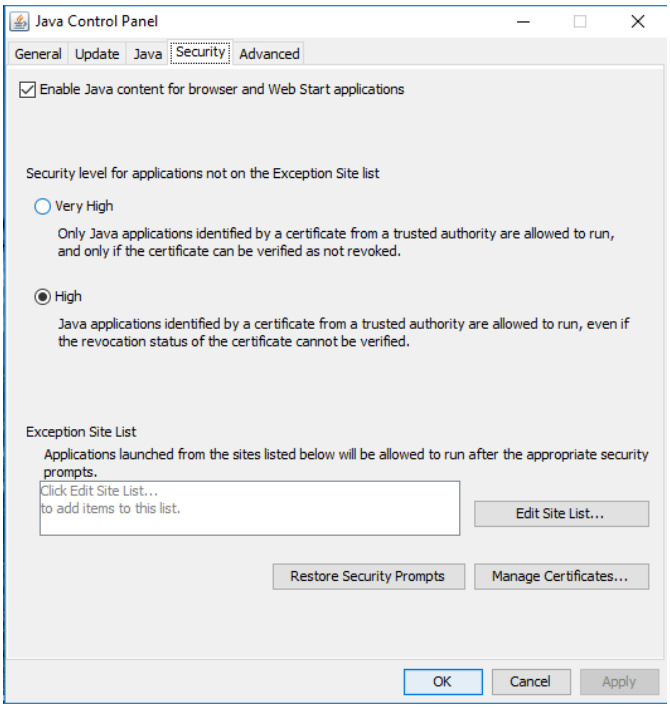


--These next steps will walk you through making the security exception in the Java -- Configuration Manager

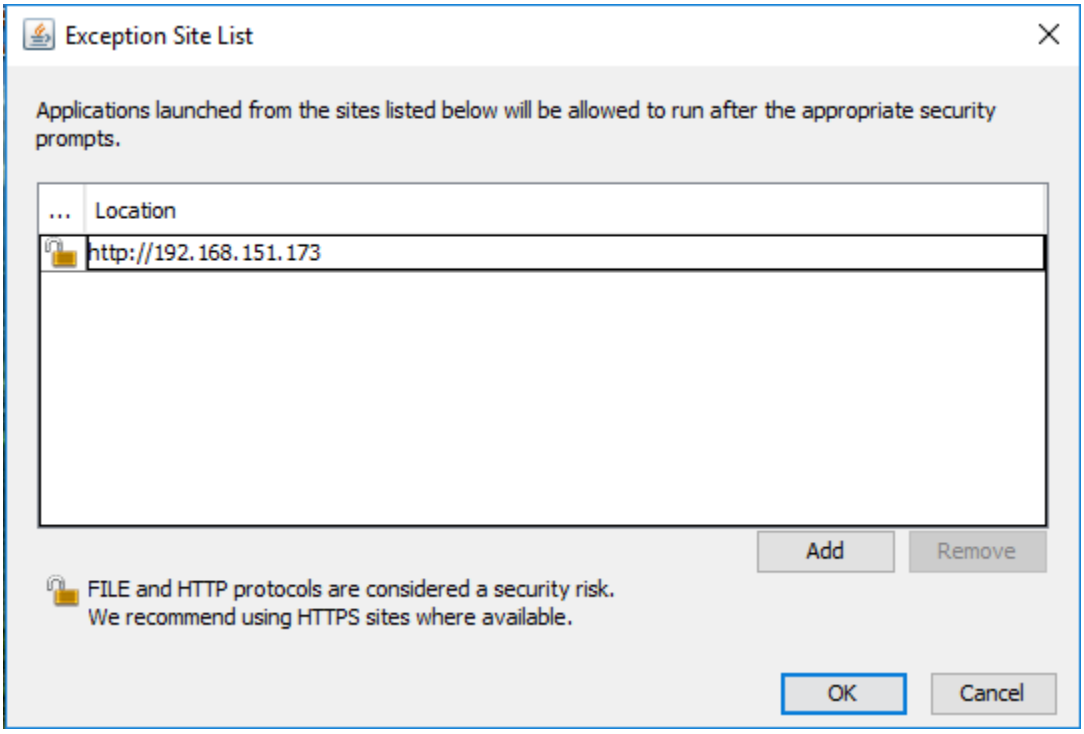
1. In your Start Menu Search “Java” to find your Configuration Manager and open it.



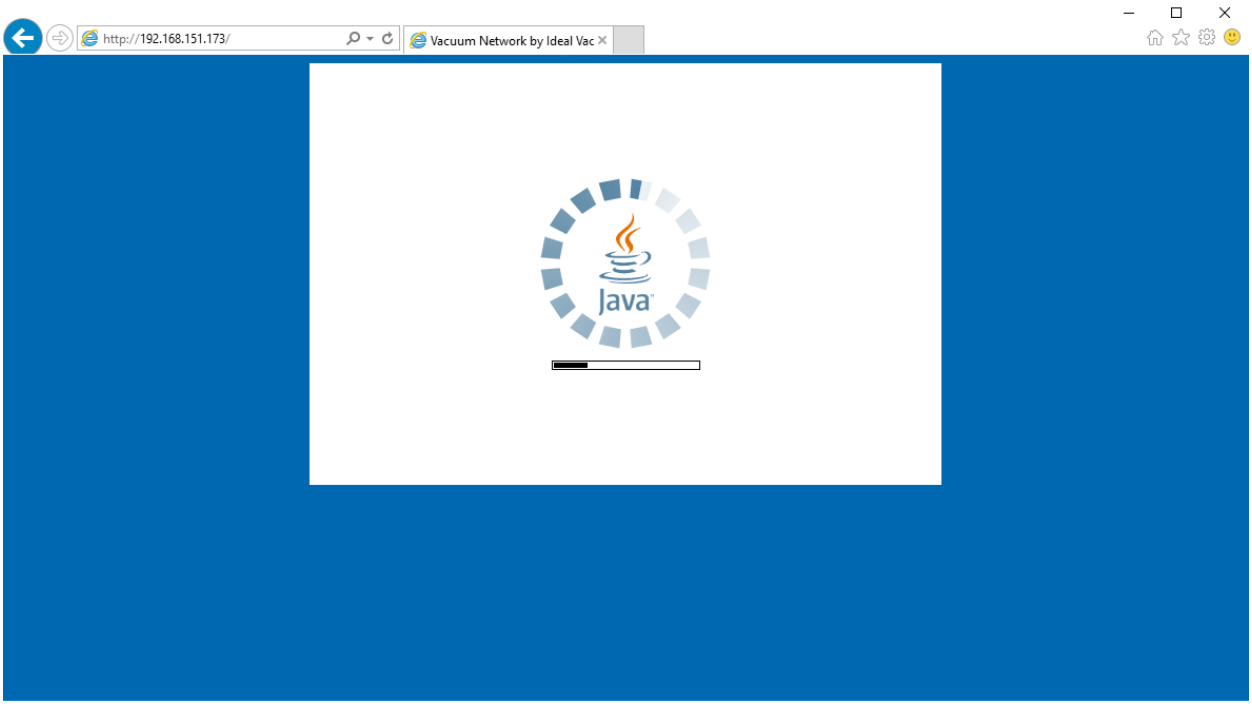
2. Once open, go to the security settings tab on the top, and click “Edit Site List”

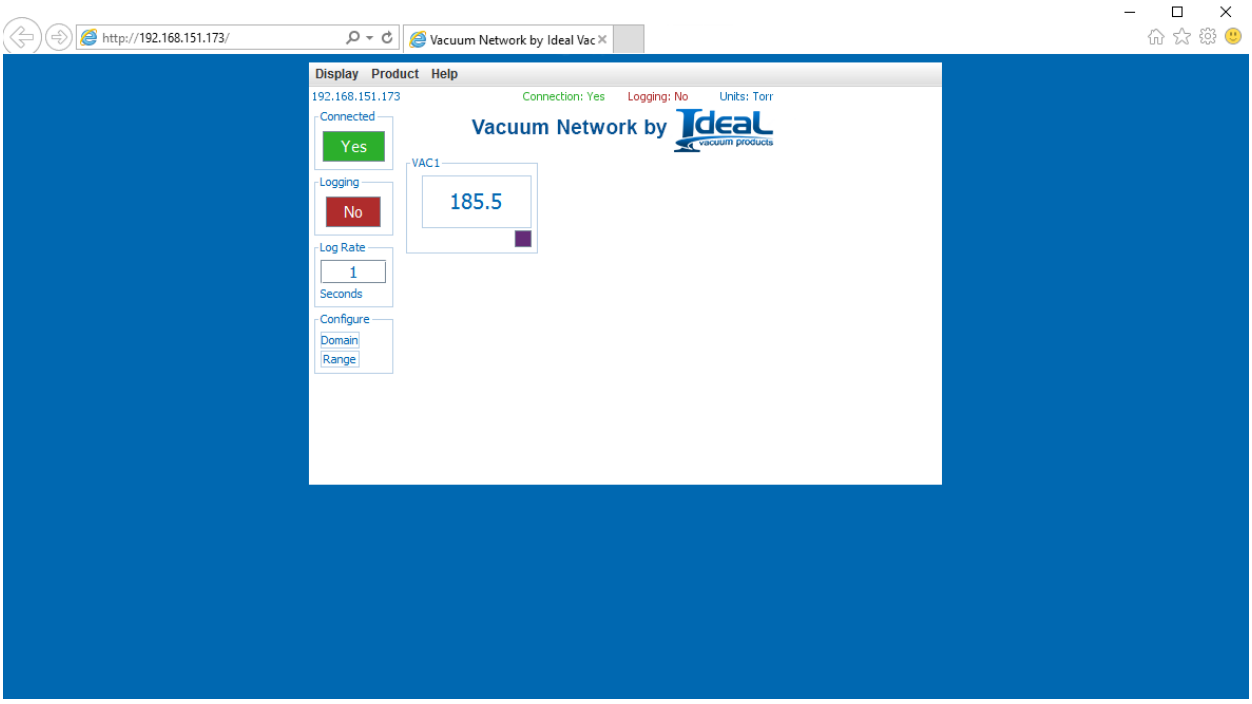


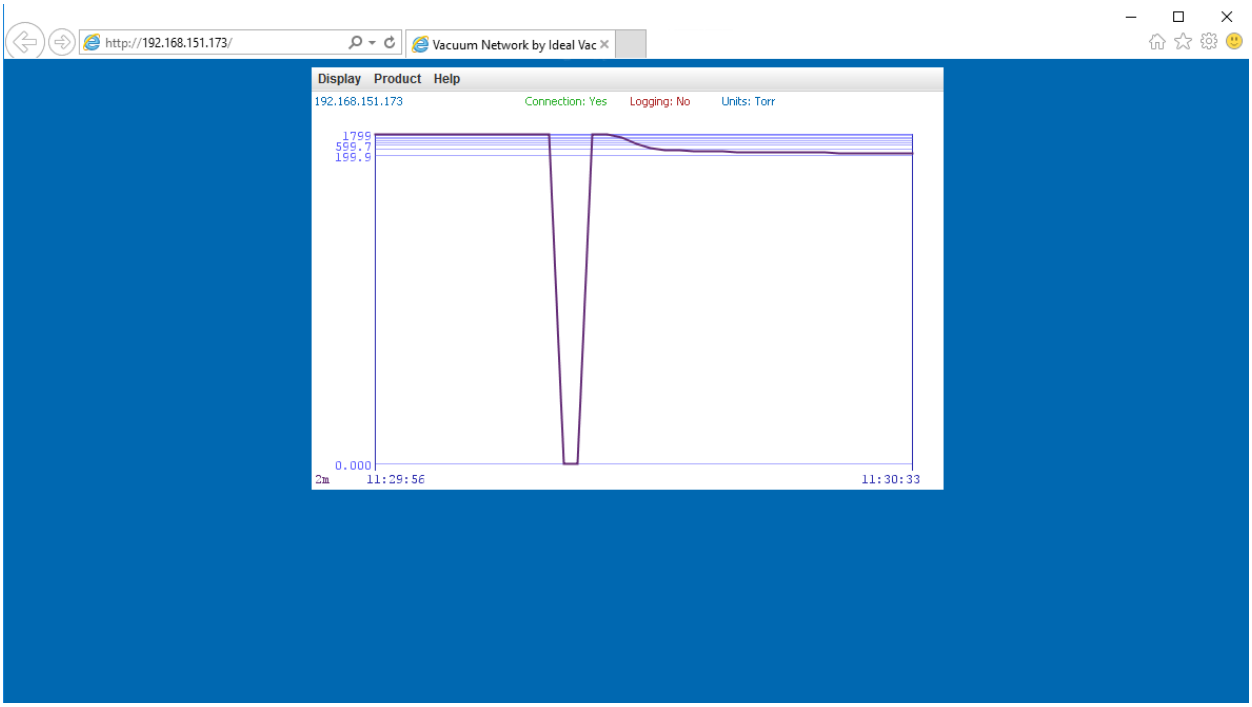
3. Once open click “add” and then type http://___.___.___.___ Fill in the blanks with the IP address you configured earlier and press OK when finished.



4. If your Gauge is plugged into your network, you may now open Internet Explorer and navigate to the IP address you provided to begin remotely monitoring your gauges data. You will be prompted by Java about the security exception. Simply press “accept.”




http://192.168.151.173/
Vacuum Network by Ideal Vac
Display Product Help
192.168.151.173
Connection: Yes
Logging: No
Units: Torr
Connected
Yes
Logging
No
Log Rate
1
Seconds
Configure
Domain
Range
Vacuum Network by Ideal vacuum products
VAC1
185.5


http://192.168.151.173/
Vacuum Network by Ideal Vac
Display Product Help
192.168.151.173
Connection: Yes
Logging: No
Units: Torr
1799
599.7
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11:30:33