

## GEN4 PRO XTREME Initial Setup Instructions for “Wired Ethernet” - MikroTik

The GEN4 PRO XTREME Initial Setup Instructions for “Wired Ethernet” explain how to;

- (1) Download the GEN4 PRO XTREME BigComm Pro (BCP) software onto a PC
- (2) Establish a wired Ethernet connection between PC running the BCP software and GEN4 PRO XTREME ECU
- (3) Activate the BCP and GEN4 PRO XTREME ECU interface to enable BCP software to create an initial Project
- (4) Connect to the GEN4 PRO XTREME ECU to establish online wired Ethernet communication
- (5) Save the calibration file, included with the GEN4 PRO XTREME ECU, into the initial Project

Once these 5 steps are completed you will be communicating online via a direct wired Ethernet connection between the PC running the BCP software and GEN4 PRO XTREME ECU with the initial Project loaded and calibration saved into the GEN4 ECU.

Below, are key considerations for each of the GEN4 PRO XTREME Initial Setup Instruction steps.

### **Step 1.0 - Download the GEN4 PRO XTREME (BCP) software from [www.bigcommpro.com](http://www.bigcommpro.com) website onto a PC**

- An internet connection needs to be established with the PC that the BCP software will be downloaded onto.
- Step 1 assumes “offline” communication i.e. PC is not connected to the GEN4 PRO XTREME wired Ethernet network.
- The BCP software download package includes an example Project containing a demo calibration and preconfigured Dashboards and Tuning Tabs to help get you acquainted with the PCB software offline.

### **Step 2.0 - Establish a wired Ethernet connection between PC running BCP software & GEN4 PRO XTREME ECU**

- The GEN4 PRO XTREME ECU can be connected directly to a PC by Wired Ethernet Networks **OR** by optional Wireless Ethernet Networks using Wireless Routers. The Wired Ethernet Networks are the default configurations and are covered in these instructions. The optional Wireless Ethernet Network configurations are covered in a separate GEN4 PRO XTREME Initial Setup Instructions for “Wireless Ethernet”.
- There are (2) GEN4 Wired Ethernet Network options to choose from:
  - The GEN4 PRO XTREME “**In-Vehicle**” Wired Ethernet Network provides a flexible, portable solution and is intended for “non-Race Car” GEN4 PRO XTREME applications. It only requires a 5’ CAT6a shielded Ethernet cable to be connected between the PC’s RJ45 Ethernet port and GEN4 ECU’s RJ45 port. If the PC is not equipped with a RJ45 Ethernet port a USB-to-RJ45 Ethernet dongle is required. (See Wired Ethernet Network 1 configuration for “In-Vehicle” applications on page 3).
  - The GEN4 PRO XTREME “**Race Car**” Wired Ethernet Network provides a flexible, permanently installed solution and is intended for Race Car and Dyno GEN4 PRO XTREME applications. The Race Car Wired Ethernet Network converts the GEN4 PRO XTREME Race Car Wireless Ethernet Network to a Wired Ethernet Network by connecting a 5’ CAT6a shielded Ethernet cable between one of the MikroTik hAP ac lite wireless router’s RJ45 Ethernet LAN ports and PC’s RJ45 port. If the PC is not equipped with a RJ45 Ethernet port a USB-to-RJ45 Ethernet dongle is required. (See Wired Ethernet Network 2 configuration for “Race Car” & Dyno applications on page 4).
- Once a wired Ethernet connection has been established between the PC running the BCP software and either of the above Wired Ethernet Network options, the GEN4 ECU needs to be powered on (VBATT & +12V switched Ignition) in order to establish online communication.

## GEN4 PRO XTREME Initial Setup Instructions for “Wired Ethernet” - MikroTik

### ***STEP 3.0 - Activate BCP and GEN4 PRO XTREME ECU interface to enable the BCP software to create an initial Project***

- Step 3 assumes Steps 1 & 2 have been completed.
- The first step of Step 3 is to open the BCP software from the PC’s desktop.
- The BCP software & GEN4 PRO XTREME ECU interface is activated by entering the end user name and contact information.
- The BCP software creates an initial Project\* using the Serial Number (MAC ID) of the GEN4 PRO XTREME ECU connected to the PC running the BCP software and activation information.
- **STEP 3.0 only occurs when connecting between a PC running the BCP software and GEN4 PRO XTREME ECU for the first time.**

\* A Project is a universal BCP file that contains all pertinent calibration data & files as well as preconfigured Dashboards, Tuner Tabs and Datalog Tabs associated with a particle GEN4 PRO XTREME ECU application.

### ***STEP 4.0 - Connect to the GEN4 PRO XTREME ECU to establish online wired Ethernet communication***

- Online wired Ethernet communication is established between the BCP software running on the PC and GEN4 PRO XTREME ECU.
- The calibration file included with the GEN4 PRO XTREME ECU is uploaded into the BCP software.

### ***STEP 5.0 - Save the calibration file, also known as “Tune”, included with the GEN4 PRO XTREME ECU, into the initial Project***

- **It is necessary to save the calibration file, also known as “Tune”, included with the GEN4 PRO XTREME ECU, into the initial Project.**

**Wired Ethernet Network 1 configuration for “In-Vehicle” applications**

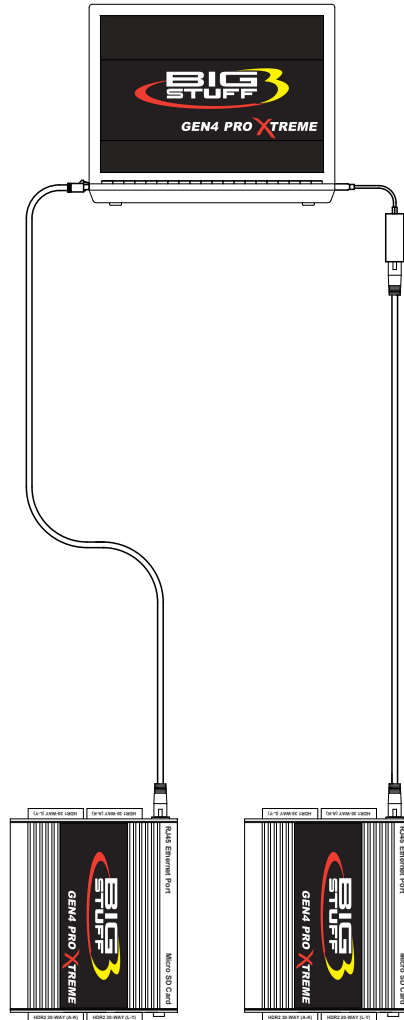
**Step 1:**

**Step 1.0 thru 1.18** - Download GEN4 PRO XTREME BigComm Pro (BCP) software from the [www.bigcommpro.com](http://www.bigcommpro.com) website onto a PC.  
(Step 1 Assumes offline communication)

**Step 2:**

**Step 2.0** - Establish wired Ethernet connection between PC running BCP software & GEN4 PRO XTREME ECU with 5’ CAT6a shielded Ethernet cable. The 5’ CAT6a Ethernet cable can be connected directly to the PC’s RJ45 Ethernet port **OR** if the PC is not equipped with a RJ45 Ethernet port a USB-to-RJ45 Ethernet Dongle is required.

**Note:** See detailed GEN4 PRO XTREME Wired Ethernet Network 1 configuration for “In-Vehicle” applications on page 15.



**Step 3:**

**Step 3.0 thru 3.6** - Activate BCP and GEN4 PRO XTREME ECU interface to enable BCP software to create an initial Project.

**Step 4:**

**Step 4.0 thru 4.2** - Connect to the GEN4 PRO XTREME ECU to establish online wired Ethernet communication.

Ethernet connection using 5’ CAT6a shielded Ethernet cable only

**OR**  
Ethernet connection using USB-to-RJ45 Ethernet Dongle & 5’ CAT6a shielded Ethernet cable

**Step 5:**

**Step 5.0 thru 5.5** - Save calibration, aka “Tune”, included with the GEN4 PRO XTREME ECU into the initial Project.

The screenshot shows the software interface with a data table. The table has 8 columns and 8 rows of numerical data.

0	1.2	0.0	-3.8	-3.8	13.7	0	
1.02	1.02	15.0	10.4	0.0	0.0	0.00	
0.0	0.0	0	0.0	0.0	0.0	0.02	
-13.9	1.00	1	0.0	0.73	0.0	1.03	
97.7	1	0	0	0	-27.1	0.0	

# GEN4 PRO XTREME Initial Setup Instructions for "Wired Ethernet" - MikroTik

## Wired Ethernet Network 2 configuration for "Race Car" and Dyno applications

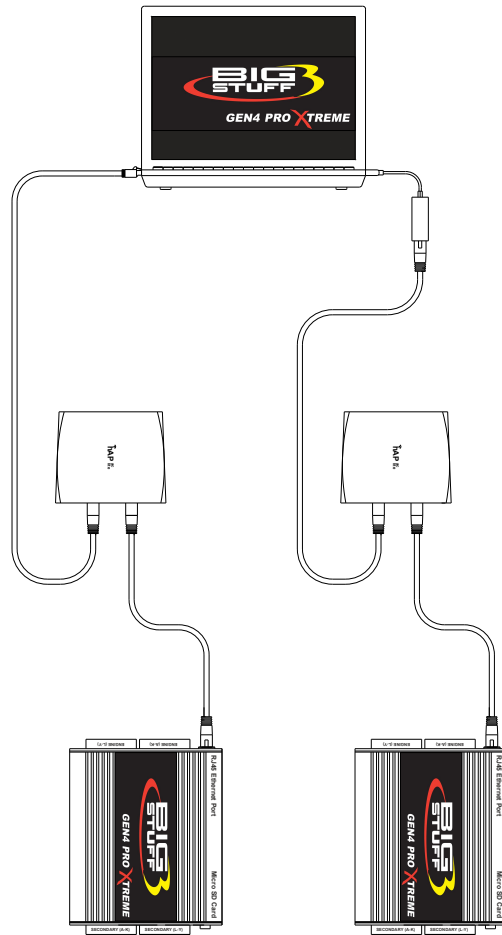
### Step 1:

**Step 1.0 thru 1.18** - Download GEN4 PRO XTREME BigComm Pro (BCP) software from the [www.bigcommpro.com](http://www.bigcommpro.com) website onto a PC. (Step 1 Assumes offline communication)

### Step 2:

**Step 2.0** - Establish wired Ethernet connection between PC running BCP software & GEN4 PRO XTREME ECU using a MikroTik hAP ac lite Router and 5' CAT6a shielded Ethernet cables. One of the 5' CAT6a Ethernet cables can be connected directly to the PC's RJ45 Ethernet port **OR** if the PC is not equipped with a RJ45 Ethernet port a USB-to-RJ45 Ethernet Dongle is required.

**Note:** See detailed GEN4 PRO XTREME Wired Ethernet Network 2 configuration for "Race Car" and Dyno applications on page 16.



### Step 3:

**Step 3.0 thru 3.6** - Activate BCP and GEN4 PRO XTREME ECU interface to enable BCP software to create an initial Project.

### Step 4:

**Step 4.0 thru 4.2** - Connect to the GEN4 PRO XTREME ECU to establish online wired Ethernet communication.

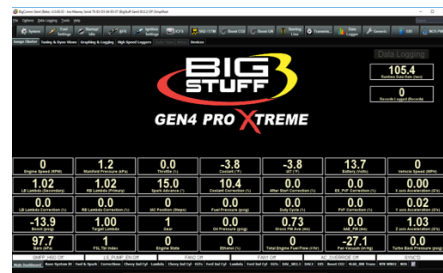
Wired Ethernet connection using MikroTik hAP ac lite Router and 5' CAT6a Ethernet cables

**OR**

Wired Ethernet Connection using MikroTik hAP ac lite Router with USB-to-RJ45 Ethernet Dongle & 5' CAT6a Ethernet cables

### Step 5:

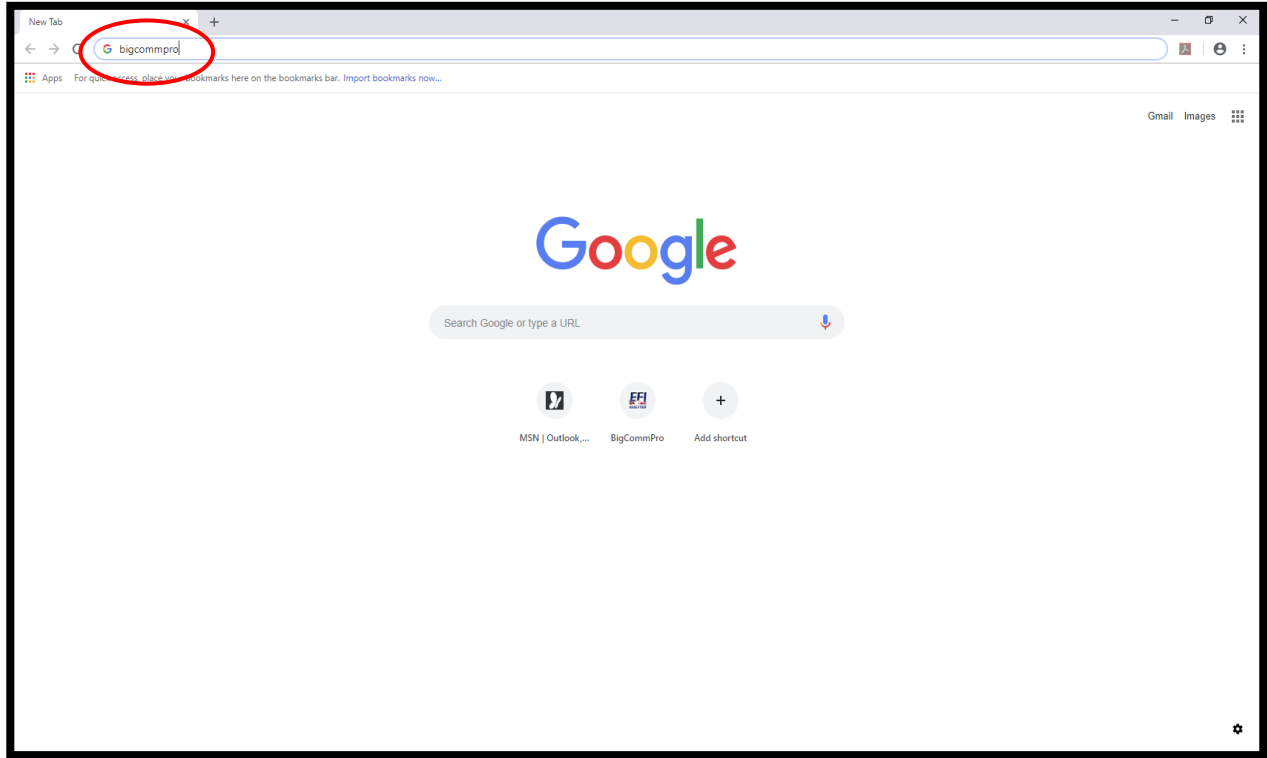
**Step 5.0 thru 5.5** - Save calibration, aka "Tune", included with the GEN4 PRO XTREME ECU into the initial Project.



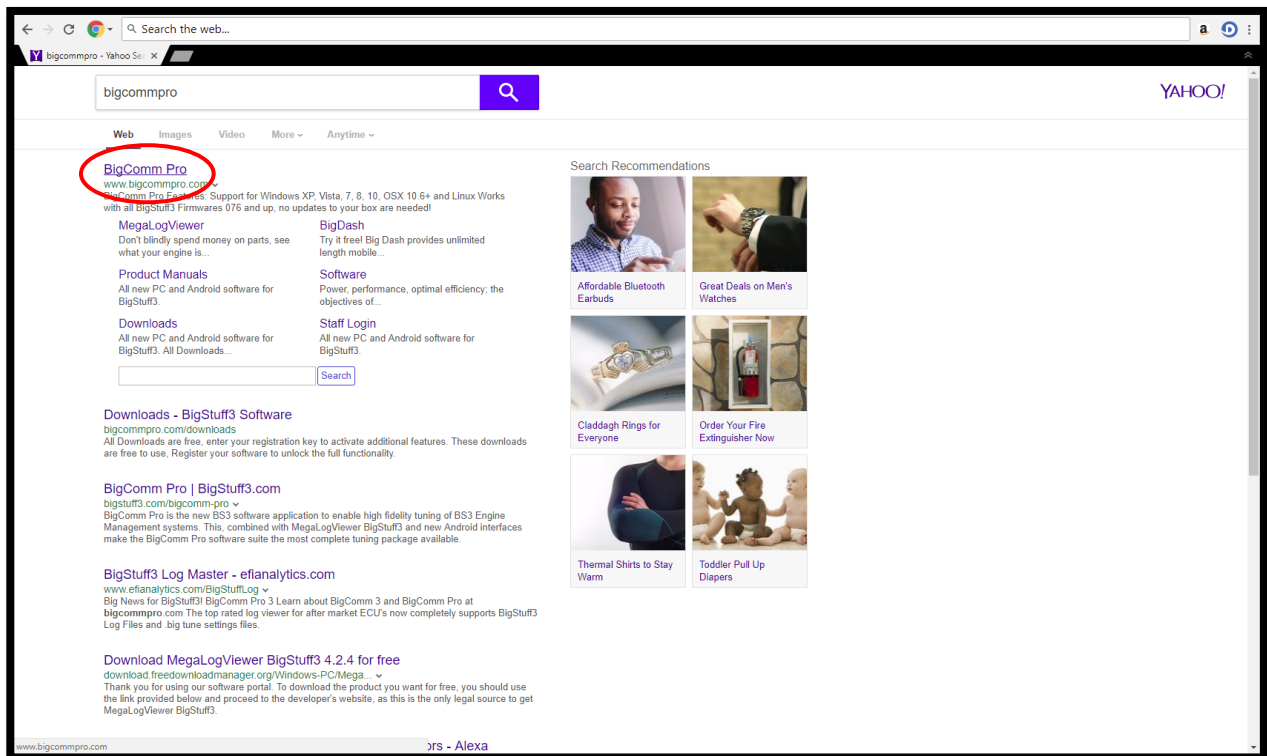
# GEN4 PRO XTREME Initial Setup Instructions for "Wired Ethernet" - MikroTik

**Step 1.0 - Download GEN4 PRO XTREME BigComm PRO (BCP) Software from the [www.bigcommpro.com](http://www.bigcommpro.com) website onto a PC**

**Step 1.1 - With the PC connected to the internet, type **bigcommpro** into the web browser and hit enter. At this point, the PC should not be connected to the GEN4 PRO XTREME wired Ethernet network.**

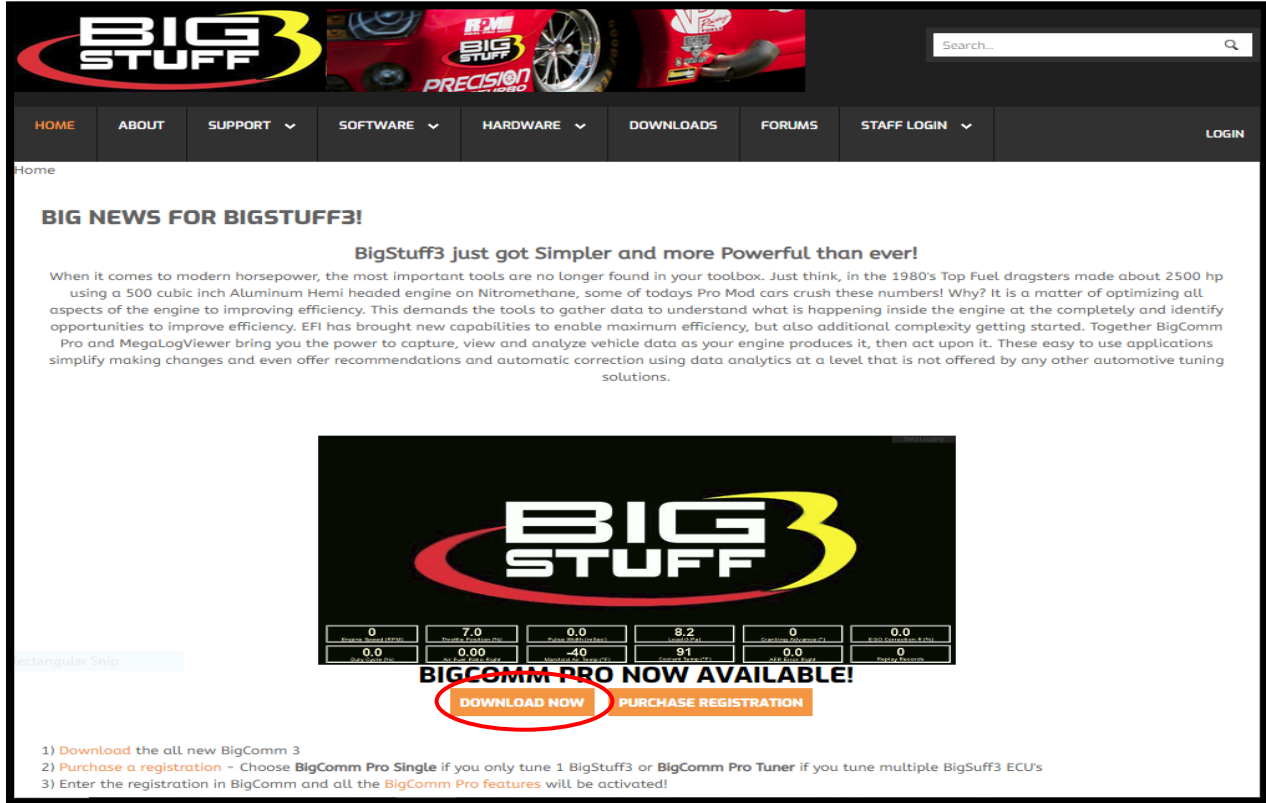


**Step 1.2 - Select BigComm Pro.**



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Step 1.3 - Once the [www.bigcommpro.com](http://www.bigcommpro.com) home page opens, select **DOWNLOAD NOW**.



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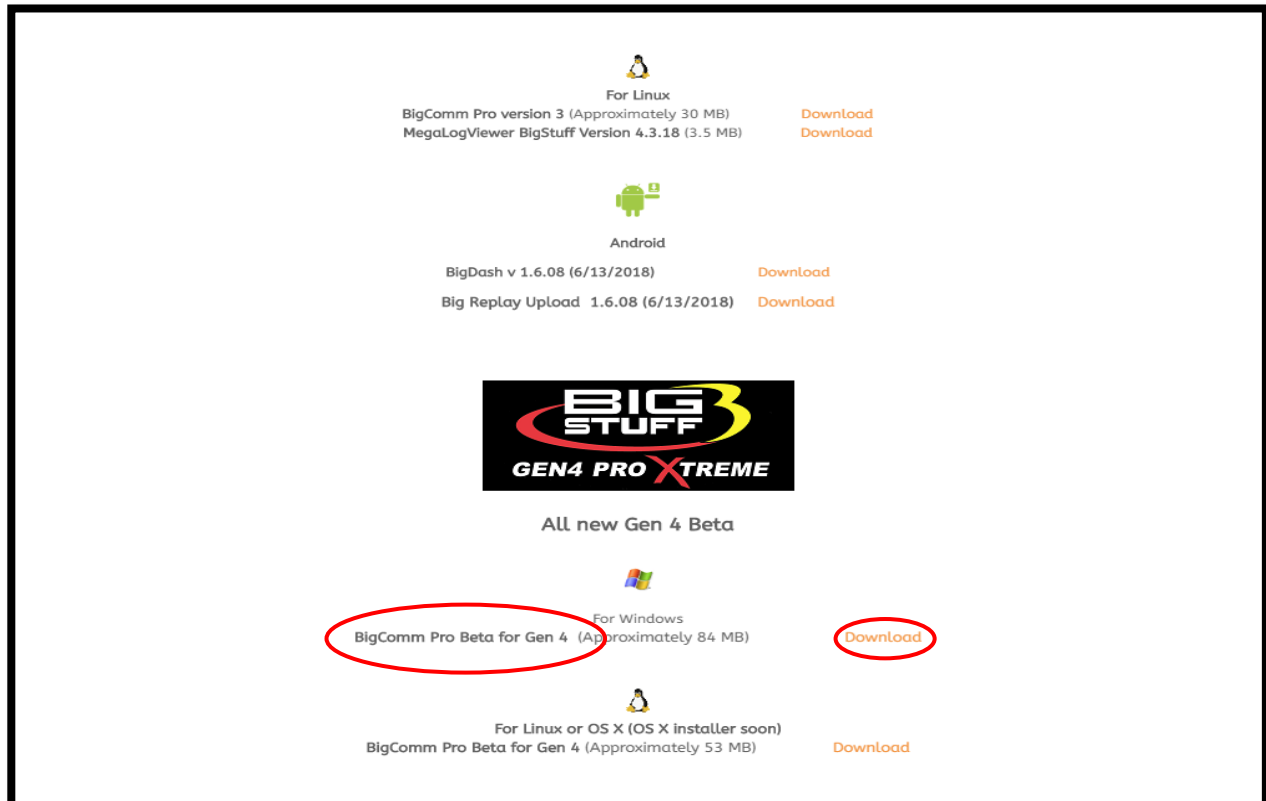
0 RPM (RPM)	7.0 Fuel (GPH)	0.0 Fuel (LBS)	8.2 Temp (°C)	0 Pressure (PSI)	0.0 RPM (RPM)
0.0 RPM (RPM)	0.00 Fuel (GPH)	-40 Temp (°C)	91 Temp (°C)	0.0 Pressure (PSI)	0 RPM (RPM)

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Step 1.4 - Download the **BigComm Pro Beta for Gen 4** by selecting **Download**.



For Linux  
BigComm Pro version 3 (Approximately 30 MB) [Download](#)  
MegaLogViewer BigStuff Version 4.3.18 (3.5 MB) [Download](#)

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Big Replay Upload 1.6.08 (6/13/2018) [Download](#)

**BIG STUFF**  
**GEN4 PRO XTREME**

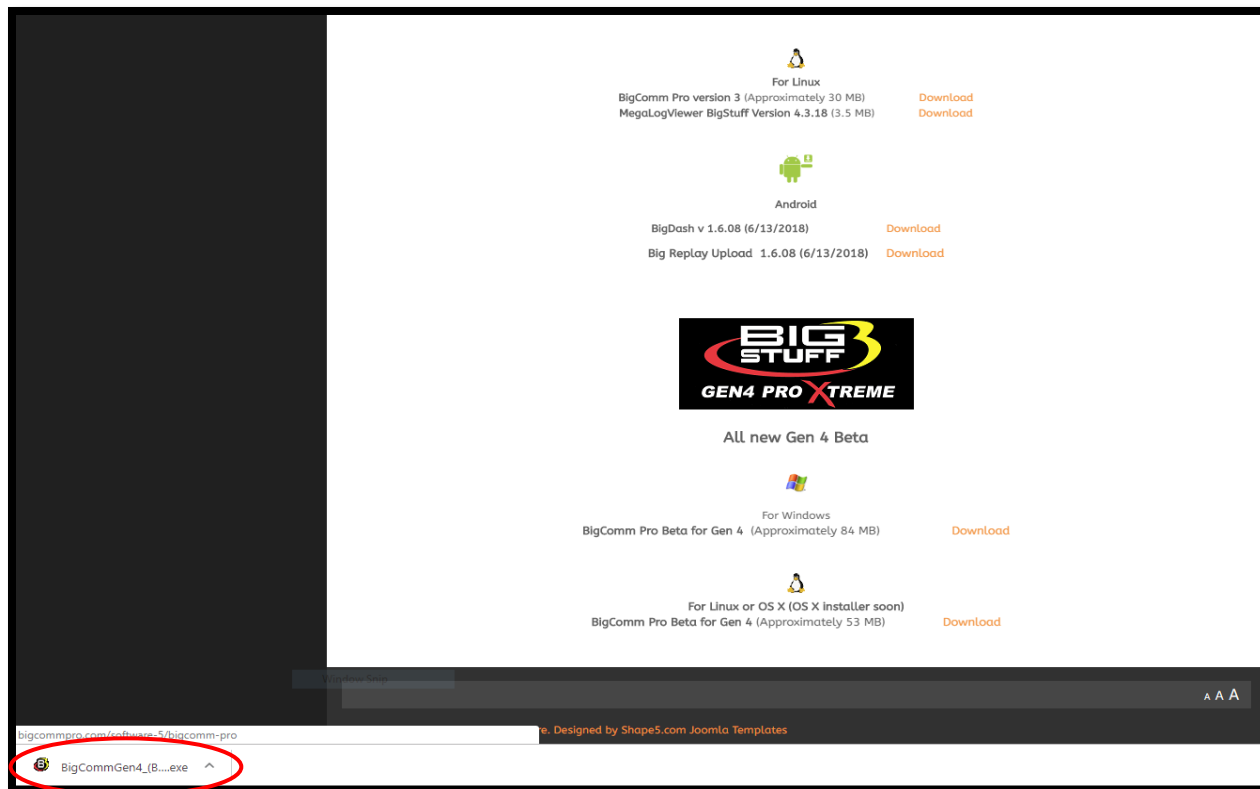
All new Gen 4 Beta

For Windows  
**BigComm Pro Beta for Gen 4 (Approximately 84 MB)** [Download](#)

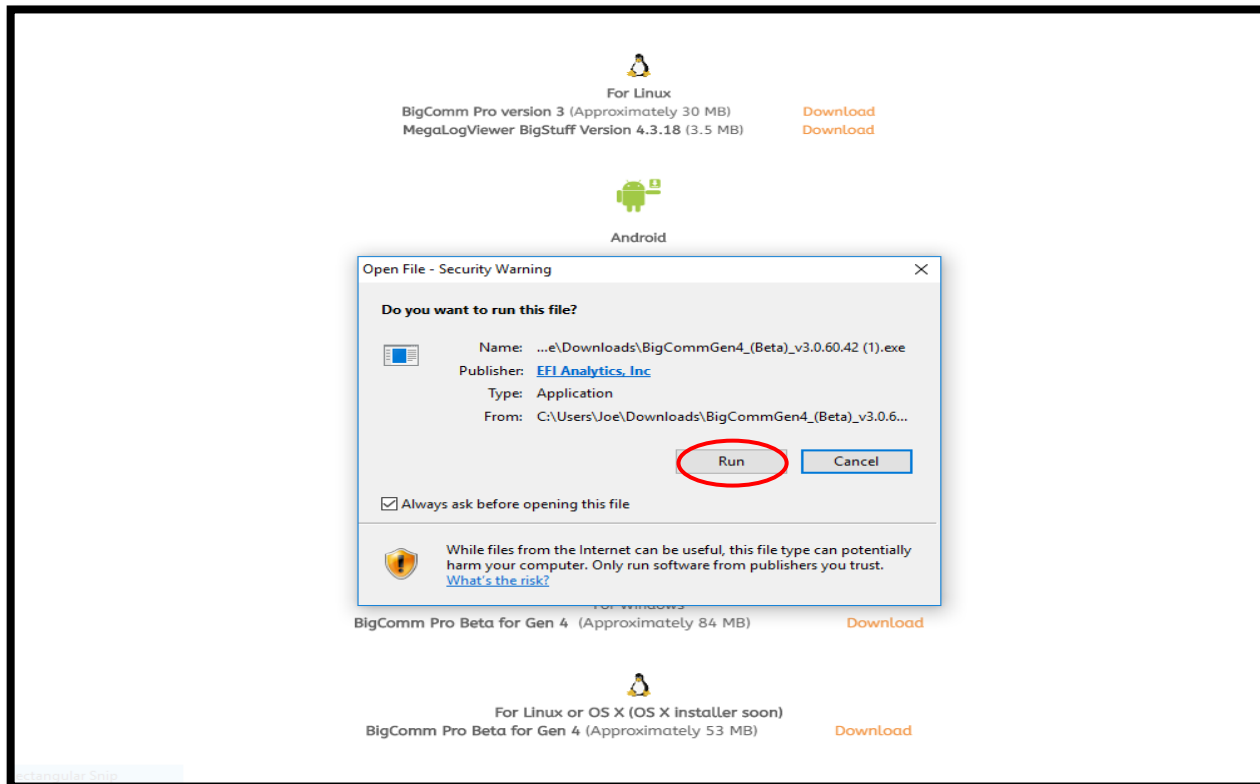
For Linux or OS X (OS X Installer soon)  
BigComm Pro Beta for Gen 4 (Approximately 53 MB) [Download](#)

## GEN4 PRO XTREME Initial Setup Instructions for "Wired Ethernet" - MikroTik

**Step 1.5** - Once the **BigCommGen4** executable has completed downloading (84 MB), select it from the lower left-hand corner of the screen.

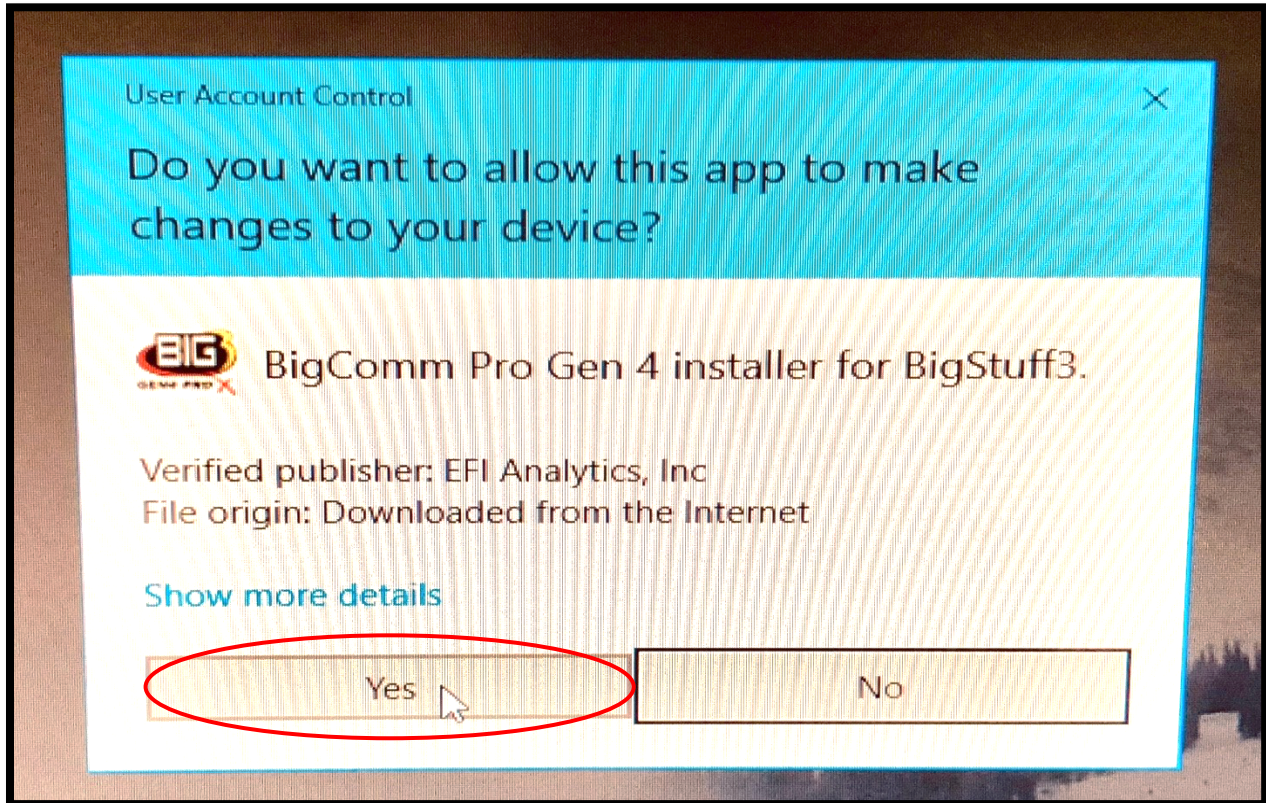


**Step 1.6** - Select Run.

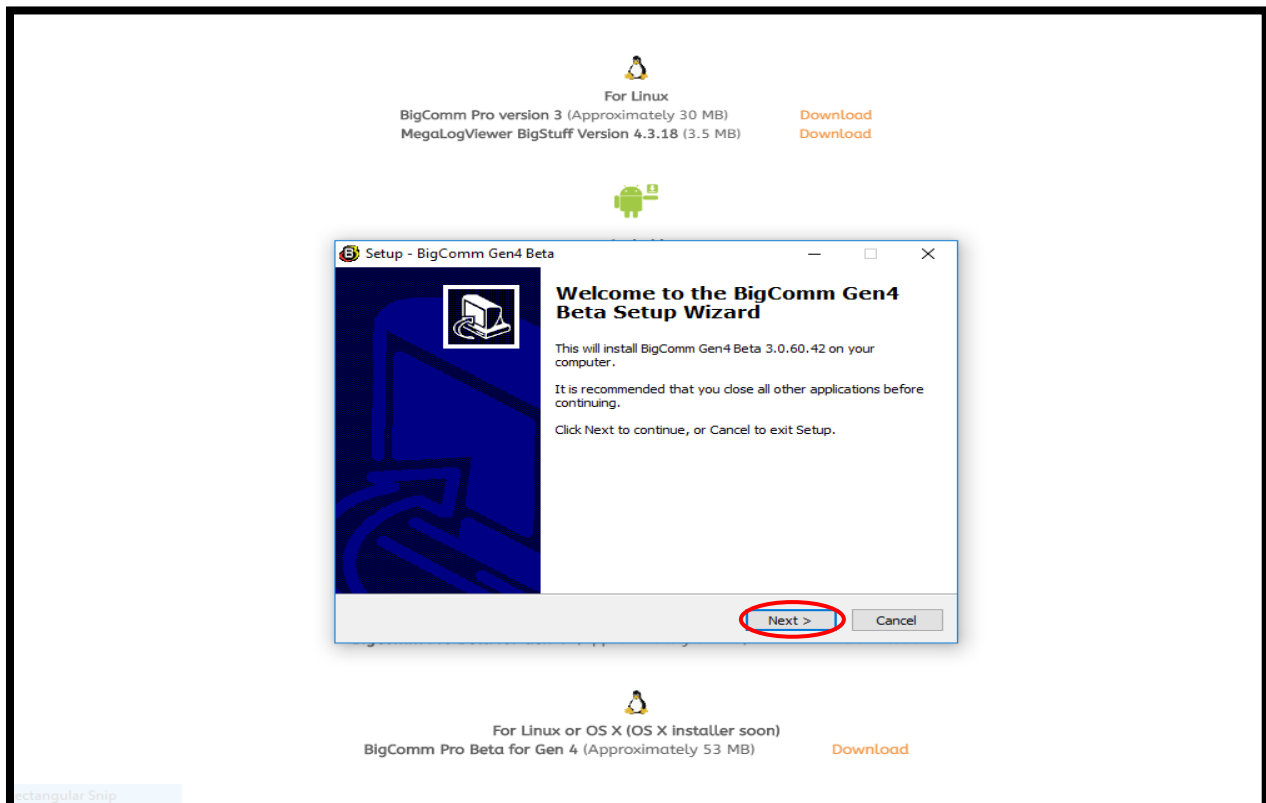


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Step 1.7 - Select Yes.



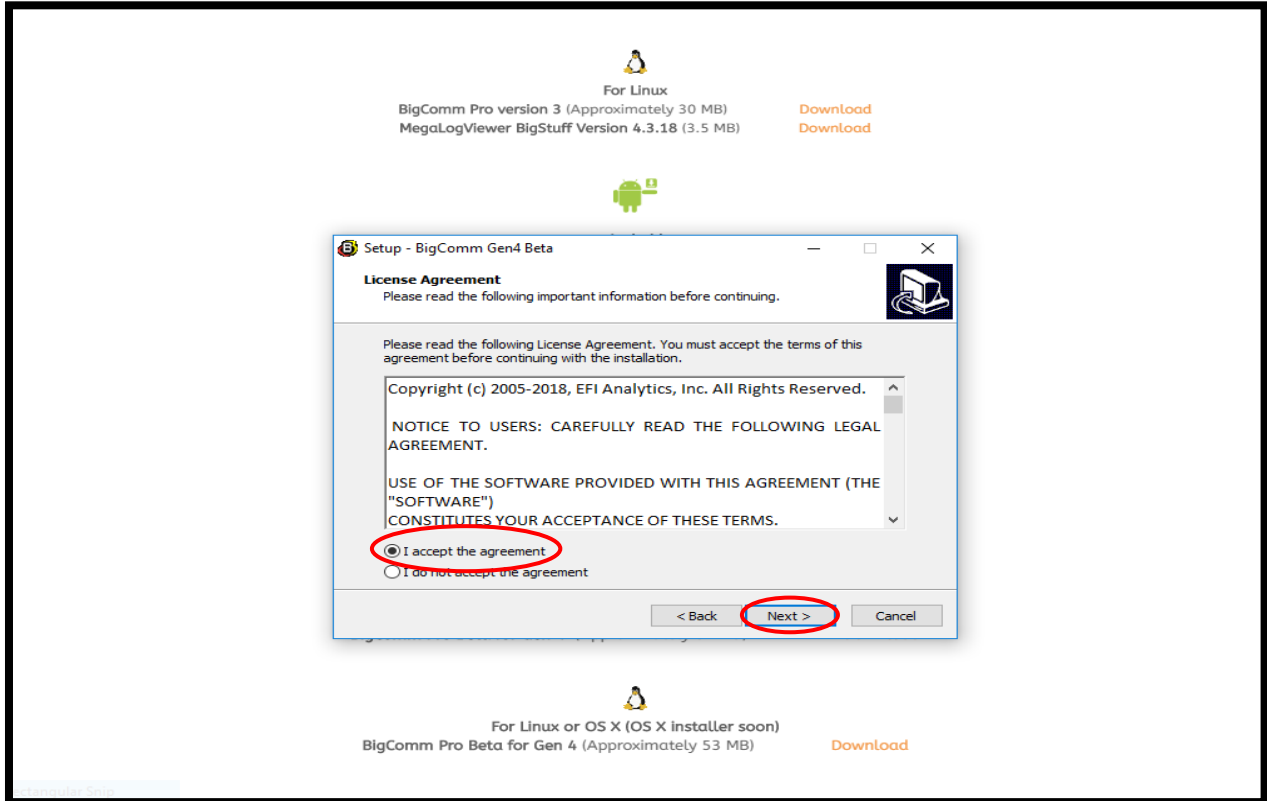
Step 1.8 - Select Next >.



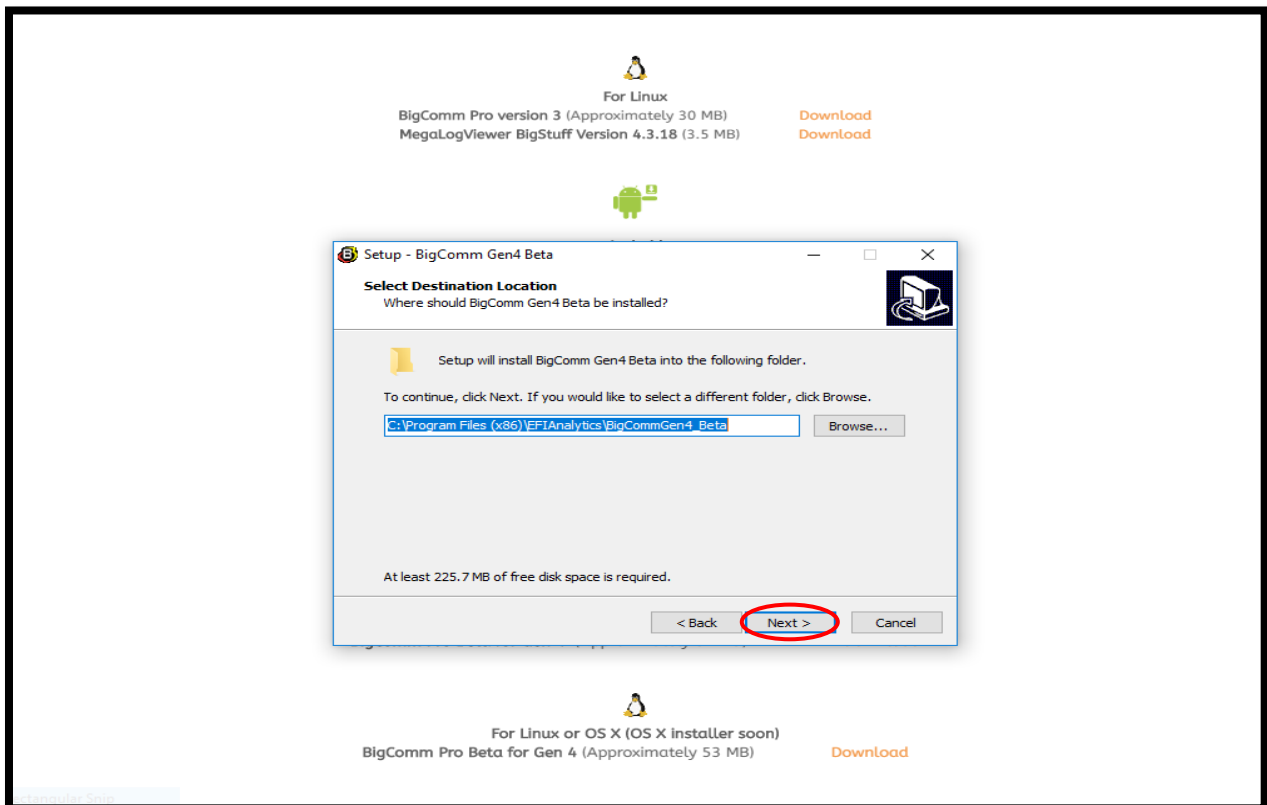


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Step 1.9 - Select "I accept the agreement" and then select Next >.

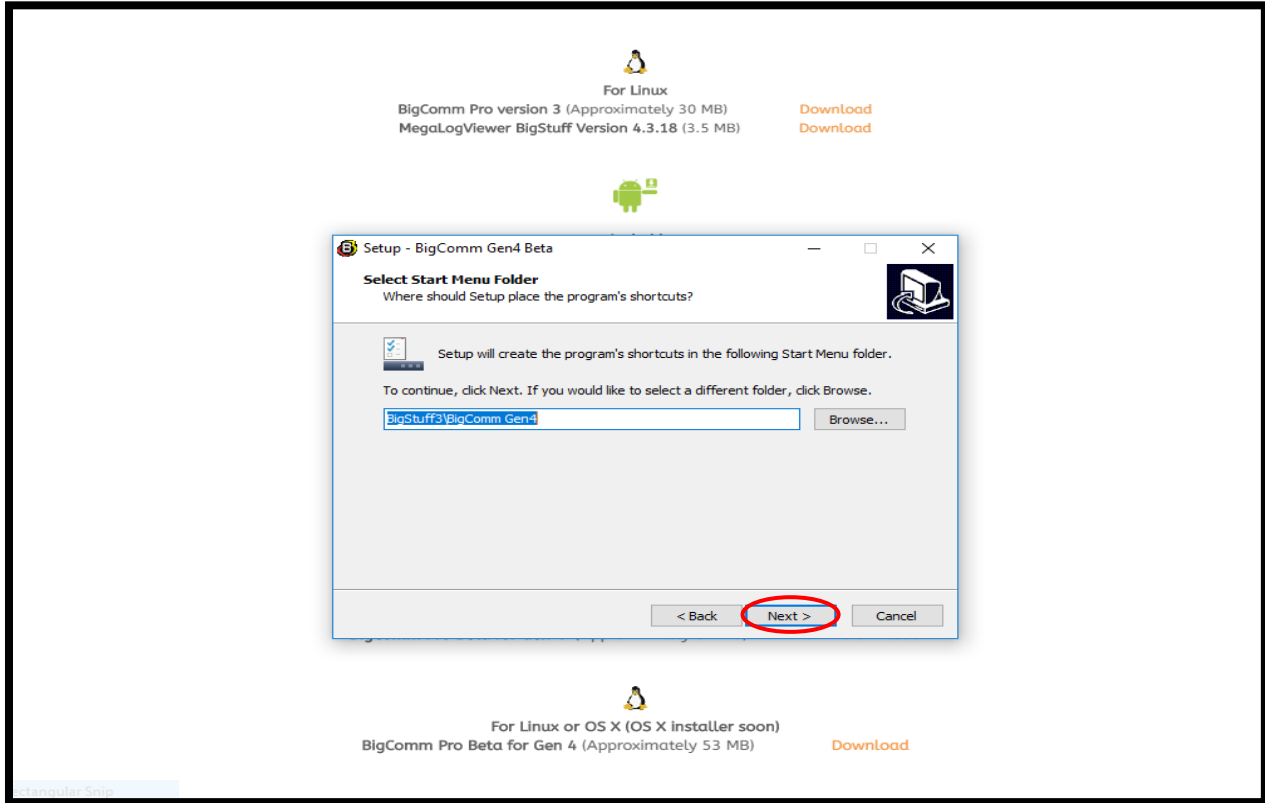


Step 1.10 - Select Next >



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Step 1.11 - Select Next >.

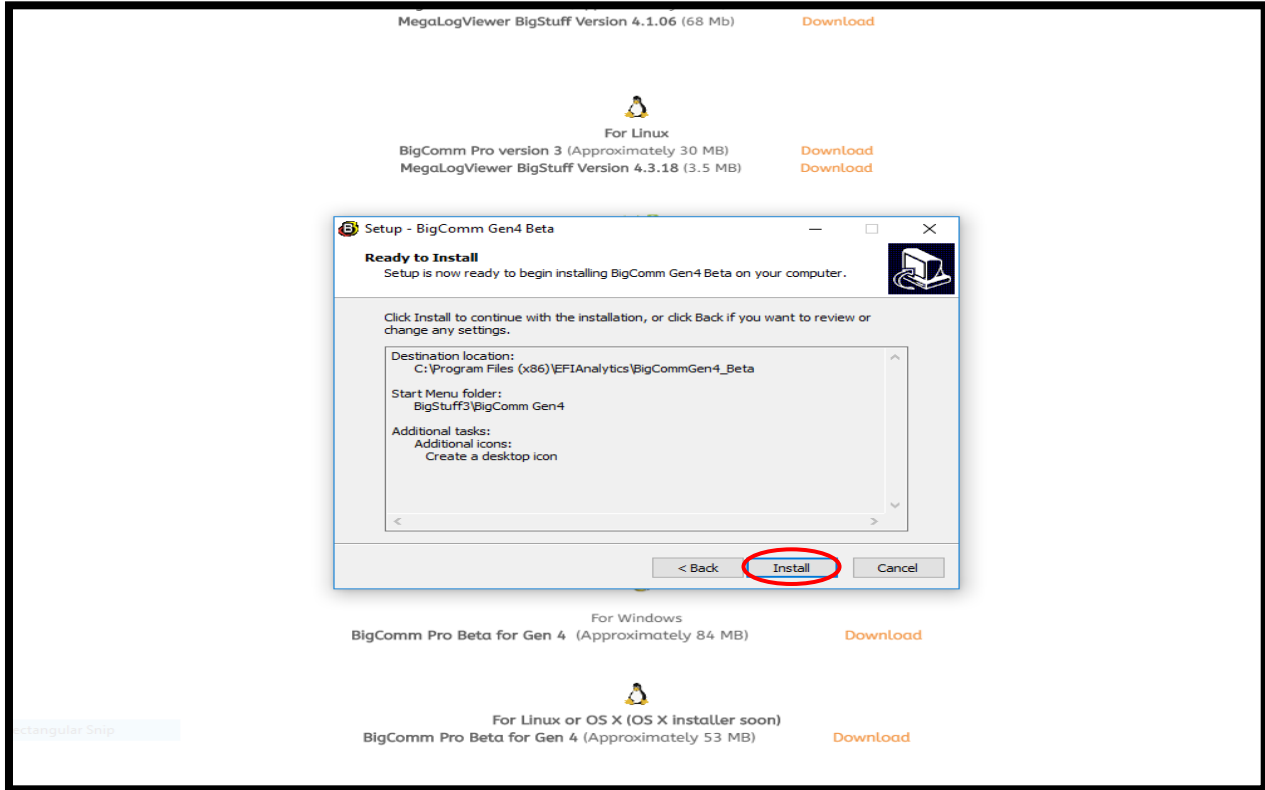


Step 1.12 - Check the "Create a desktop icon" box and then select Next >.

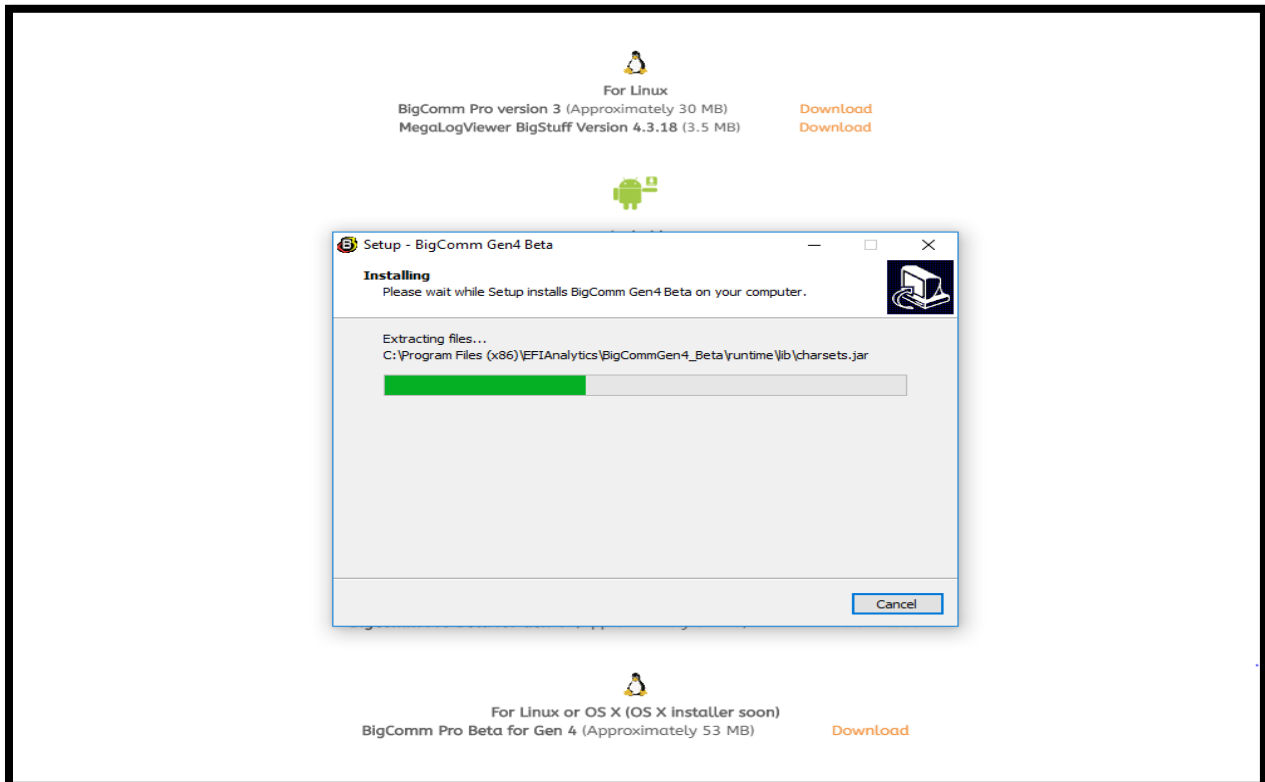


# GEN4 PRO XTREME Initial Setup Instructions for “Wired Ethernet” - MikroTik

## Step 1.13 - Select Install.

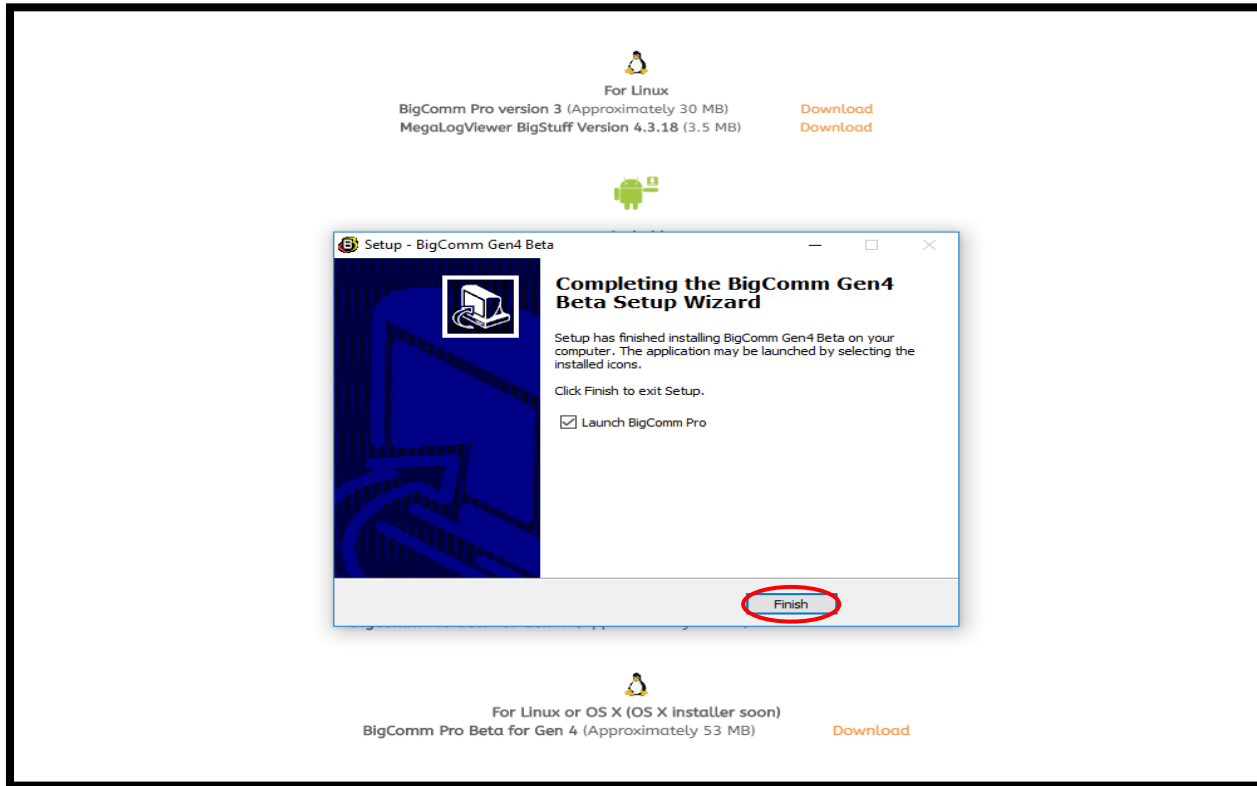


**Step 1.14** - After selecting **Install** from Step 1.13, a status bar will appear showing the progress of the BigComm Pro (BCP) GEN4 software download to your PC.

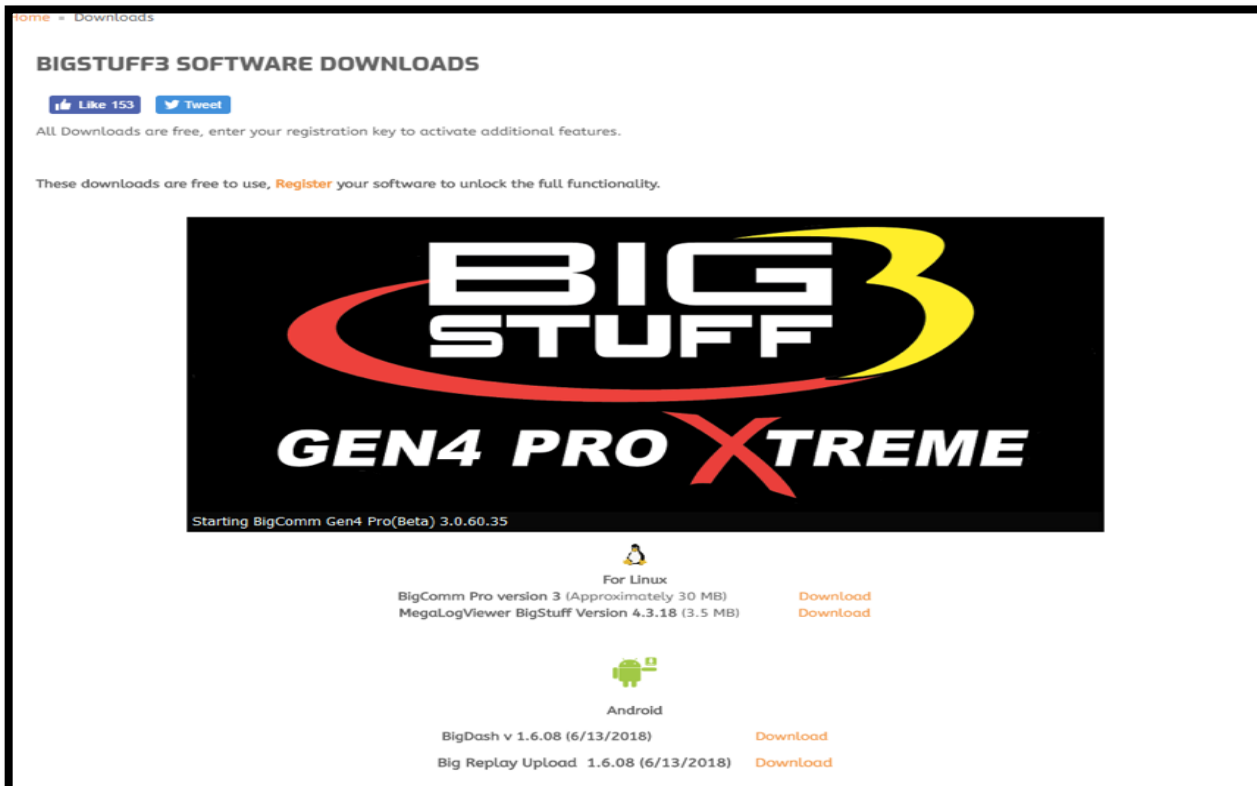


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## Step 1.15 - Select Finish.

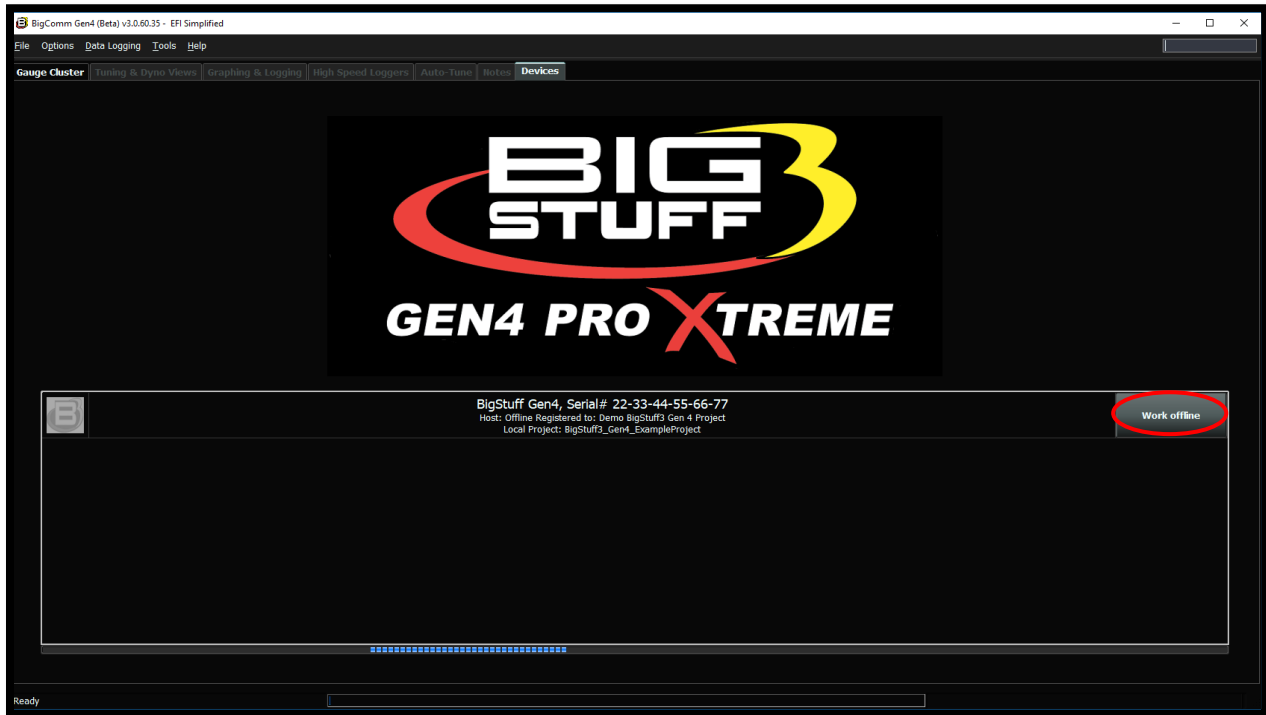


## Step 1.16 - After selecting Finish from Step 1.15, after a slight pause, the GEN4 PRO XTREME graphic screen will appear momentarily.

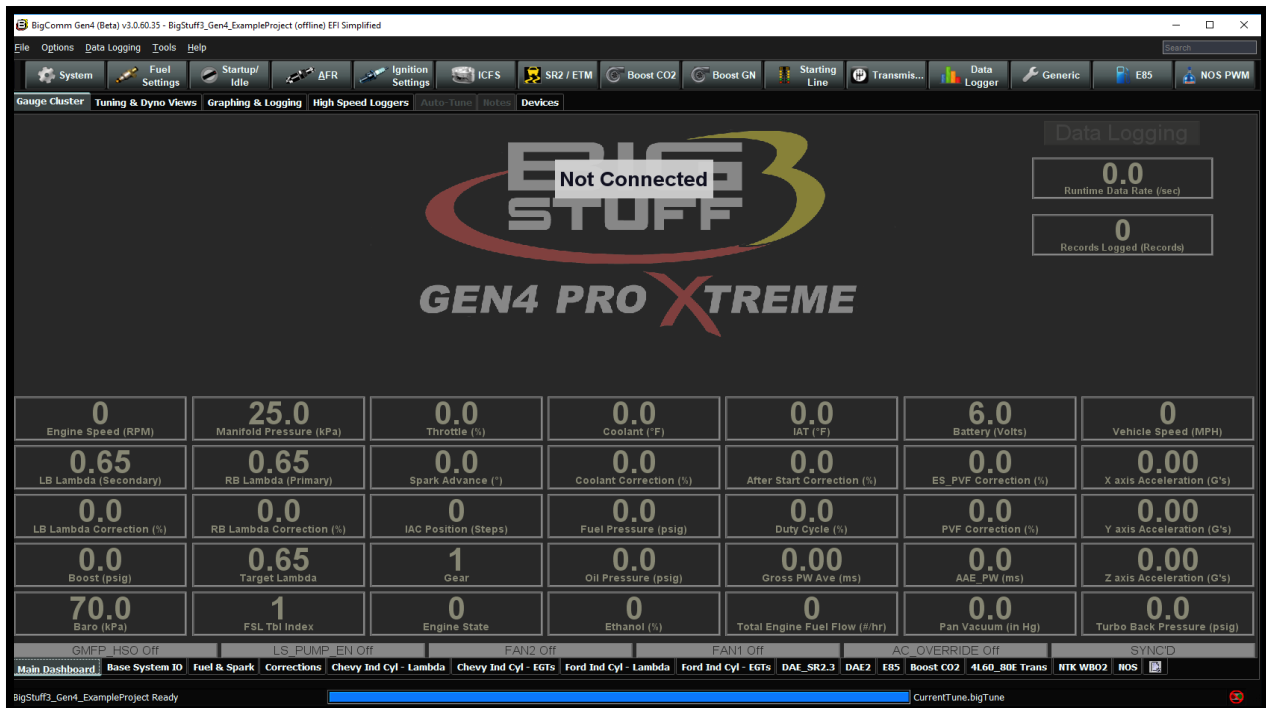


## GEN4 PRO XTREME Initial Setup Instructions for “Wired Ethernet” - MikroTik

**Step 1.17** - After another slight pause, the following GEN4 PRO XTREME software window will open. At this point, the software is running on your PC and you can work offline with an example Local Project: **BigStuff3\_Gen4\_ExampleProject** by selecting **Work offline**. The example Local Project contains a demo calibration, preconfigure dashboards and tuning tabs and should only be used offline.



**Step 1.18** - After selecting **Work offline** from Step 1.17, the following **Main Dashboard** window will open. Now would be a great time to navigate the GEN4 PRO XTREME BigComm Pro software to get acquainted with it before establishing an “online” connection.



## GEN4 PRO XTREME Initial Setup Instructions for “Wired Ethernet” - MikroTik

### **Step 2.0 - Establish a wired Ethernet connection between PC running BCP software & GEN4 PRO XTREME ECU**

The communication between the BigComm Pro (BCP) GEN4 software running on a PC and GEN4 PRO XTREME ECU is based on a Wired Ethernet connection. Online wired Ethernet communication between the PC running the BCP software and GEN4 PRO XTREME ECU can be established once the following Wired Ethernet Network connections are made:

For the **Wired Ethernet Network 1 Configuration for “In-Vehicle” applications;**

- The 5’ CAT6a Ethernet cable is connected between the RJ45 Ethernet port of the PC running the BCP software and the GEN4 PRO XTREME ECU’s RJ45 Ethernet port. If the PC is not equipped with a RJ45 Ethernet port a USB-to-RJ45 Ethernet dongle is required. A USB-to-RJ45 Ethernet dongle can be ordered from BS3. The part number is BS4-003-007. (See the GEN4 PRO XTREME Wired Ethernet Network 1 Configuration for “In-Vehicle applications on page 15).

For the **Wired Ethernet Network 2 Configuration for “Race Car” & Dyno applications;**

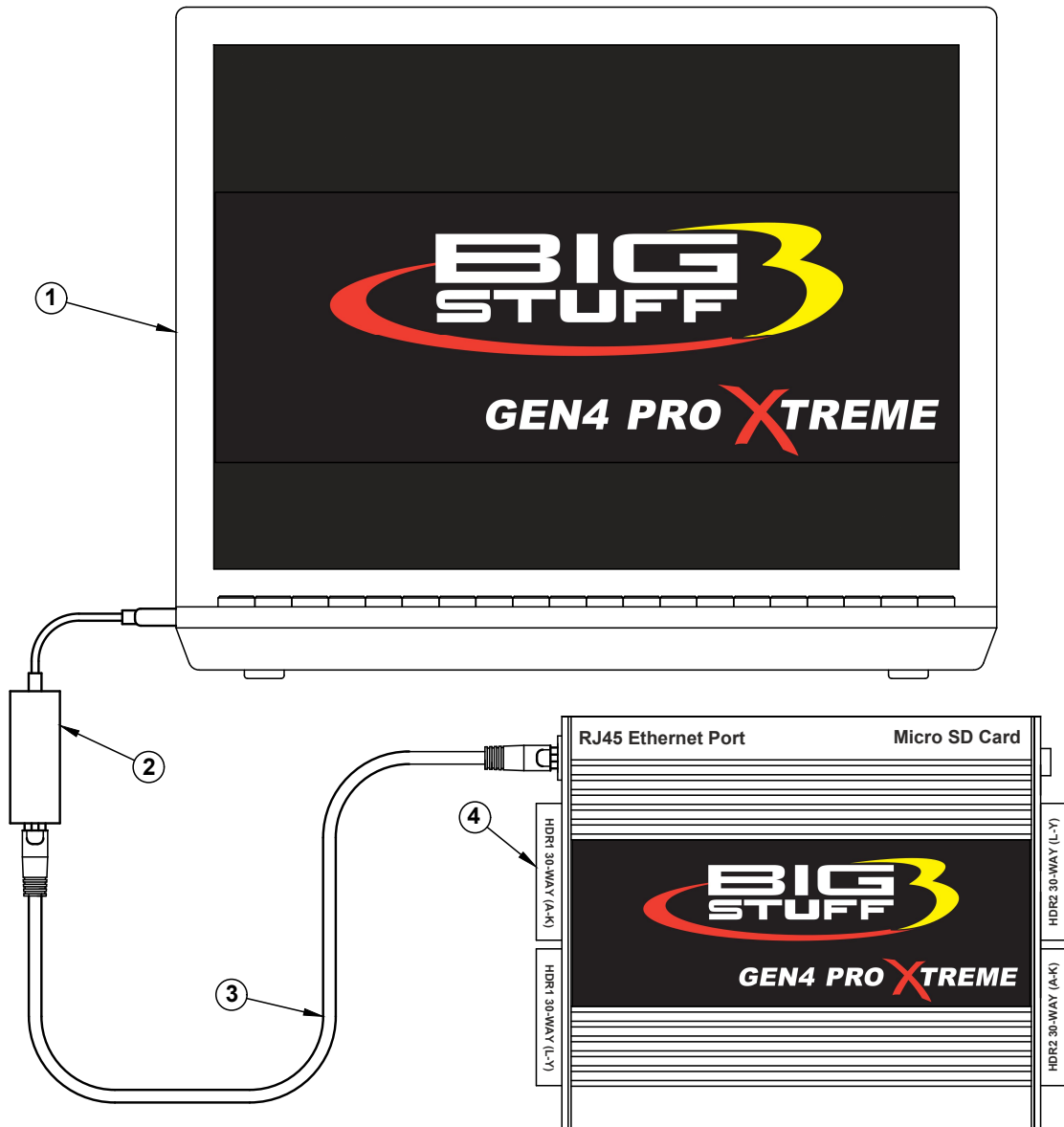
- The “Race Car” Wireless Router Battery Power Interface Harness is connected between the MikroTik hAP ac lite Race Car Wireless Router’s 10-28V DC plug and Battery (+) & (-).
- One of the 5’ CAT6a shielded Ethernet cables is connected between one of the MikroTik hAP ac lite router’s (4) RJ45 LAN ports and GEN4 ECU’s RJ45 Ethernet port.
- One of the 5’ CAT6a shielded Ethernet cables is connected between one of the MikroTik hAP ac lite router’s (4) RJ45 LAN ports and the RJ45 Ethernet port of the PC running the BCP software. If the PC is not equipped with a RJ45 Ethernet port a USB-to-RJ45 Ethernet dongle is required. A USB-to-RJ45 Ethernet dongle can be ordered from BS3. The part number is BS4-003-007. (See the GEN4 PRO XTREME Wired Ethernet Network 2 Configuration for “Race Car” & Dyno applications on page 16).
- Once the GEN4 PRO XTREME MikroTik hAP ac lite wireless router is connected to the 10-28V DC power source, the green LED will illuminate to indicate it is powered on. After one of the 5’ CAT6a shielded Ethernet cables is connected between one of the MikroTik hAP ac lite router’s (4) RJ45 LAN ports and GEN4 ECU’s RJ45 Ethernet port and another one of the 5’ CAT6a shielded Ethernet cables is connected between one of the MikroTik hAP ac lite router’s (4) RJ45 LAN ports and the RJ45 Ethernet port of the PC running the BCP software, the associated LAN channel LEDs on the backside of the MikroTik hAP ac lite will illuminate to indicate a wired connection can now be established.

Once either the above Wired Ethernet Network connections have been made, the GEN4 PRO XTREME ECU needs to be powered on (VBATT & +12V switched Ignition) in order to establish online communication with the PC running the BCP software. The ECU’s RJ45 green LED will illuminate when it is powered on and the ECU’s RJ45 orange LED will illuminate and begin flashing when a wired Ethernet connection is established. Once the wired Ethernet connection is established, instruction Steps 3.0 & 4.0 will detail how to establish online communication between the PC running the BCP software and GEN4 PRO XTREME ECU.

## GEN4 PRO XTREME Initial Setup Instructions for “Wired Ethernet” - MikroTik

### Wired Ethernet Network 1 Configuration for “In-Vehicle” applications

#### GEN4 PRO XTREME ECU / PC / Wired Ethernet Connection Configuration



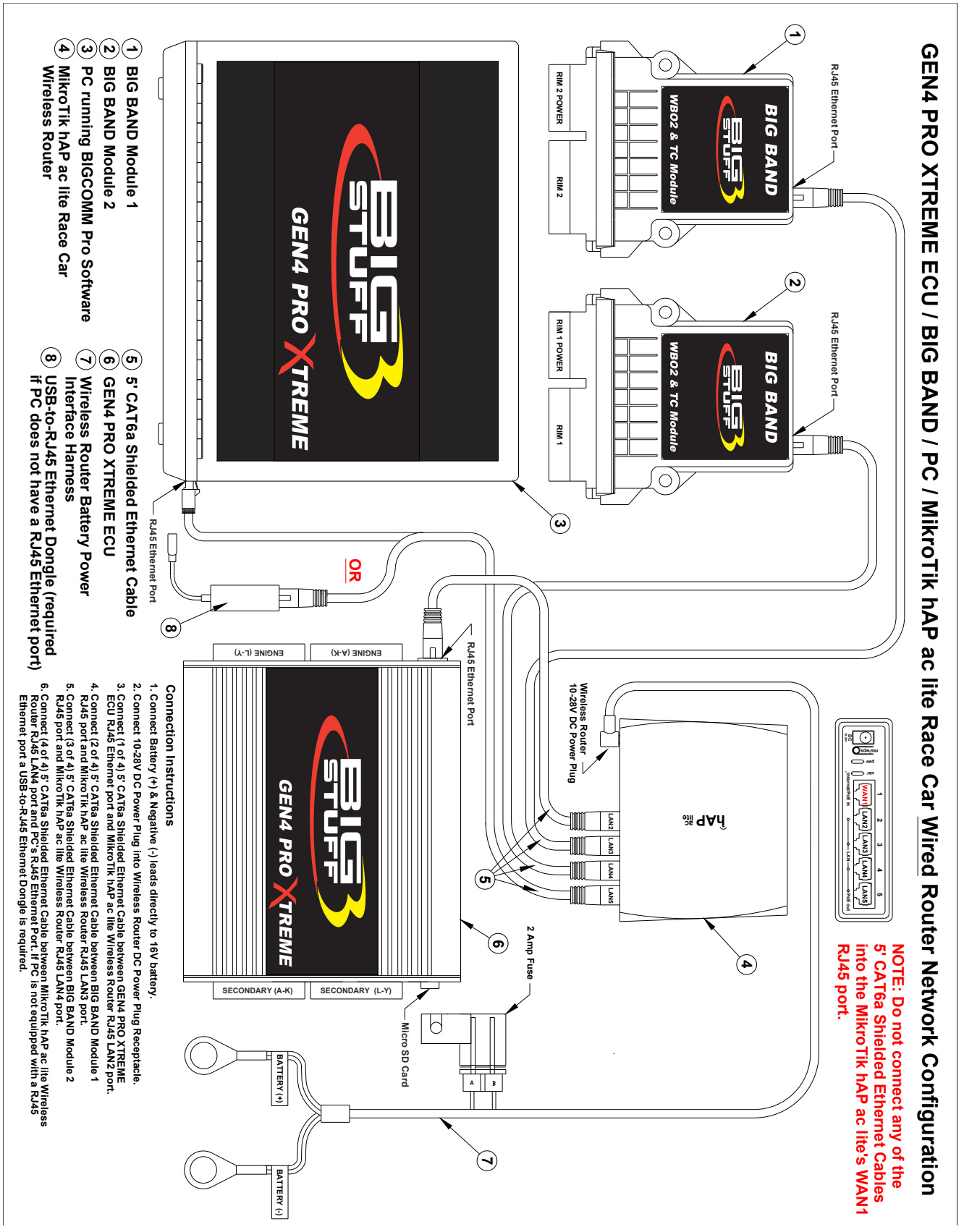
- ① PC running BIGCOMM PRO Software
- ② USB-to-RJ45 Ethernet Dongle
- ③ 5' CAT6a Shielded Ethernet Cable
- ④ GEN4 PRO XTREME ECU

#### Connection Instructions

1. Connect one end of the 5' CAT6a Shielded Ethernet Cable directly to the PC's RJ45 Ethernet port and the other end to the GEN4 PRO XTREME ECU's RJ45 Ethernet port. **OR**

2. If the PC is not equipped with a RJ45 Ethernet port, use the BS3 USB-to-RJ45 Ethernet Dongle (P/N: BS4-003-007) to establish a RJ45 Ethernet port using one of the PC's USB ports. Once installed, connect one end of the 5' CAT6a Shielded Ethernet Cable into the RJ45 Ethernet port of the USB-to-RJ45 Ethernet Dongle and the other end to the GEN4 PRO XTREME ECU'S RJ45 Ethernet port.

**Wired Ethernet Network 2 Configuration for "Race Car" & Dyno applications**

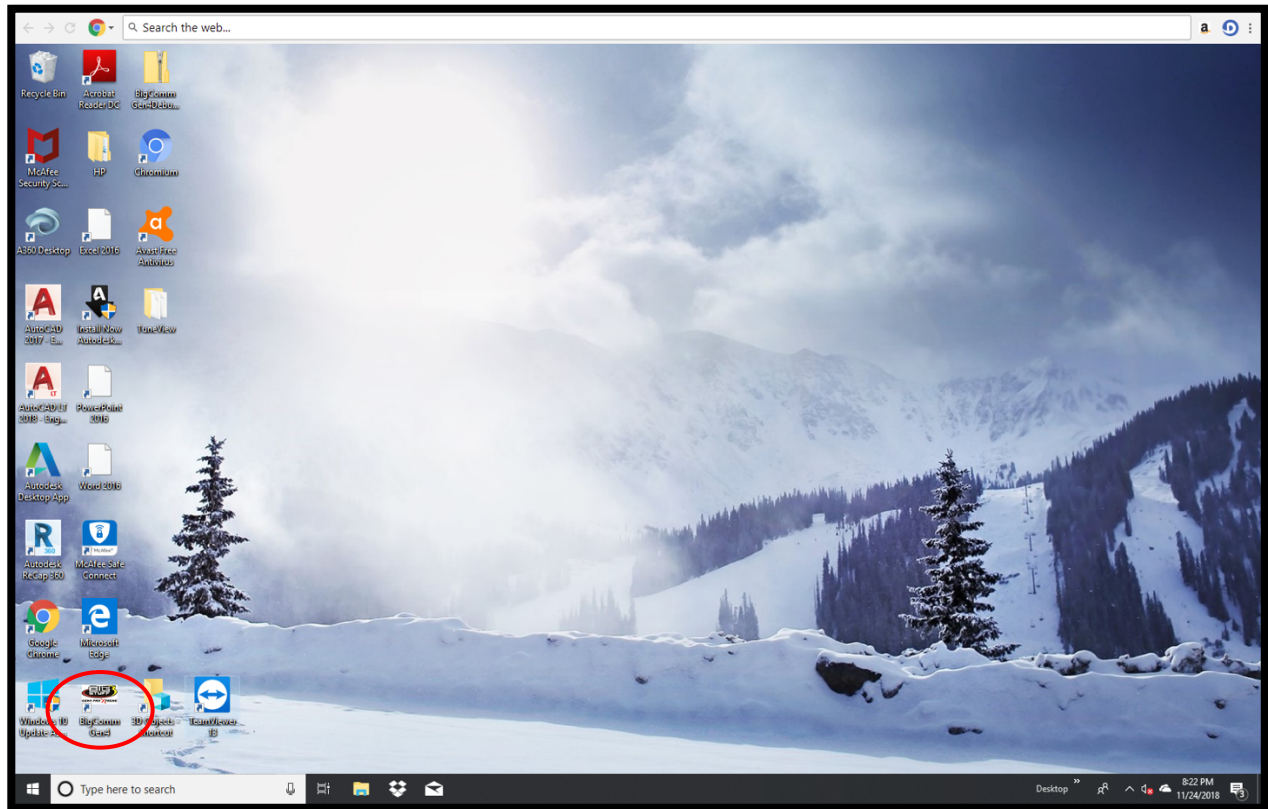




## GEN4 PRO XTREME Initial Setup Instructions for “Wired Ethernet” - MikroTik

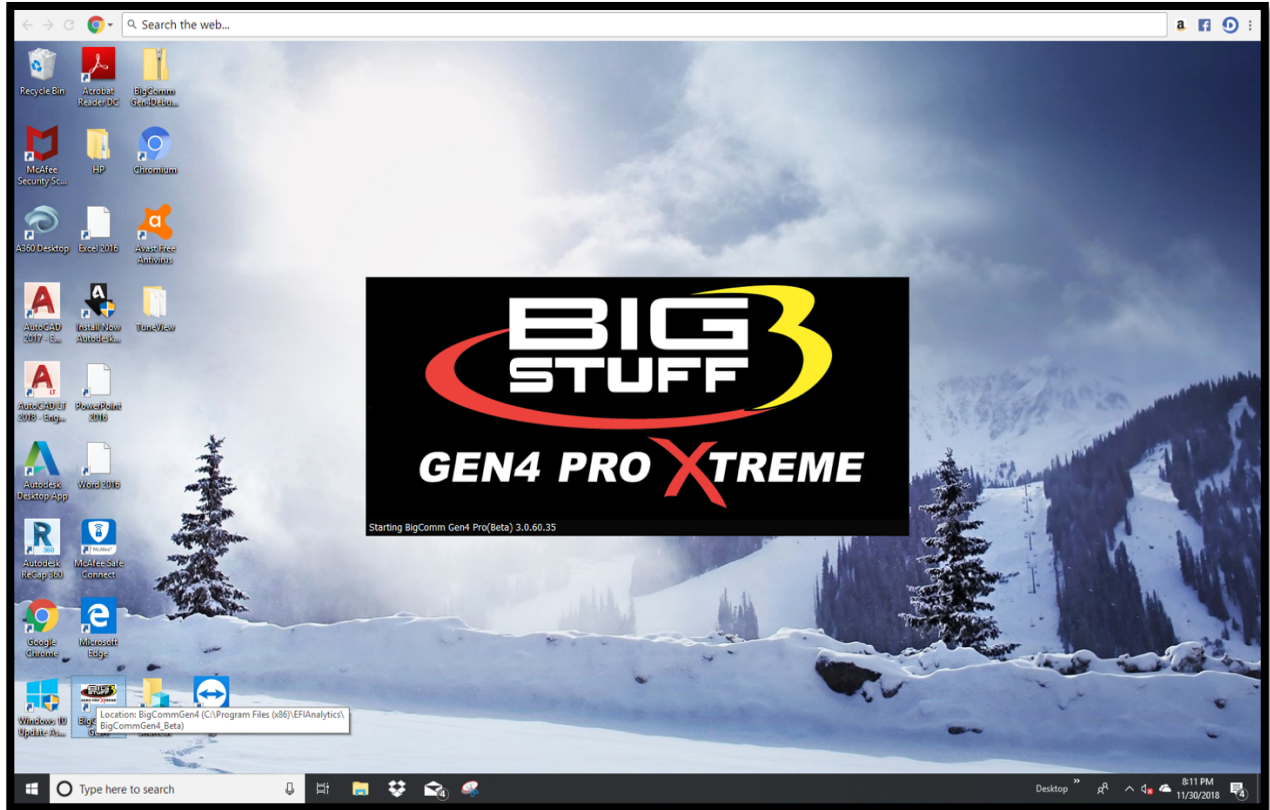
**STEP 3.0 - Activate the BCP software and GEN4 PRO XTREME ECU interface to enable BCP software to create initial Project (STEP 3.0 only occurs when connecting between a PC running the BCP software and GEN4 PRO XTREME ECU for the first time)**

**Step 3.1** - Once a Wired Ethernet Network connection is established, as detailed on page 15 for In-Vehicle applications or page 16 for Race Car applications, and the GEN4 PRO XTREME ECU is powered on (VBATT & +12V switched Ignition), open the GEN4 PRO XTREME BCP software from the PC’s desktop by double clicking on the **GEN4 PRO XTREME BCP icon** located in the lower left-hand corner of screen.



## GEN4 PRO XTREME Initial Setup Instructions for “Wired Ethernet” - MikroTik

**Step 3.2** - Once the **BCP icon** is selected, the following GEN4 PRO XTREME graphic will momentarily appear on the screen.



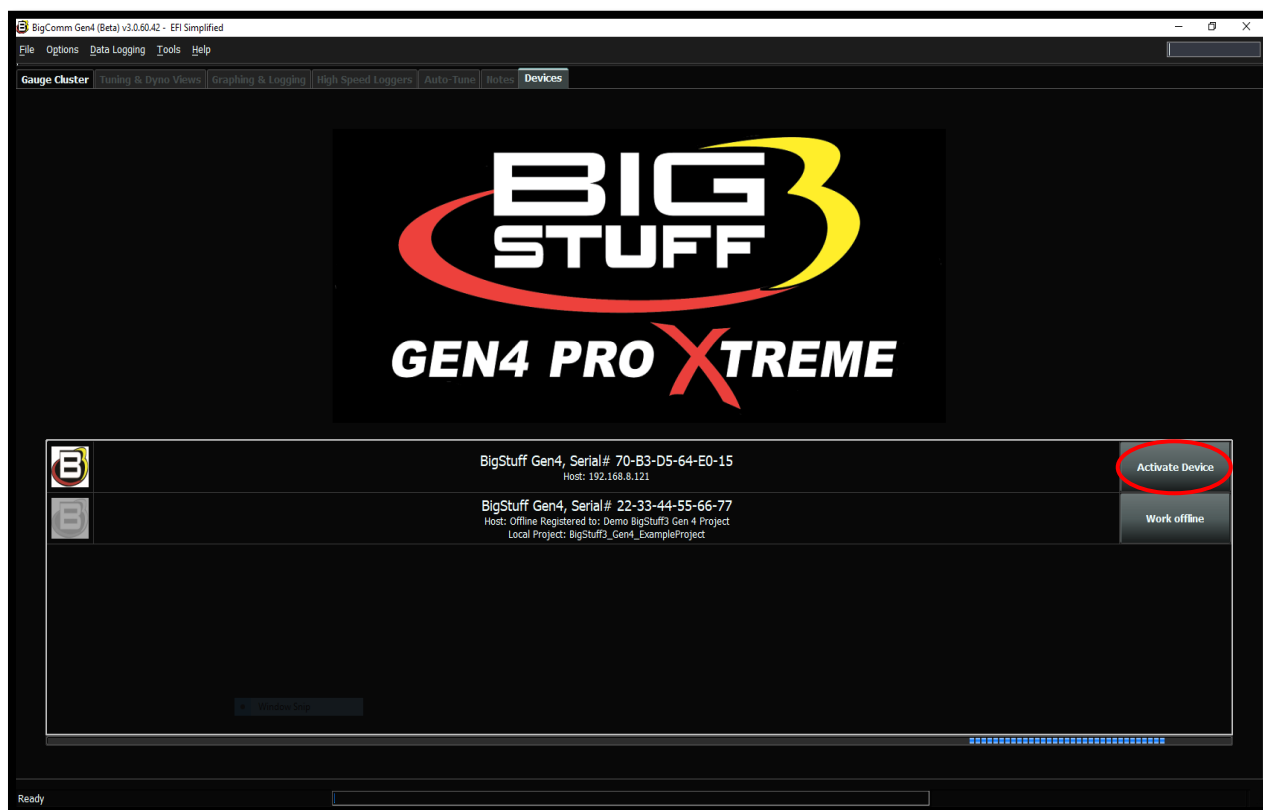
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**Step 3.3** - After a momentary pause, the following BCP software window will open. As you can see, there are two possible selections to choose from;

The first is: **Bigstuff Gen4, Serial# 70-B3-D5-64-E0-15**. This is the Serial Number (MAC ID) of the GEN4 PRO XTREME ECU that will be communicating with the PC running the BCP software once it’s activated.

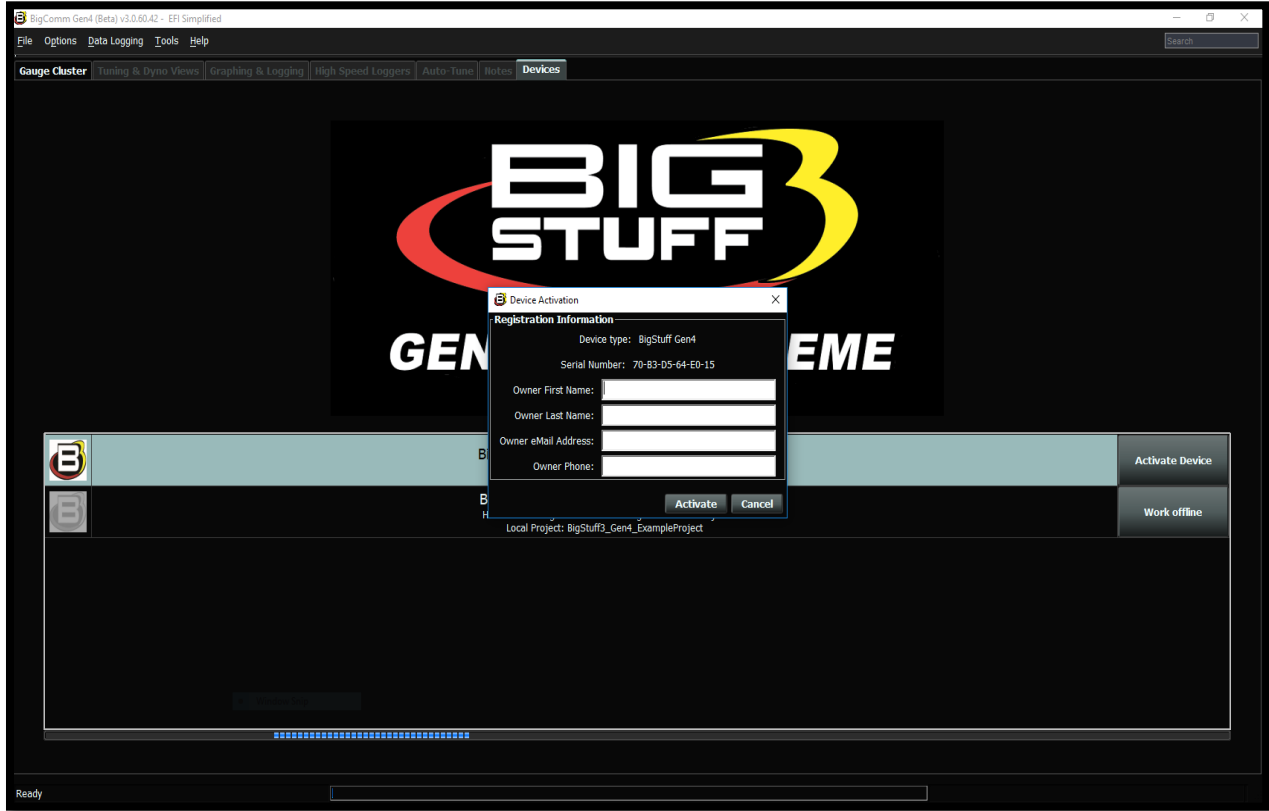
The second is: **Bigstuff Gen4, Serial# 22-33-44-55-66-77**. This is the default serial number associated with the example Local Project: **Bigstuff3\_GEN4\_ExampleProject** running offline on the PC. The example Local Project: **Bigstuff3\_GEN4\_ExampleProject** was included as part of the BCP software download package and contains a demo calibration, preconfigure dashboards and tuning tabs and is only meant to be **used offline** to navigate and get acquainted with the BCP software.

Before an initial Project can be created, the BCP software & GEN4 PRO XTREME ECU interface needs to be activated. This is initiated by single clicking on **Activate Device**.

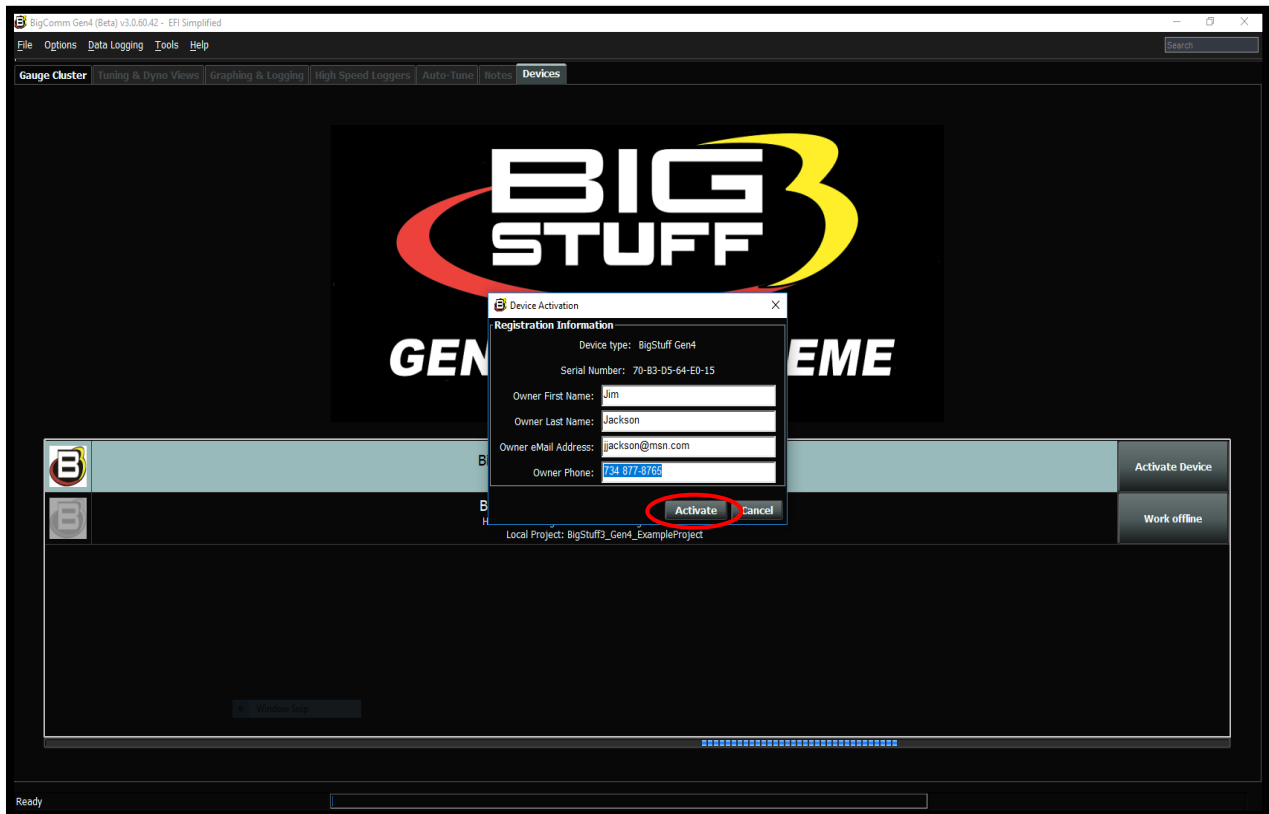


## GEN4 PRO XTREME Initial Setup Instructions for “Wired Ethernet” - MikroTik

**Step 3.4** - Once **Activate Device** is selected in Step 3.3, the following BCP dialogue window will open.



**Step 3.5** - Fill in the requested activation information and single click on **Activate**.

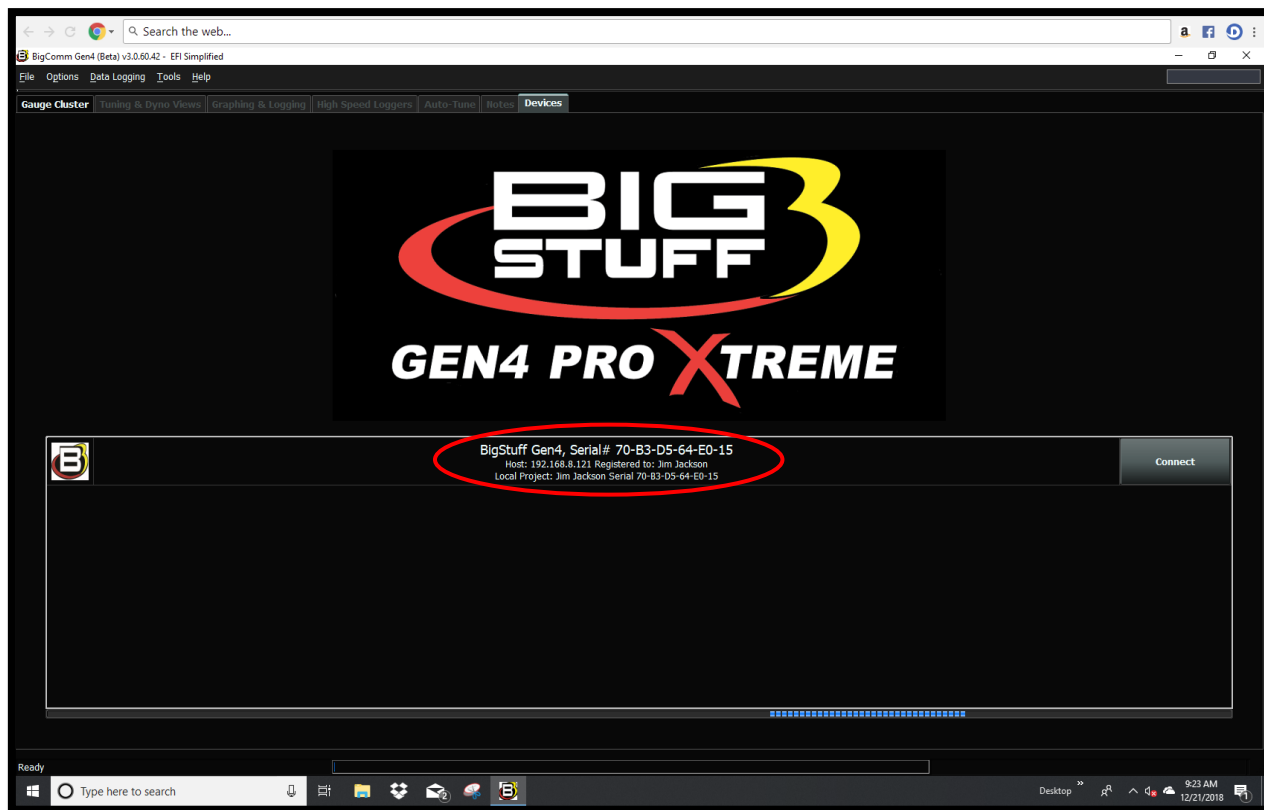


## GEN4 PRO XTREME Initial Setup Instructions for “Wired Ethernet” - MikroTik

**Step 3.6** – Once **Activate** is selected in Step 3.5, the following BCP software window will open. As you can see, there is now only one selection to choose from;

The **Bigstuff Gen4, Serial# 70-B3-D5-64-E0-15** is the Serial Number (MAC ID) of the GEN4 PRO XTREME ECU connected to the PC running the BCP software. Please note the Device Activation information (i.e. the owner’s name, Jim Jackson for this example) filled out in Step 3.5 is now associated with the initial **Bigstuff Gen4, Serial# 70-B3-D5-64-E0-15** Project that will be uploaded into the BCP software running on the PC.

The previous default **Bigstuff Gen4, Serial# 22-33-44-55-66-77** serial number that had the example Local Project: **Bigstuff3\_GEN4\_ExampleProject** associated with it has been removed. It was only intended to provide an example Project **Bigstuff3\_GEN4\_ExampleProject** as part of the BCP software download package to navigate and get acquainted with the BCP software before establishing online communication.



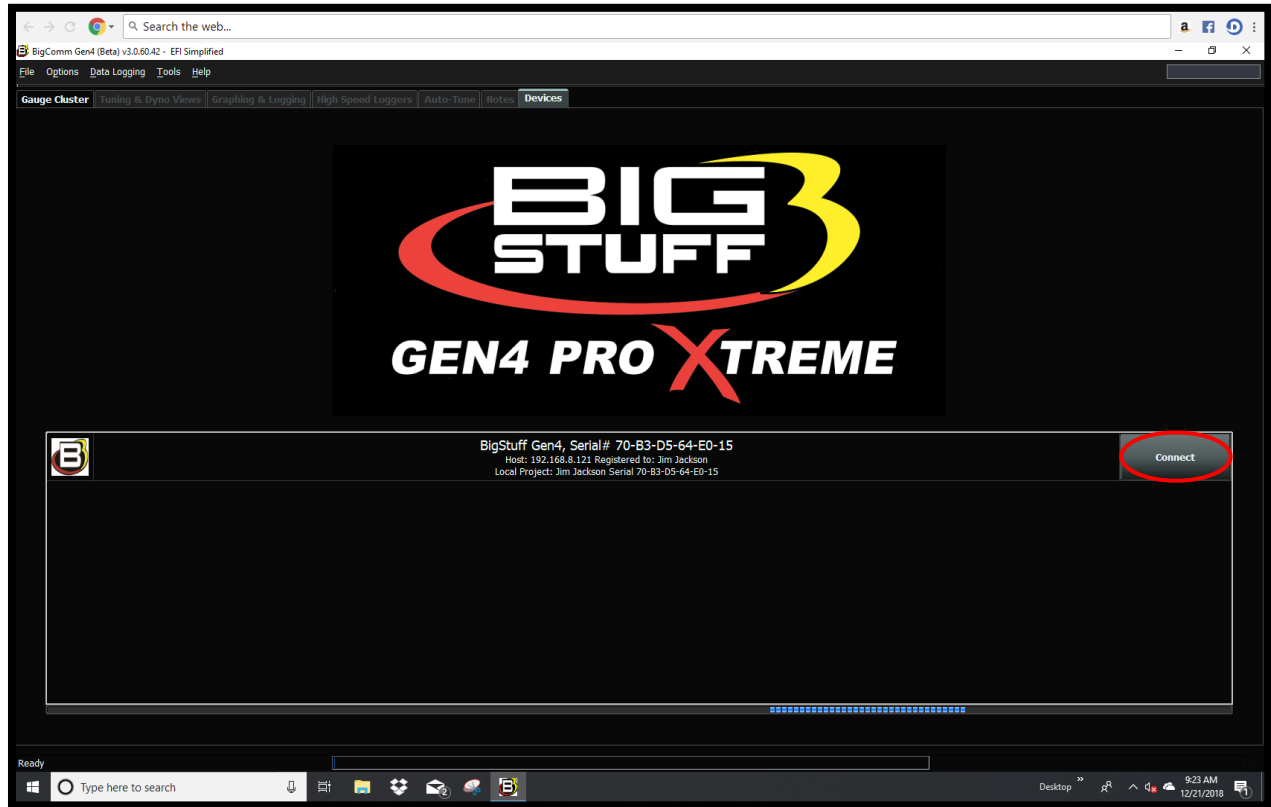
There are a couple of key things that occur when **Activate Device** is selected;

- The BCP software & GEN4 PRO XTREME ECU interface is activated by entering the end user name and contact information.
- The BCP software creates an initial Project using the Serial Number (MAC ID) of the GEN4 PRO XTREME ECU connected to the PC running the BCP software and activation information. The initial Project contains preconfigured Gauge Clusters; aka “Dashboards”, Tuning & Dyno Views; aka “Tuning Tabs” and “Datalog Tabs” with predefined measurement variables.

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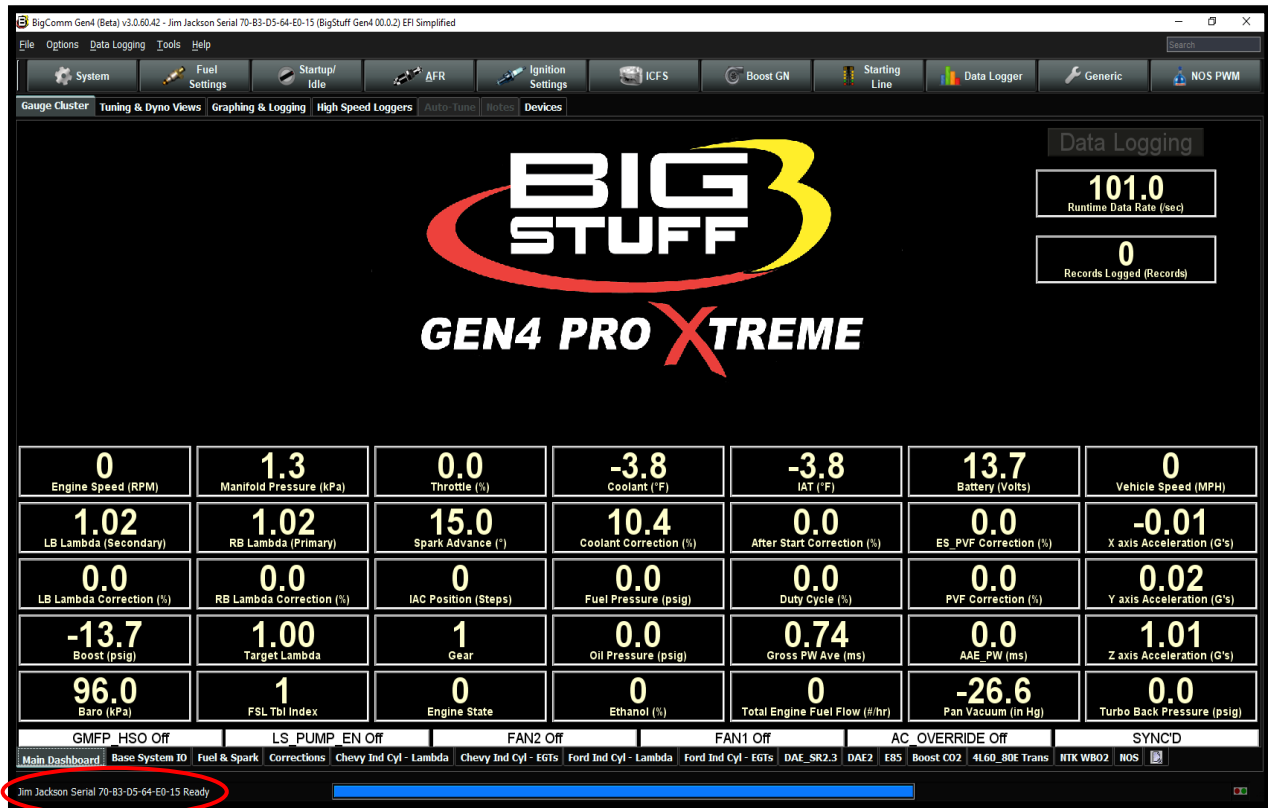
### Step 4.0 - Connect to the GEN4 PRO XTREME ECU to establish online wired Ethernet communication

**Step 4.1** - To establish online wired Ethernet communication between the BCP software running on the PC and GEN4 PRO XTREME ECU single click on **Connect**.



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**Step 4.2** – Below, is the BCP default **Main Dashboard** window that opens after selecting **Connect** in Step 4.1. For this example, **Jim Jackson Serial 70-B3-D5-64-E0-15** is the Project running in the BCP software on the PC. For your application, **Your Name Serial 70-B3-D5-64-XX-XX** will be the Project running in the BCP software on the PC.



There are several key things that occur when **Connect** is selected;

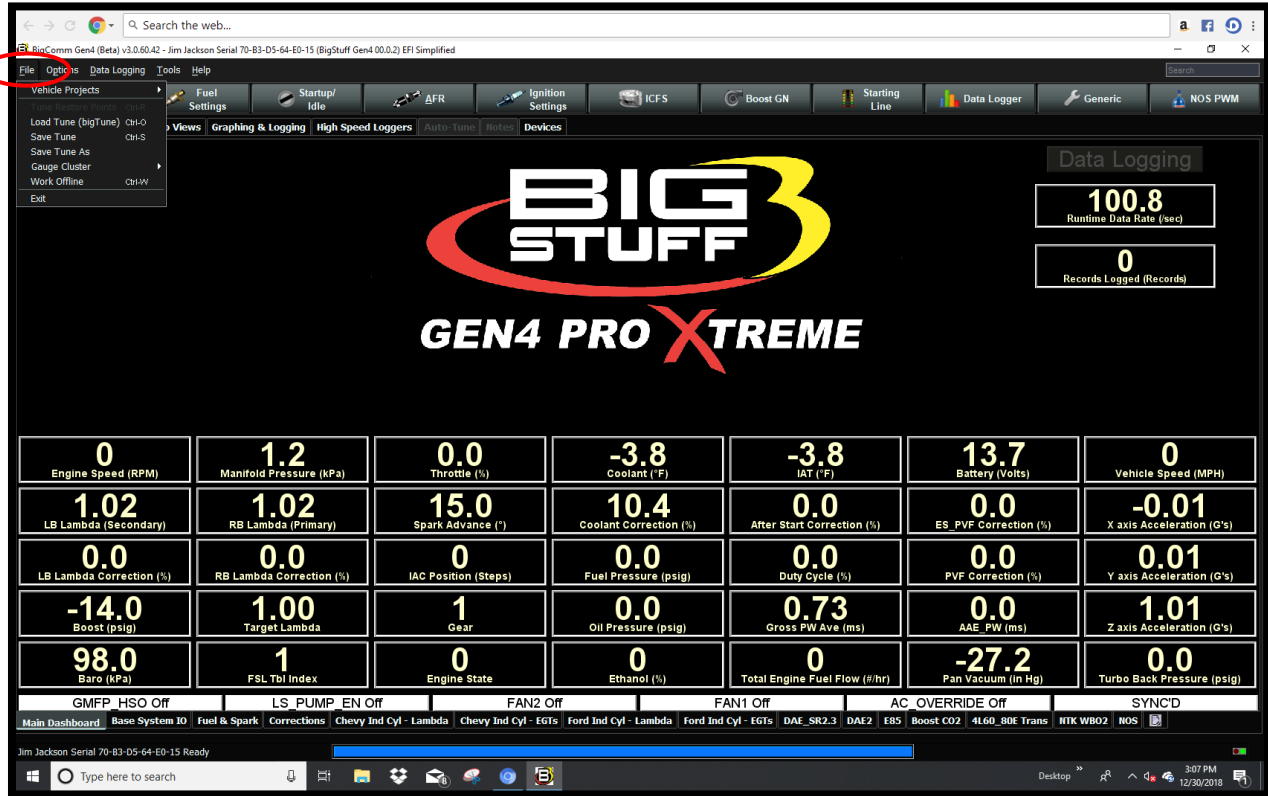
- Online wired Ethernet communication is established between the BCP software running on the PC and GEN4 PRO XTREME ECU.
- The calibration file included with the GEN4 PRO XTREME ECU is uploaded into the BCP software running on the PC.

The next necessary step is to save the calibration file, also known as “Tune”, included with the GEN4 PRO XTREME ECU, into the initial Project. This is covered in Steps 5.0 thru 5.5 below.

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### STEP 5.0 - Save the calibration file, also known as “Tune”, included with the GEN4 PRO XTREME ECU into the initial Project

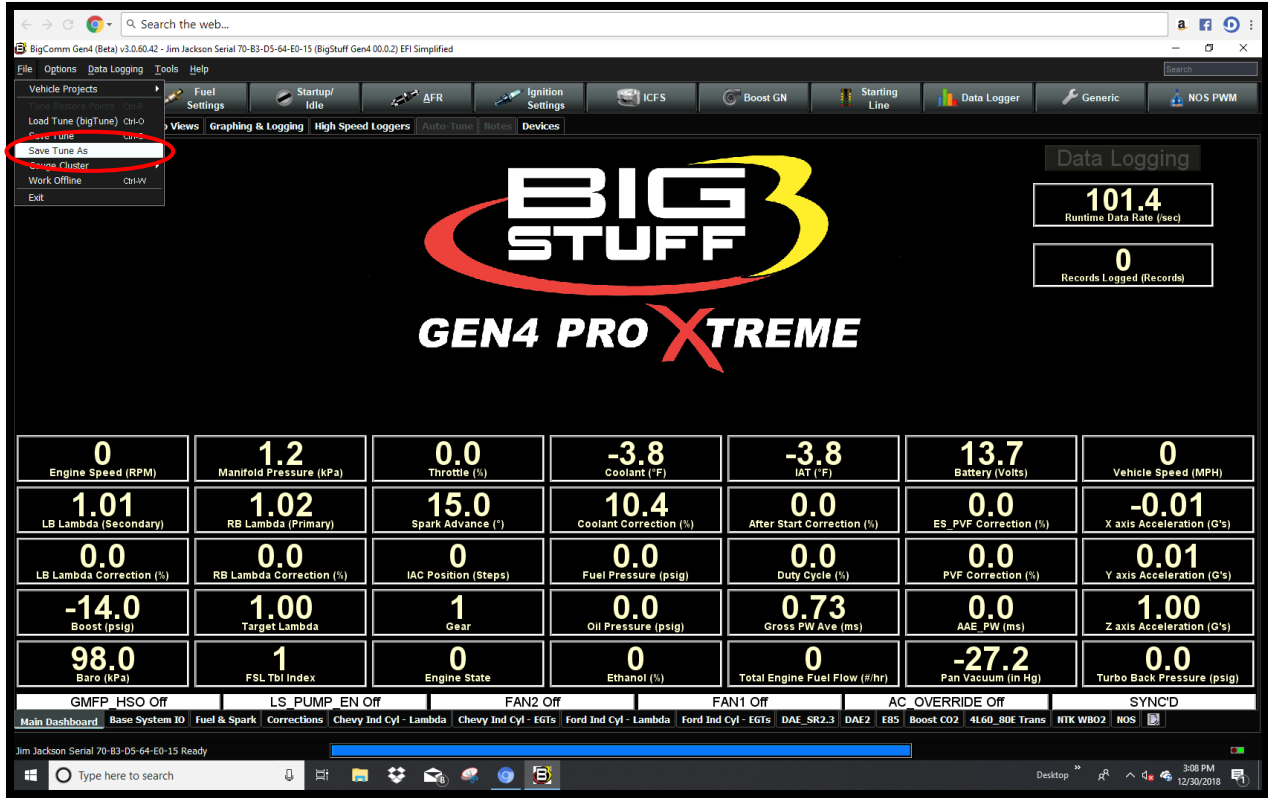
**Step 5.1** - It is necessary to save the calibration file, also known as “Tune”, included with the GEN4 PRO XTREME ECU into the initial Project. This is straight forward and initiated by highlighting and left mouse clicking on **File** in the upper left hand-hand corner of the BCP software tool bar as shown below.





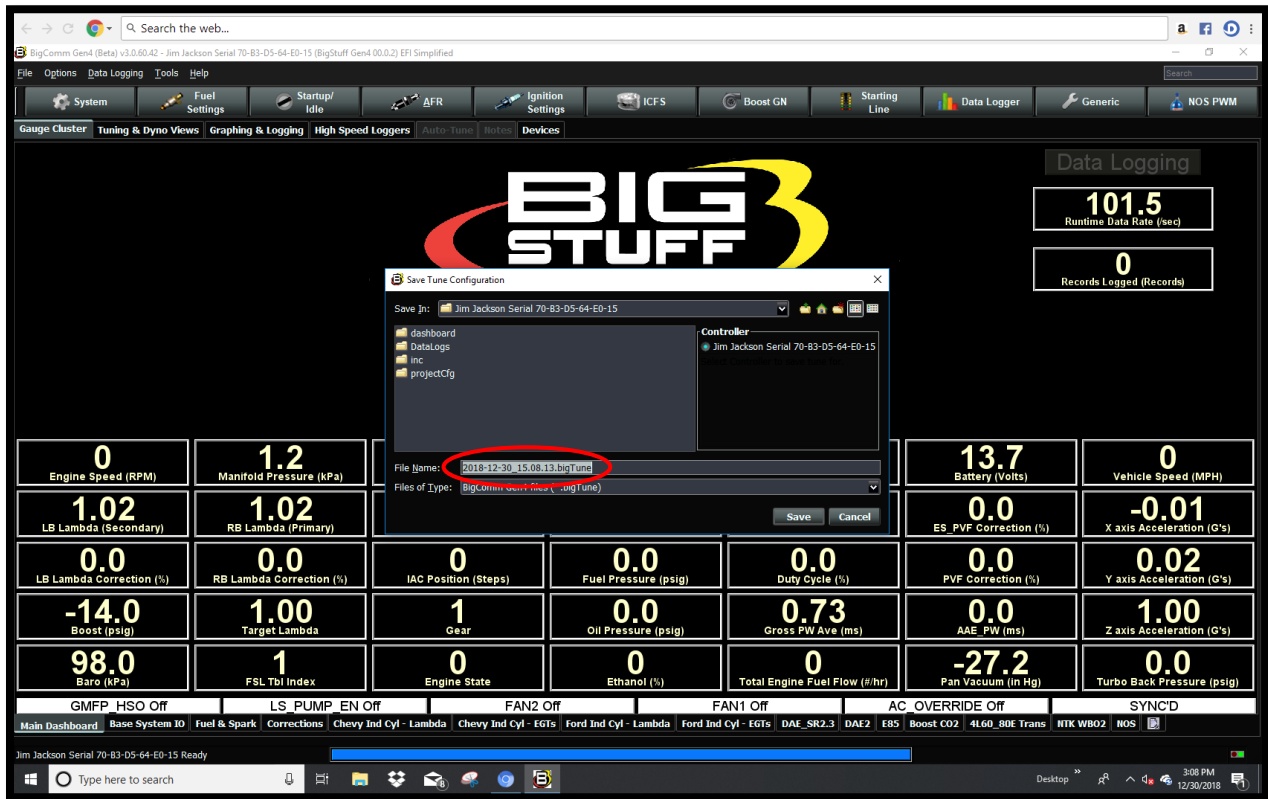
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**Step 5.2** - Once **File** is selected in Step 5.1, a drop-down window will open. Once opened, highlight and left mouse click on **Save Tune As** as shown below.



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**Step 5.3** - Once **Save Tune As** is selected in Step 5.2, a **Save Tune Configuration** dialogue window will open as shown below. Once opened, you will see a **BCP File Name** automatically assigned to the calibration file as shown below. The automatically assigned calibration file name for this example is **2018-12-30\_15.08.13.bigTune**, which is the date and time the calibration file is saved.



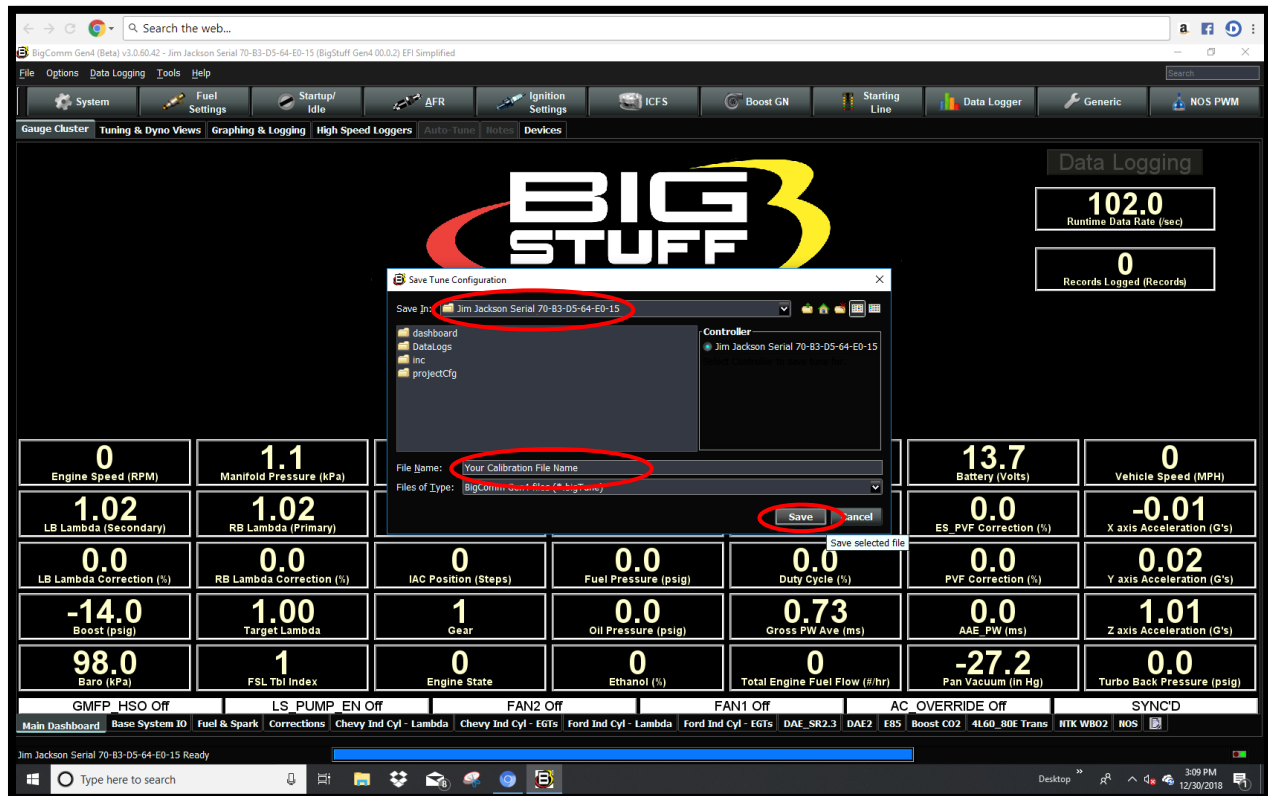
The screenshot displays the BigStuff Gen4 software interface. A "Save Tune Configuration" dialog box is open, showing the file name "2018-12-30\_15.08.13.bigTune" circled in red. The background interface includes a top menu bar with options like System, Fuel Settings, and Startups/Idle. The main area features a dashboard with various engine performance metrics, a "Data Logging" section showing "101.5 Runtime Data Rate (sec)" and "0 Records Logged (Records)", and a bottom status bar with system information.

Metric	Value
Engine Speed (RPM)	0
Manifold Pressure (kPa)	1.2
LB Lambda (Secondary)	1.02
RB Lambda (Primary)	1.02
LB Lambda Correction (%)	0.0
RB Lambda Correction (%)	0.0
Boost (psig)	-14.0
Baro (kPa)	98.0
Target Lambda	1.00
FSL Tbl Index	1
IAC Position (Steps)	0
Gear	1
Engine State	0
Fuel Pressure (psig)	0.0
Oil Pressure (psig)	0.0
Ethanol (%)	0
Duty Cycle (%)	0.0
Gross PW Ave (ms)	0.73
Total Engine Fuel Flow (#/hr)	0
Battery Volts	13.7
Vehicle Speed (MPH)	0
ES_PVF Correction (%)	0.0
X axis Acceleration (G's)	-0.01
PVF Correction (%)	0.0
Y axis Acceleration (G's)	0.02
AAE_PW (ms)	0.0
Z axis Acceleration (G's)	1.00
Pan Vacuum (In Hg)	-27.2
Turbo Back Pressure (psig)	0.0

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**Step 5.4** - You can overwrite the automatically assigned calibration File Name with a naming convention of your choice by highlighting and typing a file name over the automatically assigned BCP software File Name. For this example, the calibration File Name is **Your Calibration File Name**.

Once the new calibration File Name is typed in, left mouse click on **Save**. Once Save is selected the BCP software will automatically add the **.bigTune** suffix to the file name while saving the calibration file into the Project file associated with the GEN4 PRO XTREME ECU currently connected to the PC running the BCP software. For this example, the calibration file will be saved into the **Jim Jackson Serial 70-B3-D5-64-E0-15** Project File.



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**Step 5.5** – Once **Save** is selected in Step 5.4, the following BCP window will open showing the **Jim Jackson Serial 70-B3-D5-64-E0-15 Tune Saved!** message in the lower left hand corner of the BCP window as shown below.

0	1.1	0.0	-3.8	-3.8	13.7	0
Engine Speed (RPM)	Manifold Pressure (kPa)	Throttle (%)	Coolant (°F)	IAT (°F)	Battery (Volts)	Vehicle Speed (MPH)
1.01	1.03	15.0	10.4	0.0	0.0	-0.01
LB Lambda (Secondary)	RB Lambda (Primary)	Spark Advance (°)	Coolant Correction (%)	After Start Correction (%)	ES PVF Correction (%)	X axis Acceleration (G's)
0.0	0.0	0	0.0	0.0	0.0	0.01
LB Lambda Correction (%)	RB Lambda Correction (%)	IAC Position (Steps)	Fuel Pressure (psig)	Duty Cycle (%)	PVF Correction (%)	Y axis Acceleration (G's)
-14.0	1.00	1	0.0	0.73	0.0	1.01
Boost (psig)	Target Lambda	Gear	Oil Pressure (psig)	Gross PW Ave (ms)	AAE PW (ms)	Z axis Acceleration (G's)
98.0	1	0	0	0	-27.2	0.0
Baro (kPa)	FSL Tbl Index	Engine State	Ethanol (%)	Total Engine Fuel Flow (#/hr)	Pan Vacuum (in Hg)	Turbo Back Pressure (psig)

That's it... You're now communicating online via a wired Ethernet connection between the PC running the BCP software and GEN4 PRO XTREME ECU with the initial Project loaded and calibration saved into the GEN4 ECU.

Granted, the GEN4 PRO XTREME “Initial Setup” for Wired Ethernet seems to take quite a few steps. Fortunately, subsequent connections are straight forward and only require the following steps;

1. Make sure the CAT6a shielded Ethernet cable is connected between the GEN4 PRO XTREME ECU's RJ45 Ethernet port and the RJ45 Ethernet port on the PC running the BCP software.
  - a. If using the MikroTik hAP ac lite wireless router as a Wired Ethernet Network, make sure CAT6a shielded Ethernet cables are connected between;
    - i. One of the MikroTik hAP ac lite router's RJ45 Ethernet LAN ports and the GEN4 PRO XTREME ECU's RJ45 Ethernet port
    - ii. One of the MikroTik hAP ac lite router's RJ45 Ethernet LAN ports and the RJ45 Ethernet port on the PC running the BCP software
2. Power up GEN4 PRO XTREME ECU (+12V Switch Ignition and VBATT (+) & (-)).
3. Once GEN4 PRO XTREME ECU's Orange LED begins flashing, open the BCP software and select Connect to establish online communication with the appropriate GEN4 PRO XTREME ECU.

**Key Note: You must go through a +12V switched ignition key cycle (key on/off/on) in order to establish online communication with a different GEN4 PRO XTREME ECU!**