

GEN4 PRO XTREME Initial Setup Instructions for “Wireless Ethernet” – MikroTik & GLiNet

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

- (1) Download the GEN4 PRO XTREME BigComm Pro (BCP) software onto a PC
- (2) Establish a wireless connection between PC running the BCP software and GEN4 wireless network
- (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 wireless 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 wireless 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 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 wireless 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 wireless connection between PC running BCP software & GEN4 wireless network

- **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 optional Wireless Ethernet Network configurations are covered in these instructions. The Wired Ethernet Networks are the default configurations and are covered in a separate GEN4 PRO XTREME Initial Setup Instructions for “Wired Ethernet”.**
- There are (2) GEN4 Wireless Ethernet Network options to choose from:
 - The GEN4 PRO XTREME “**In-Vehicle**” Wireless Ethernet Network uses a GLiNet router powered by a 5V/1A DC source. The In-Vehicle Wireless Ethernet Network provides a flexible, portable solution and is intended for “non-Race Car” GEN4 PRO XTREME applications. (See Wireless Ethernet Network 1 configuration for “In-Vehicle” applications on page 3).
 - The GEN4 PRO XTREME “**Race Car**” Wireless Ethernet Network uses a MikroTik hAP ac lite router powered by a 10-28V/1A DC source. The Race Car Wireless Ethernet Network provides a flexible, permanently installed solution and is intended for Race Car and Dyno GEN4 PRO XTREME applications. (See Wireless Ethernet Network 2 configuration for “Race Car” & Dyno applications on page 4).
 - **Please note, the GEN4 PRO XTREME “Race Car” Wireless Ethernet Network, using the MikroTik hAP ac lite router, can be converted to a Wired Ethernet Network by connecting a CAT6a Shielded Ethernet cable between one of the MikroTik hAP ac lite router’s RJ45 LAN ports and the GEN4 PRO XTREME ECU’s RJ45 port. Further details are covered in a separate GEN4 PRO XTREME Initial Setup Instructions for “Wired Ethernet”.**
- Once a wireless connection has been established between the PC running the BCP software and either of the above Wireless Ethernet Network options, the 5’ CAT6a shielded Ethernet cable needs to be connected between the wireless router’s RJ45 LAN port and GEN4 ECU’s RJ45 port. Once connected, the GEN4 ECU needs to be powered on (VBATT & +12V switched Ignition) in order to establish online communication.

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STEP 3.0 - Activate the BCP and GEN4 PRO XTREME ECU interface to enable 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 needs to be activated by entering the end user name and contact information.
- The BCP software uses the activation information along with the Serial Number (MAC ID) of the GEN4 PRO XTREME ECU connected to the PC running the BCP software to create an initial Project*.
- **STEP 3.0 is only required 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 wireless Ethernet communication

- Online wireless 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.

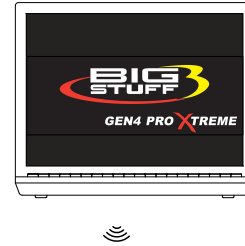
STEP 5.0 - Save the calibration file, also known as “Tune”, included with the GEN4 PRO XTREME ECU, into the initial Project

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

Wireless Ethernet Network 1 configuration for “In-Vehicle” applications

Step 1:

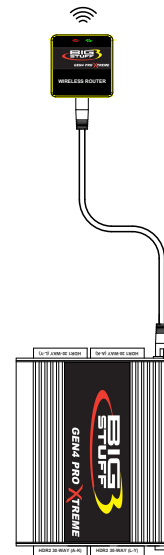
Step 1.0 thru 1.18 - Download GEN4 PRO XTREME BigComm Pro (BCP) software from the www.bigcommpro.com website onto a PC.
(Step 1 Assumes offline communication)



Step 2:

Step 2.0 thru 2.9 - Establish wireless connection between PC running BCP software & GEN4 Wireless Network using yellow GLiNet wireless router for “In-Vehicle” applications.

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



Step 3:

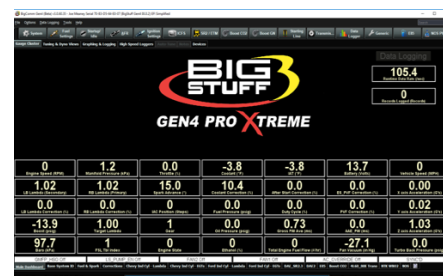
Step 3.0 thru 3.6 - Activate BCP and GEN4 PRO XTREME ECU interface to enable BCP software to create an initial Project.

Step 4:

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

Step 5:

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



Wireless Ethernet Network 2 configuration for “Race Car” & Dyno applications

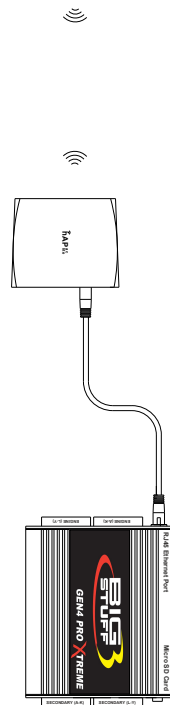
Step 1:

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



Step 2:

Step 2.0 thru 2.9 - Establish wireless connection between PC running BCP software & GEN4 Wireless Network using MikroTik hAP ac lite wireless router for “Race Car” and Dyno applications.
Note: See detailed GEN4 PRO XTREME Wireless Ethernet Network 2 configuration for “Race Car” and Dyno applications on page 16.



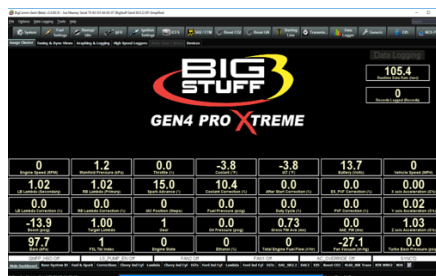
Step 3:

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:

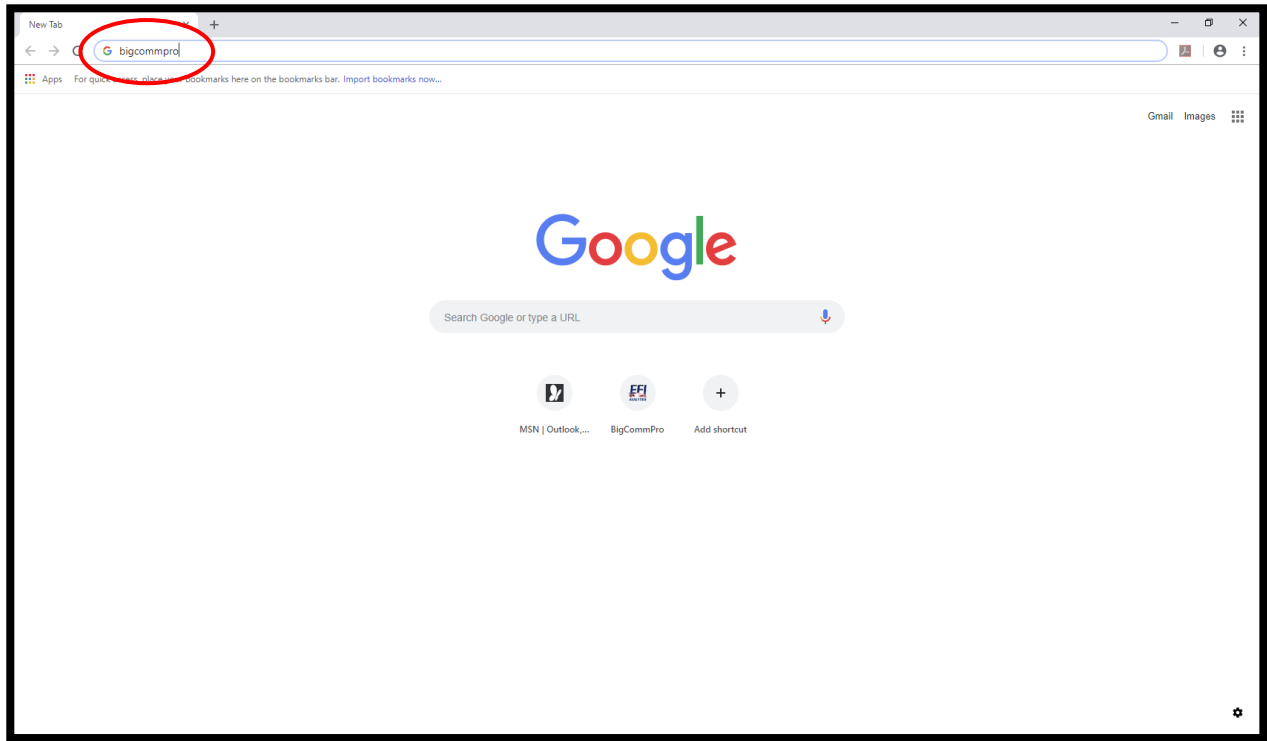
Step 4.0 thru 4.2 - Connect to the GEN4 PRO XTREME ECU to establish an online wireless communication.

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

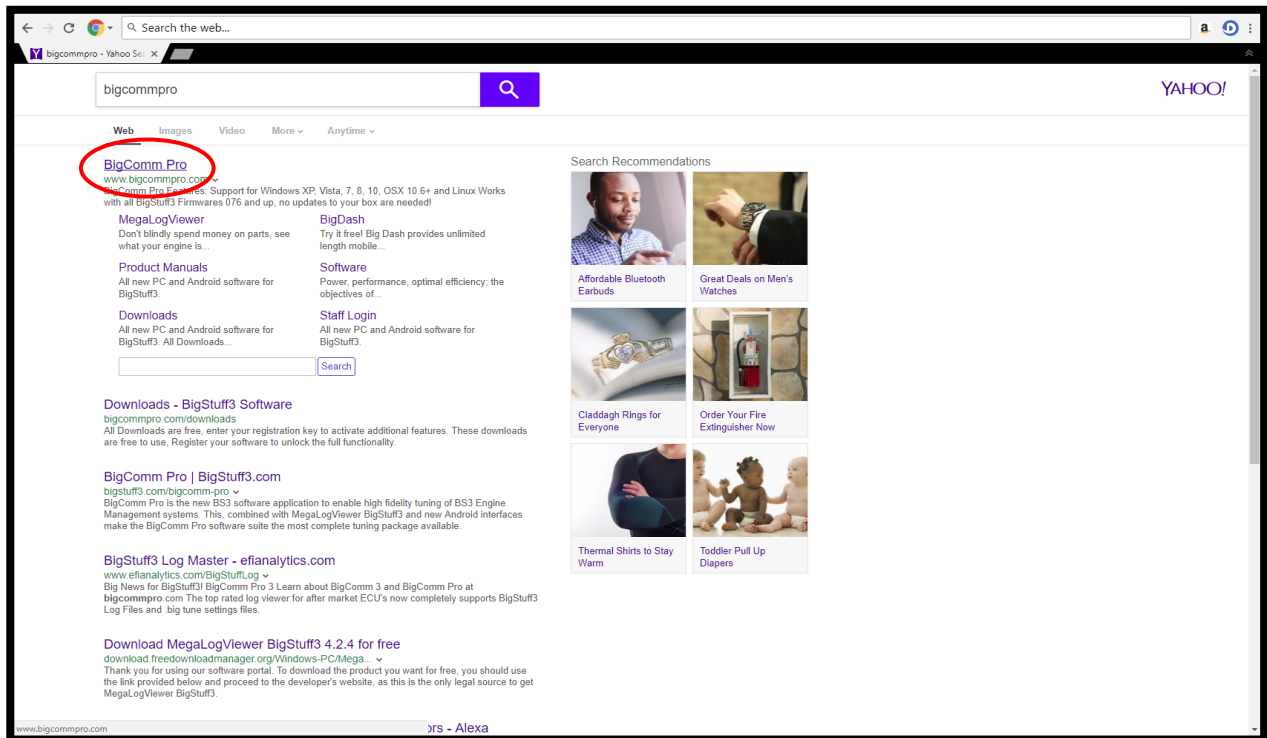


GEN4 PRO XTREME Initial Setup Instructions for “Wireless Ethernet” – MikroTik & GLiNet
Step 1.0 - Download GEN4 PRO XTREME BigComm PRO (BCP) Software from the www.bigcommpro.com website onto a PC

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 wireless network.**

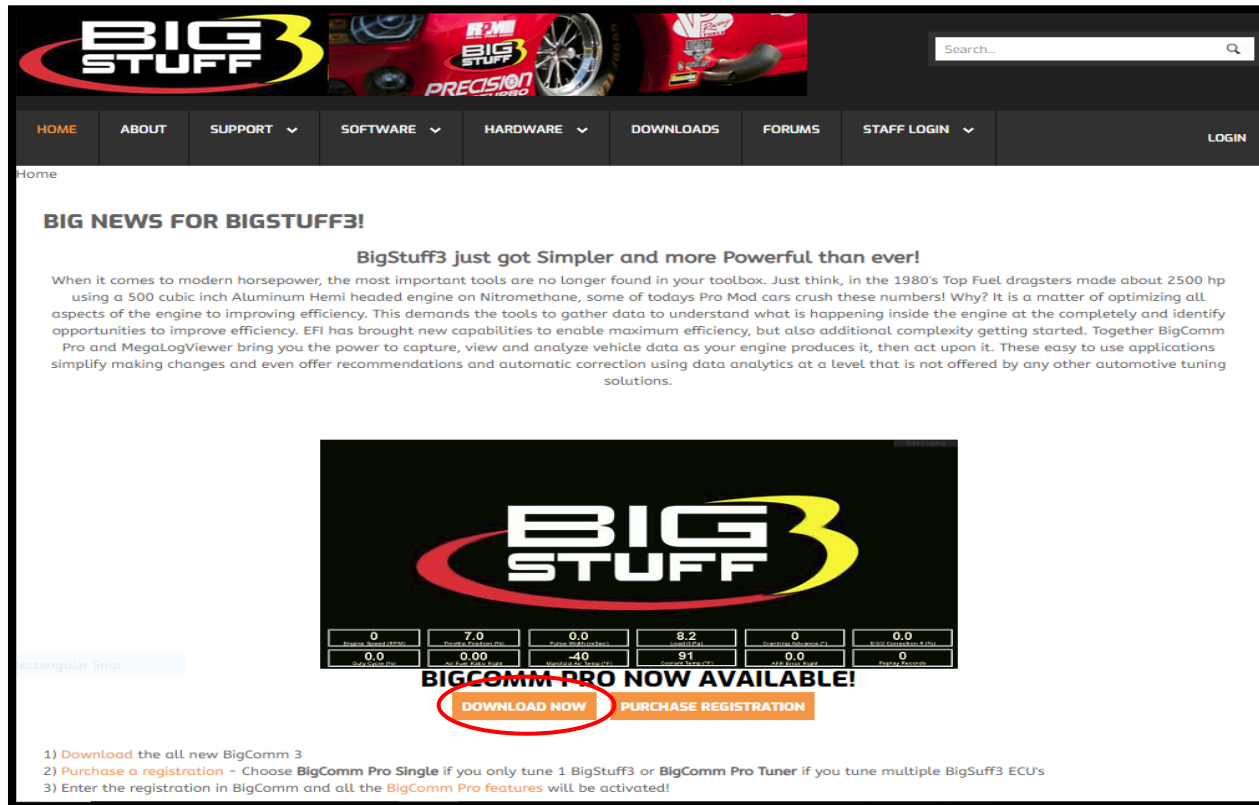


Step 1.2 - Select BigComm Pro.



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Step 1.3 - Once the www.bigcommpro.com home page opens, select **DOWNLOAD NOW**.



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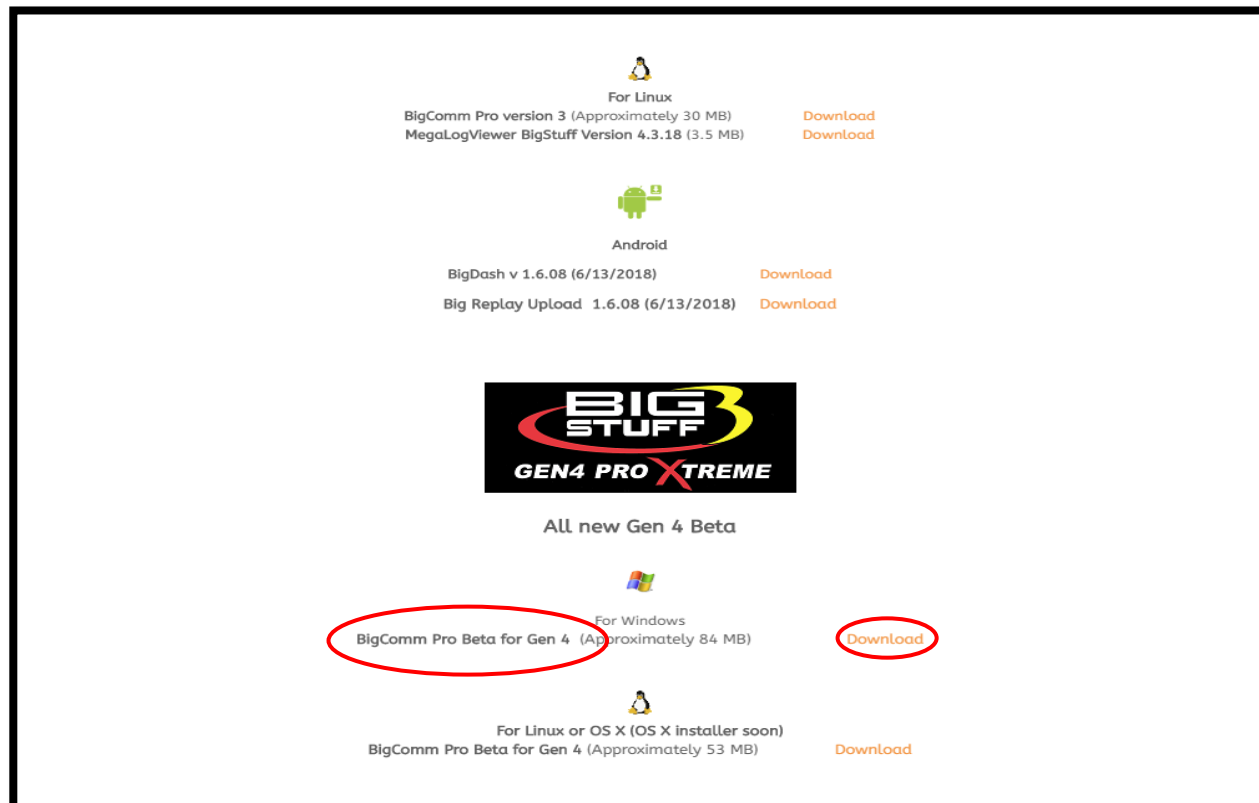
0	7.0	0.0	8.2	0	0.0
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- 1) Download the all new BigComm 3
- 2) Purchase a registration - Choose **BigComm Pro Single** if you only tune 1 BigStuff3 or **BigComm Pro Tuner** if you tune multiple BigStuff3 ECU's
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Step 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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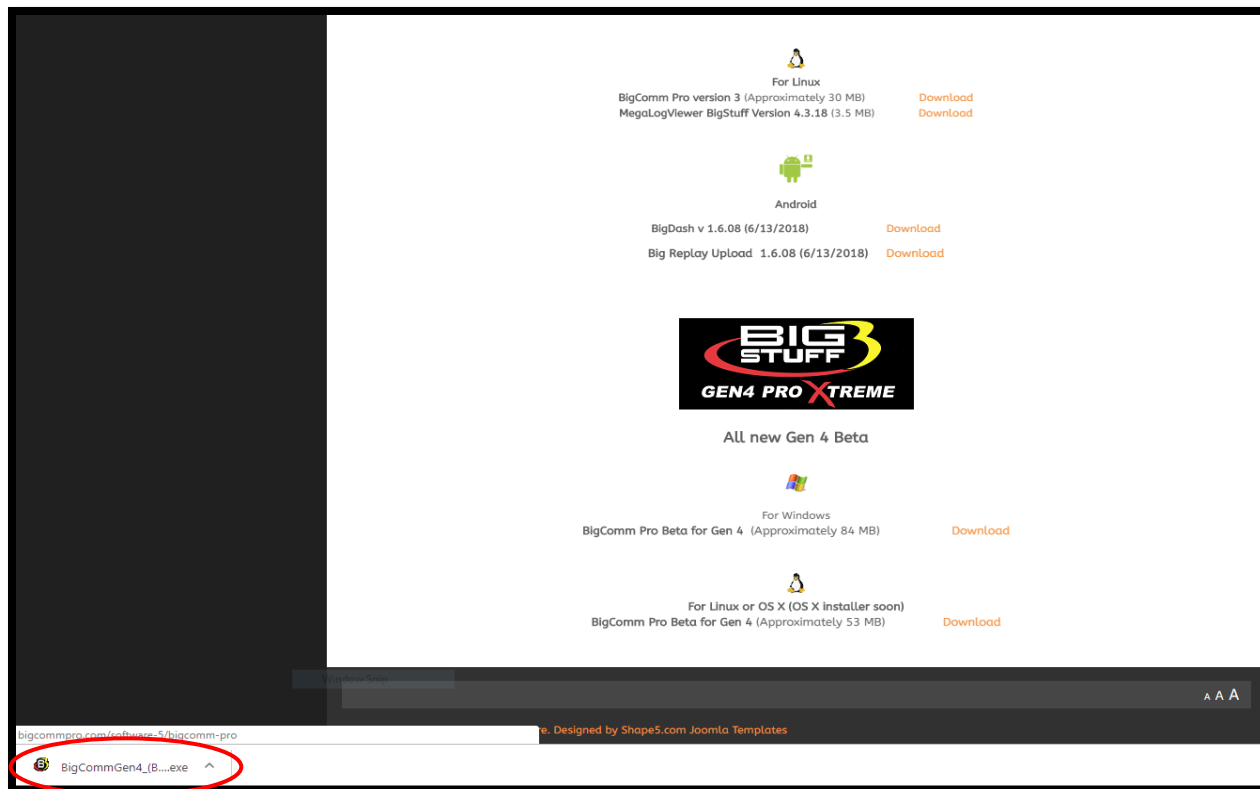
BigComm Pro Beta for Gen 4 (Approximately 84 MB) [Download](#)

For Linux or OS X (OS X Installer soon)

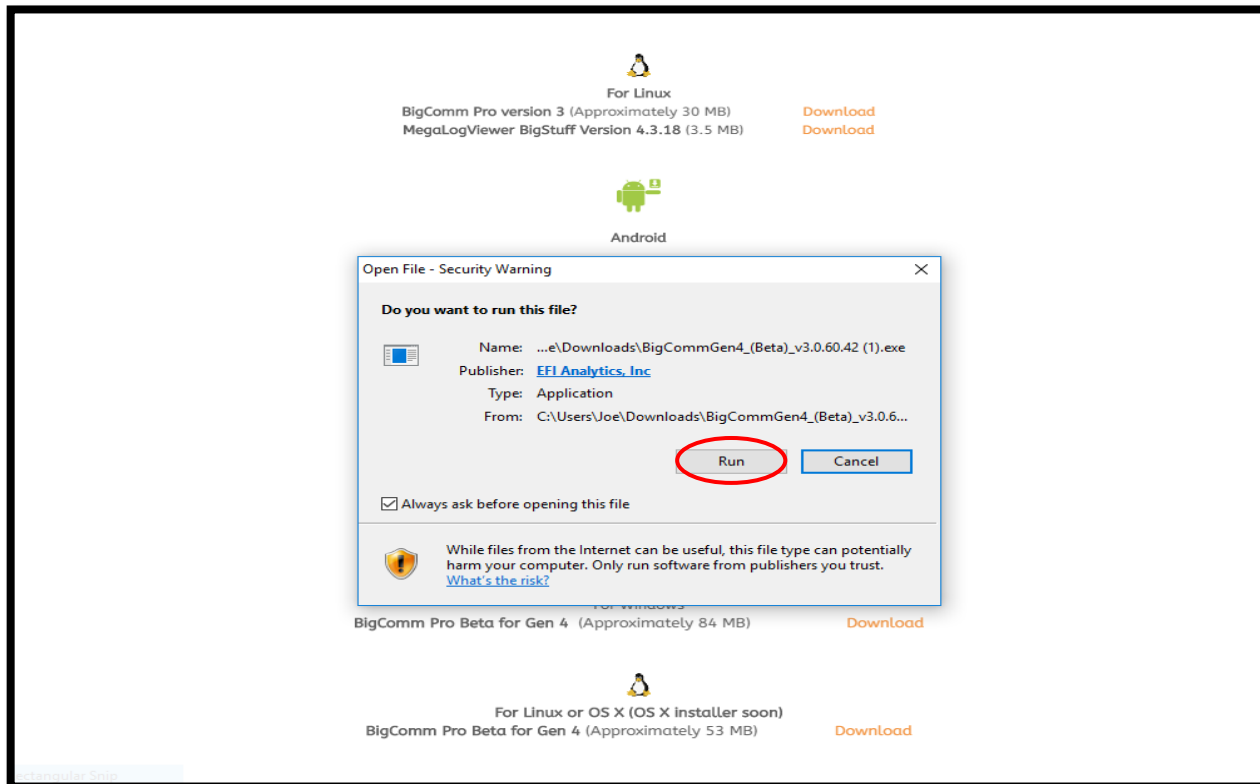
BigComm Pro Beta for Gen 4 (Approximately 53 MB) [Download](#)

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

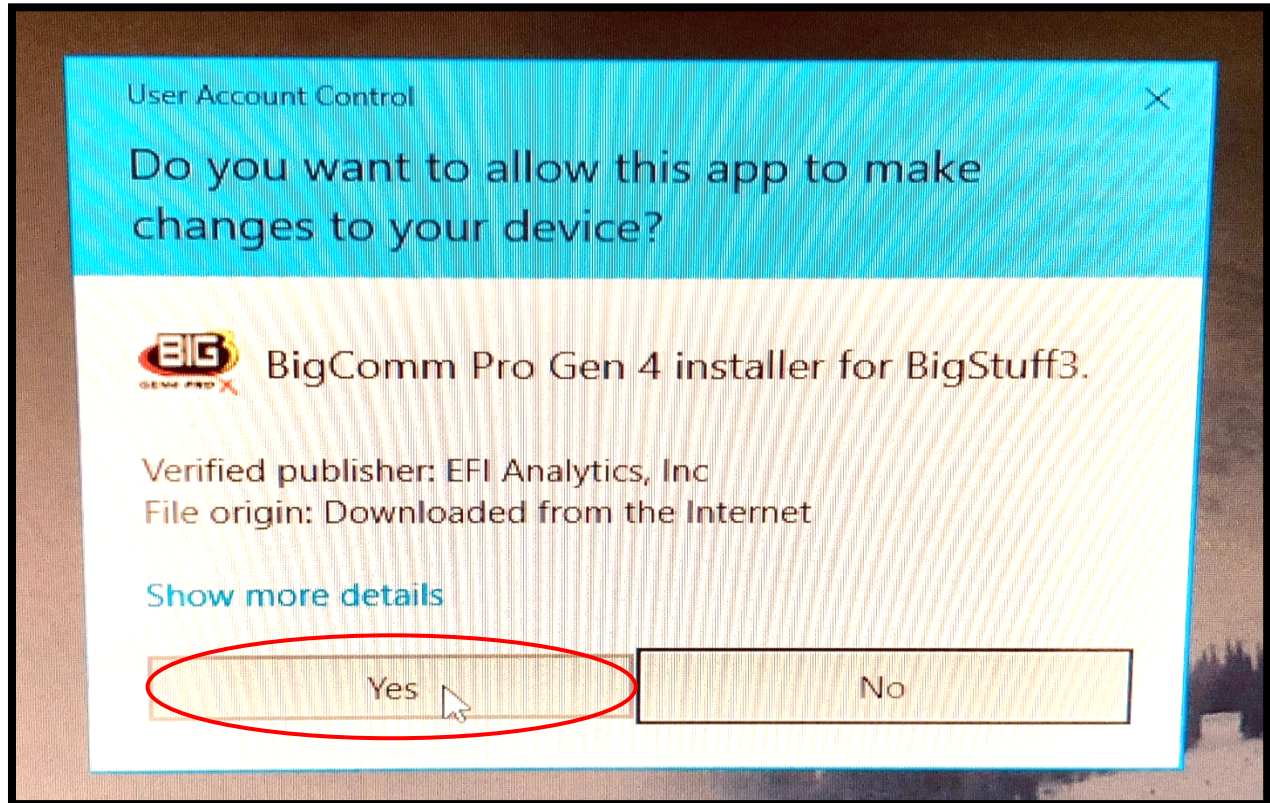


Step 1.6 - Select Run.



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Step 1.7 - Select Yes.

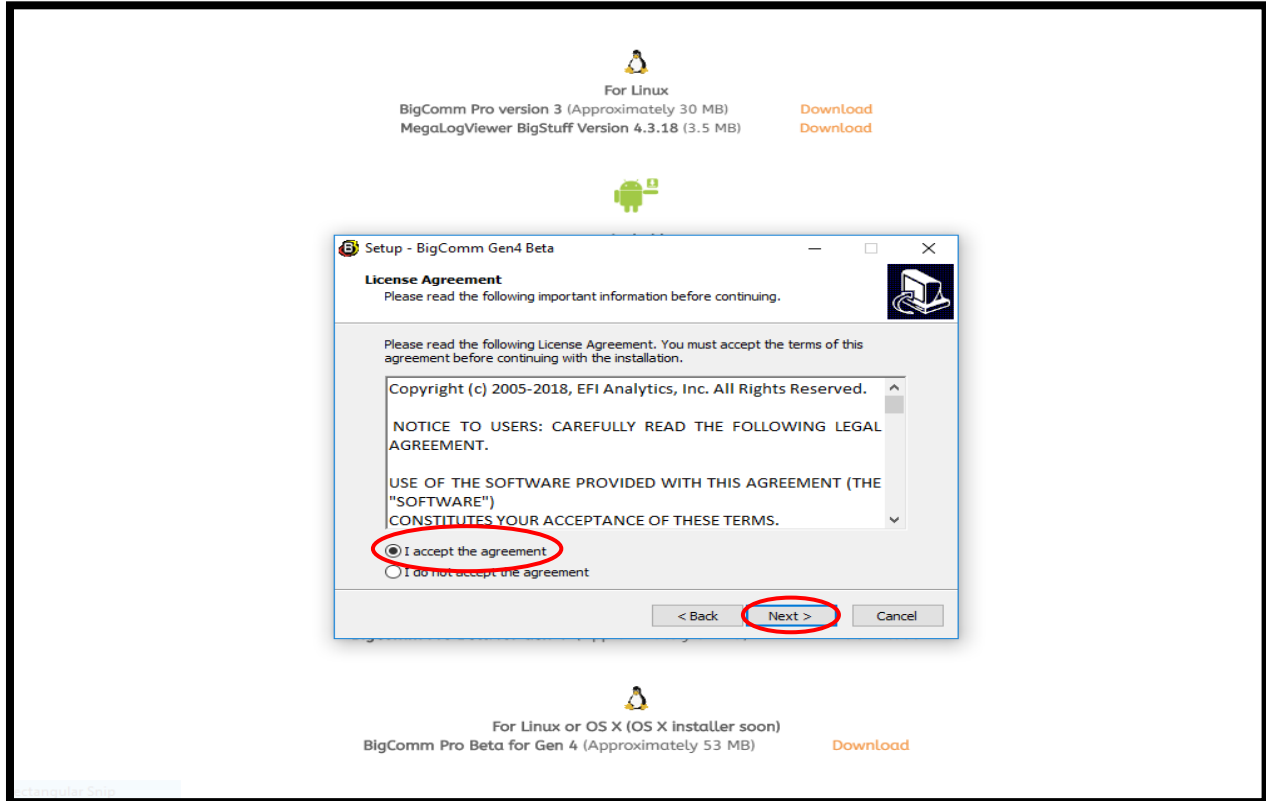


Step 1.8 - Select Next >.

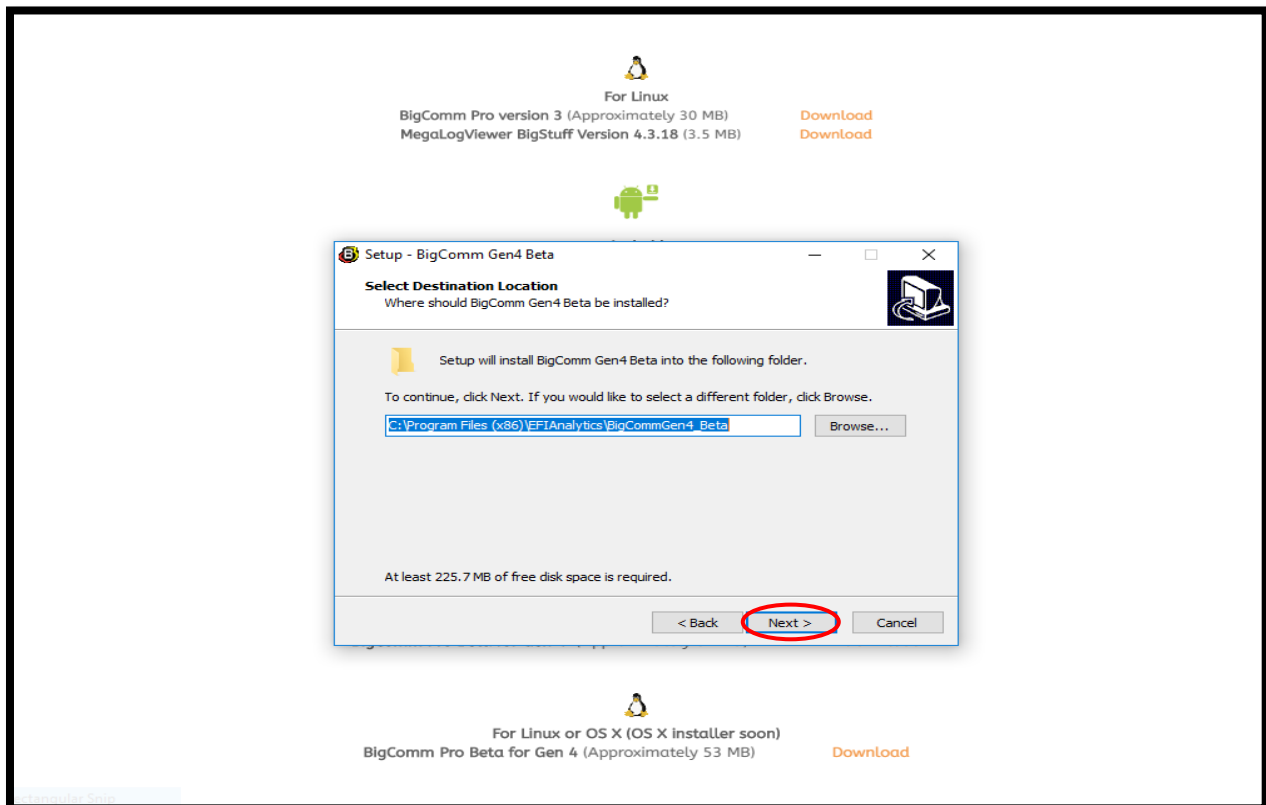


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Step 1.9 - Select "I accept the agreement" and then select Next >.

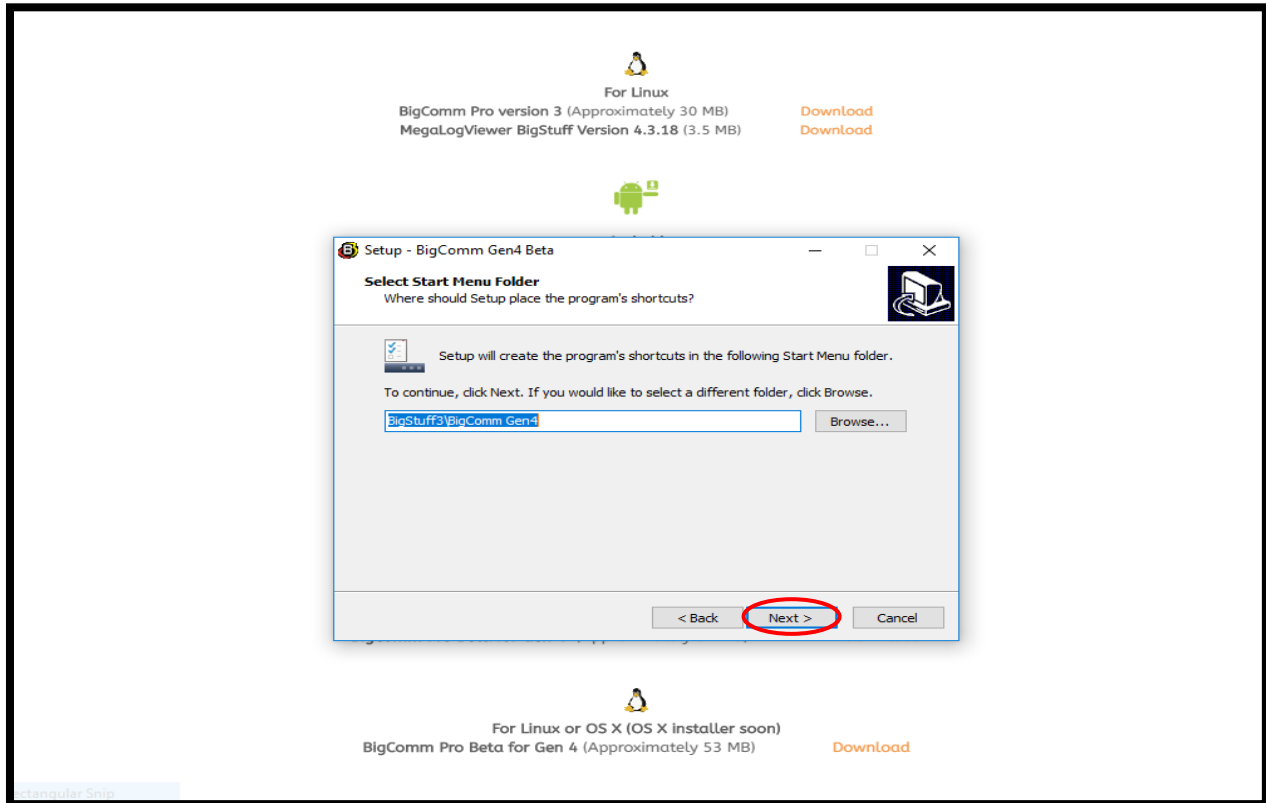


Step 1.10 - Select Next >

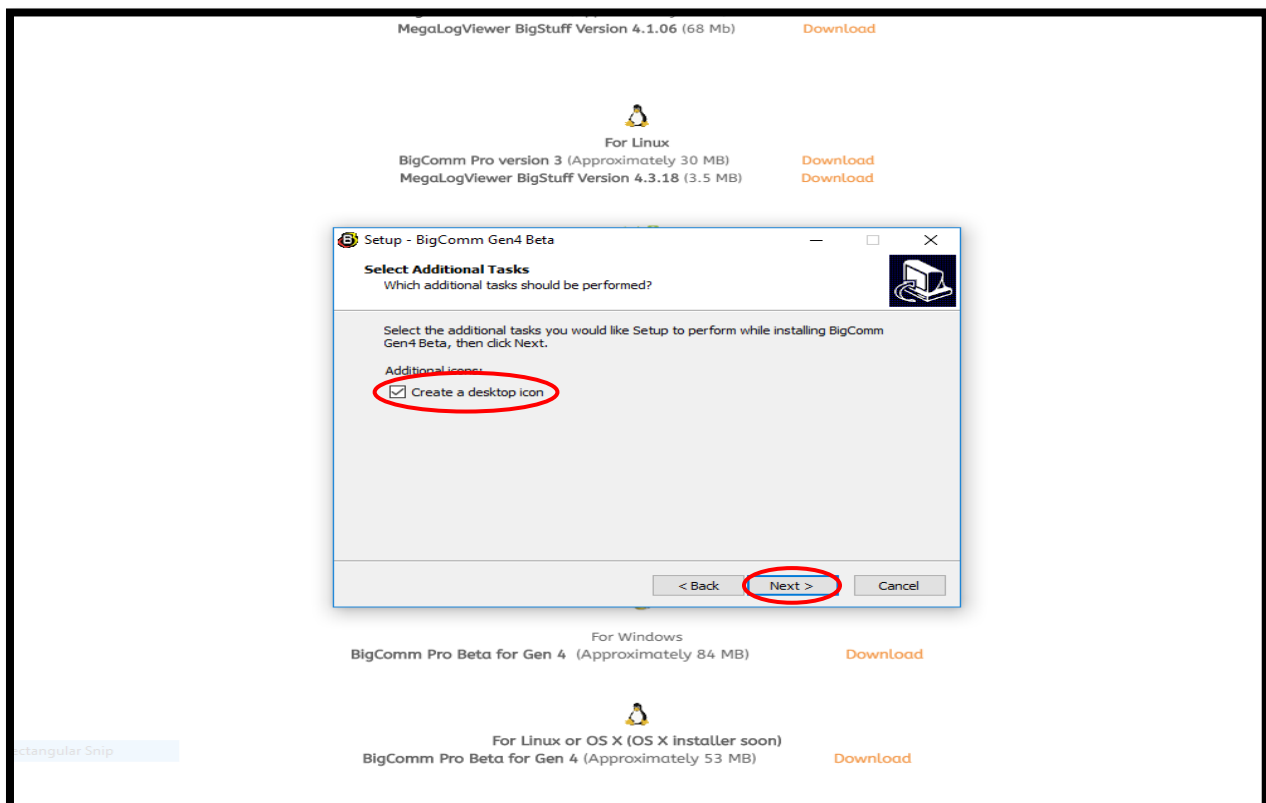


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Step 1.11 - Select Next >.

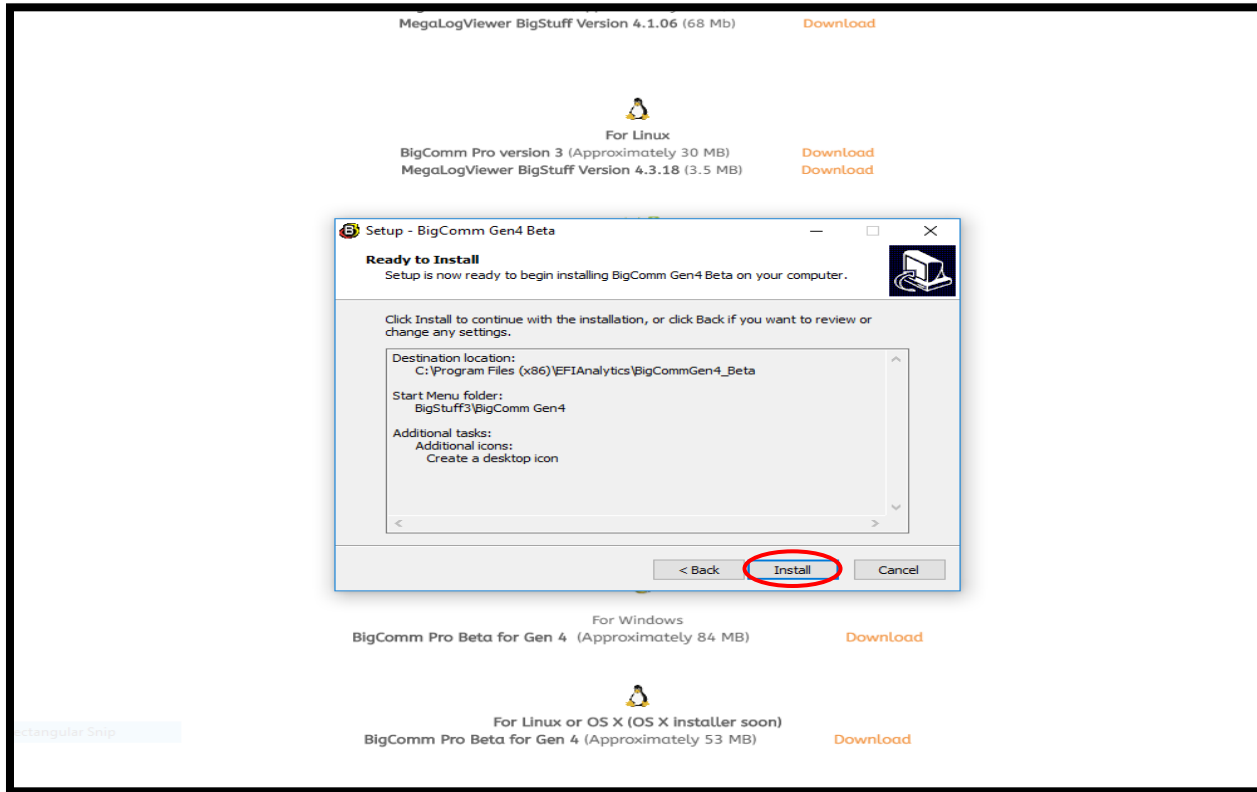


Step 1.12 - Check the “Create a desktop icon” box and then select Next >.

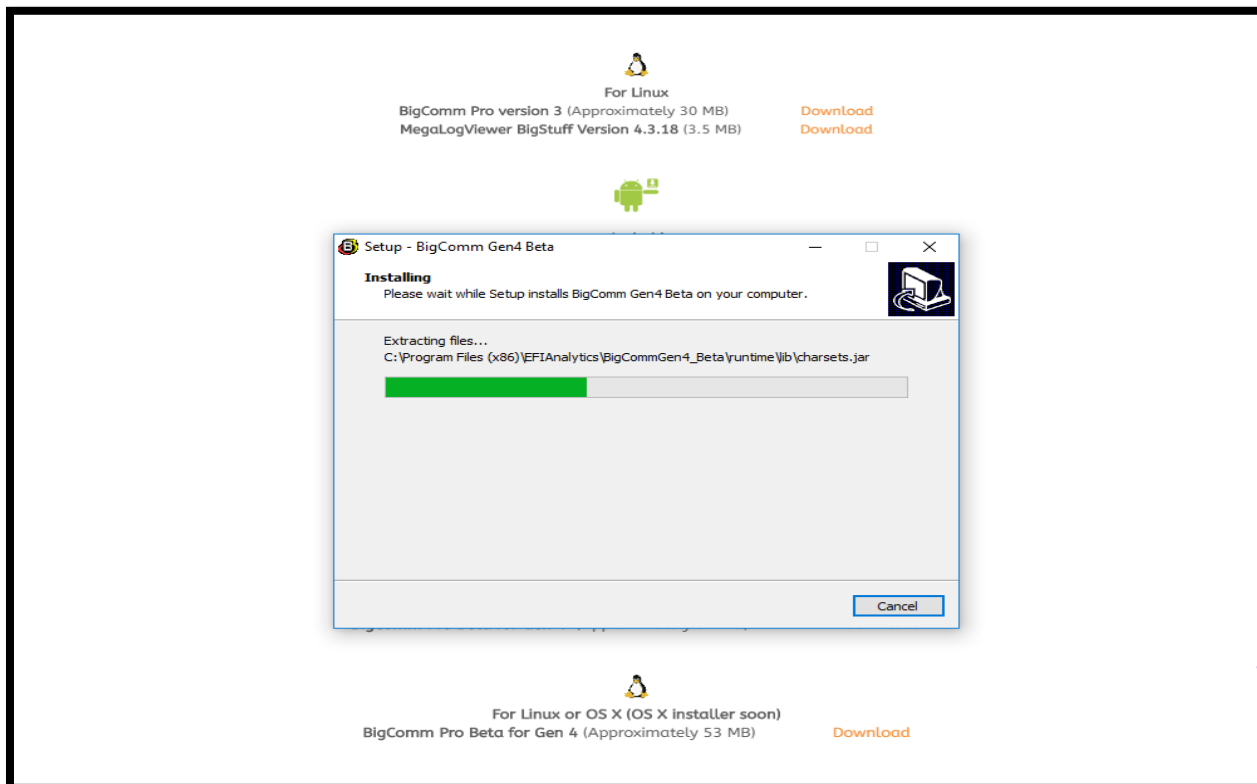


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Step 1.13 - Select Install.

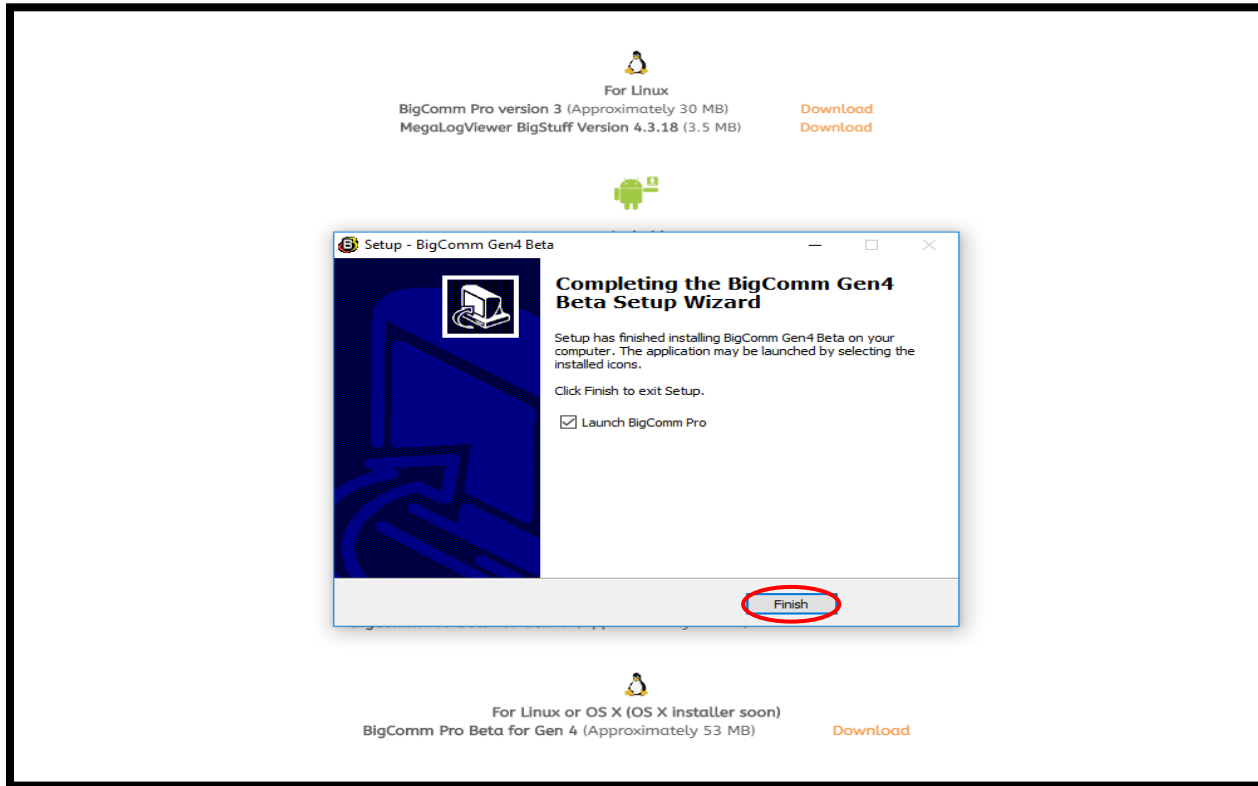


Step 1.14 - After selecting Install from Step 1.13, a status bar will appear showing the progress of the BigComm Pro (BCP) GEN4 software download to your PC.

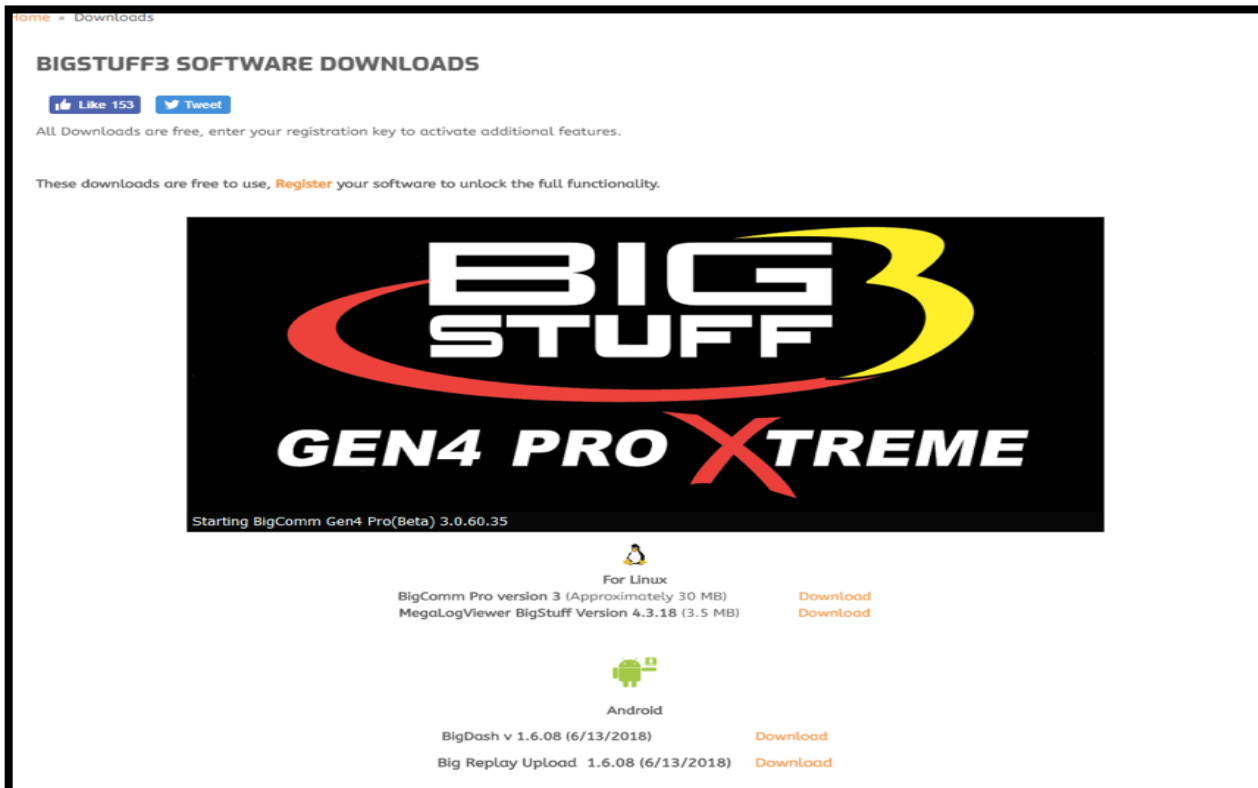


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Step 1.15 - Select Finish.



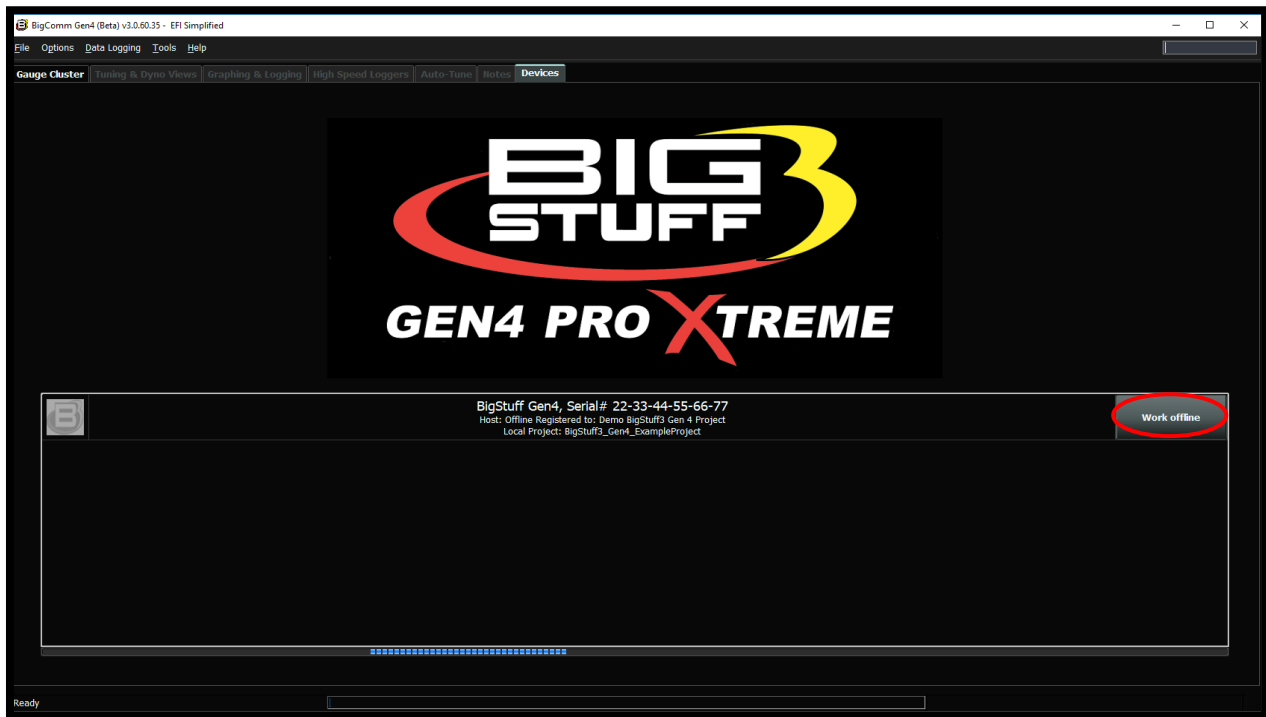
Step 1.16 - After selecting Finish from Step 1.15, after a slight pause, the GEN4 PRO XTREME graphic screen will appear momentarily.



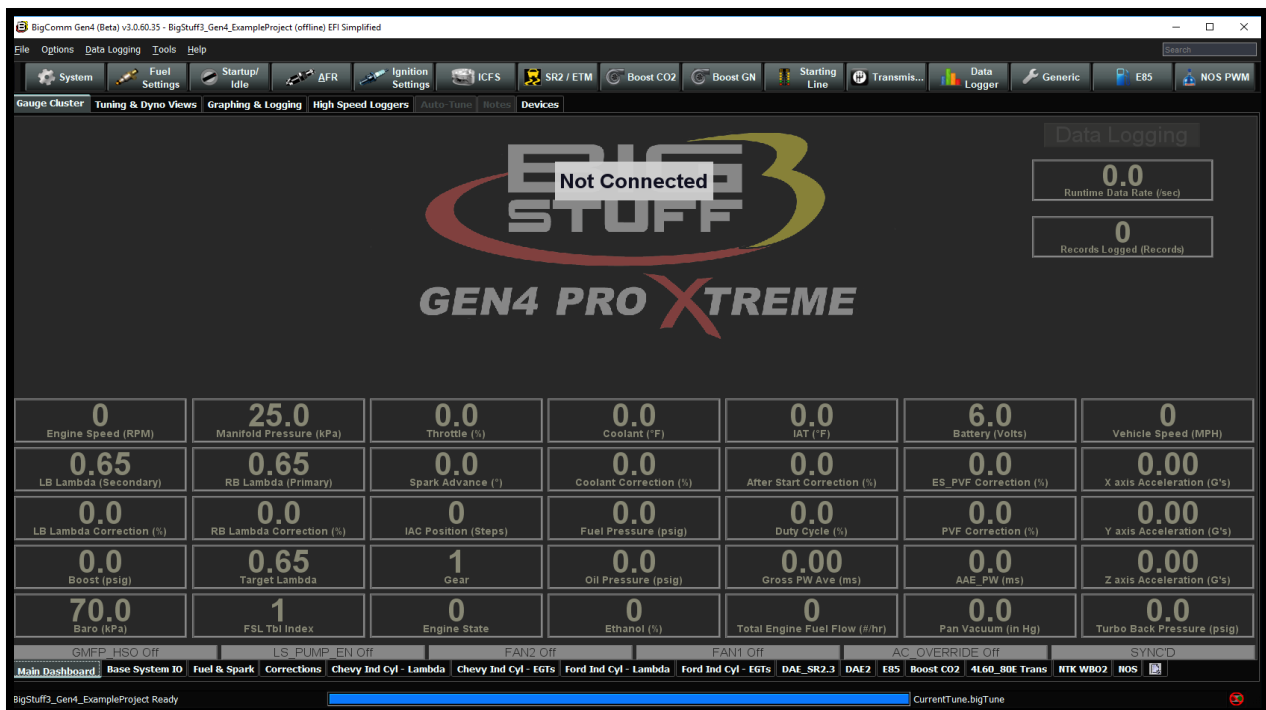
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Step 1.17 - After another slight pause, the following GEN4 PRO XTREME software window will open. At this point, the software is running on your PC and you can work offline with an example Local Project:

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 “Wireless Ethernet” – MikroTik & GLiNet

Step 2.0 - Establish a wireless connection between PC running BCP software & GEN4 wireless network

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

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

- The Micro USB/USB2.0 Power Cable is connected between the GEN4 PRO XTREME GLiNet In-Vehicle Wireless Router’s Micro USB Power port and either;
 - the USB2.0 port on the PC **or**
 - the Dual 5V/2.4A USB2.0 Car Charger installed into the vehicle’s 12 VDC power accessory port (“cigarette lighter”) **or**
 - the stand-alone universal 5V/1A power pack.
- The 5’ CAT6a Ethernet cable is connected between the GEN4 PRO XTREME Wireless Router’s RJ45 Ethernet LAN port and GEN4 PRO XTREME ECU’s RJ45 Ethernet port. (See the GEN4 PRO XTREME Wired Ethernet Network 1 Configuration for “In-Vehicle” applications on page 15).
- Once the GEN4 PRO XTREME GLiNET wireless router is connected to a 5VDC power source, the right-side green LED (above the “G” in BIG) will illuminate to indicate it is powered on. After a short period of time, the left-side red LED (above the “B” in BIG) will illuminate to indicate a wireless connection can now be established. Once a wireless connection is established the red LED will begin to flicker. Once the Wireless Ethernet online communication between the PC running the BCP software and GEN4 PRO XTREME ECU is established the red LED will begin to flash.

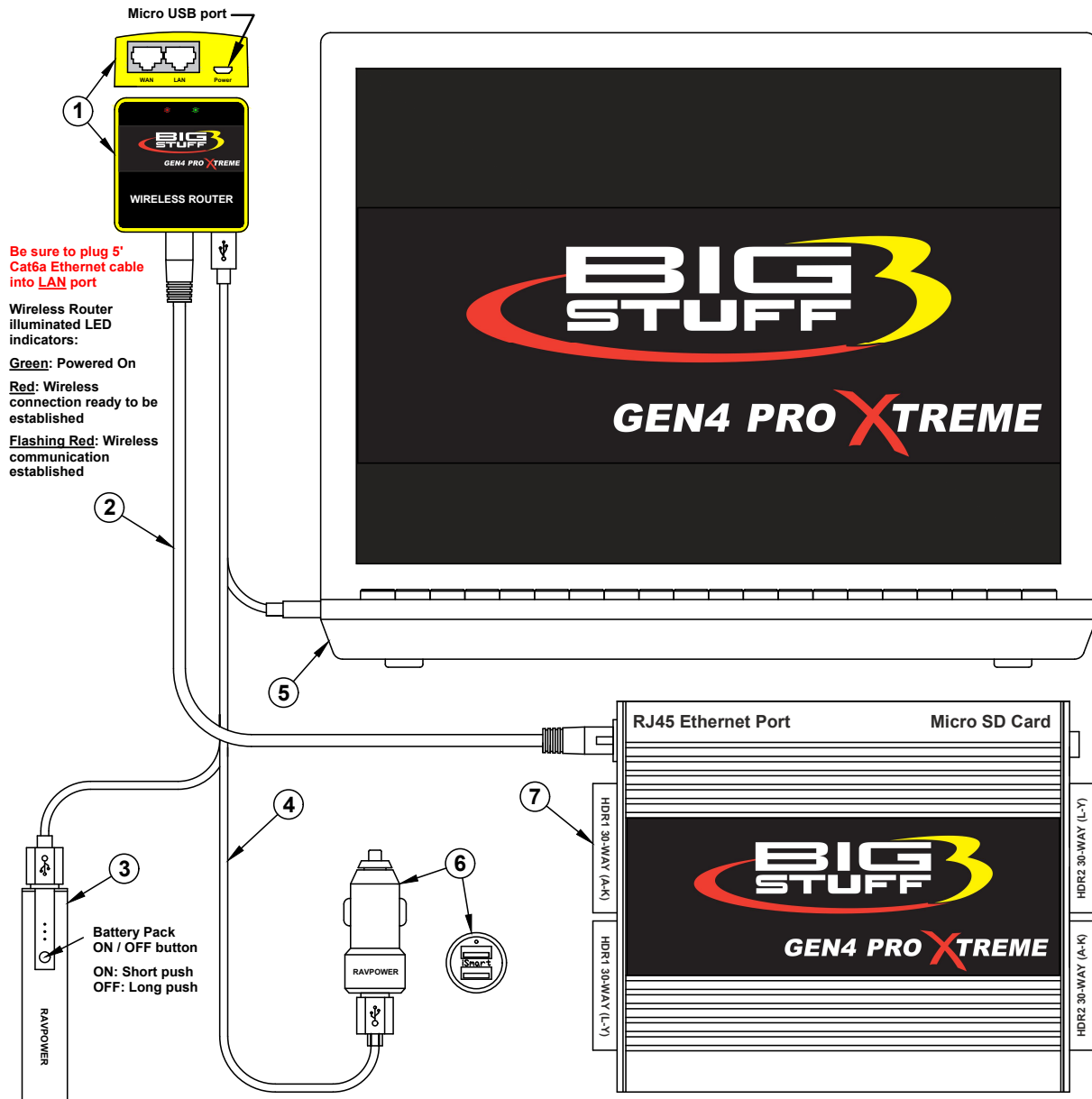
For the **Wireless Ethernet Network 2 Configuration for “Race Car” and Dyno applications;**

- 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 (+) & (-).
- The 5’ CAT6a shielded Ethernet cable is connected between one of the MikroTik hAP ac lite router’s (4) RJ45 LAN ports and GEN4 ECU’s RJ45 Ethernet port. (See the GEN4 PRO XTREME Wired Ethernet Network 2 Configuration for “Race Car” & Dyno applications on page 16).
- Once the above connections are made the GEN4 PRO XTREME MikroTik hAP ac lite wireless router’s green LED will illuminate to indicate it is powered on. The LAN channel LED on the backside of the MikroTik hAP ac lite router that the 5’ CAT6a shielded Ethernet cable is connected to will also illuminate to indicate a wireless connection can now be established.

Once either the above Wireless 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 wireless Ethernet connection is established. Once the wireless 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.

Wireless Ethernet Network 1 configuration for “In-Vehicle” applications

GEN4 PRO XTREME ECU / PC / In-Vehicle Wireless Router Network Configuration



- 1 GEN4 PRO XTREME GLiNET In-Vehicle Wireless Router
- 2 5' CAT6a Shielded Ethernet Cable
- 3 Universal 5V / 1A Battery Pack
- 4 Micro USB / USB 2.0 Power Cable
- 5 PC running BIGCOMM PRO Software
- 6 Dual 5V / 2.4A USB 2.0 Car Charger
- 7 GEN4 PRO XTREME ECU

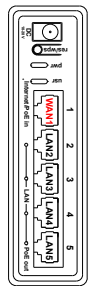
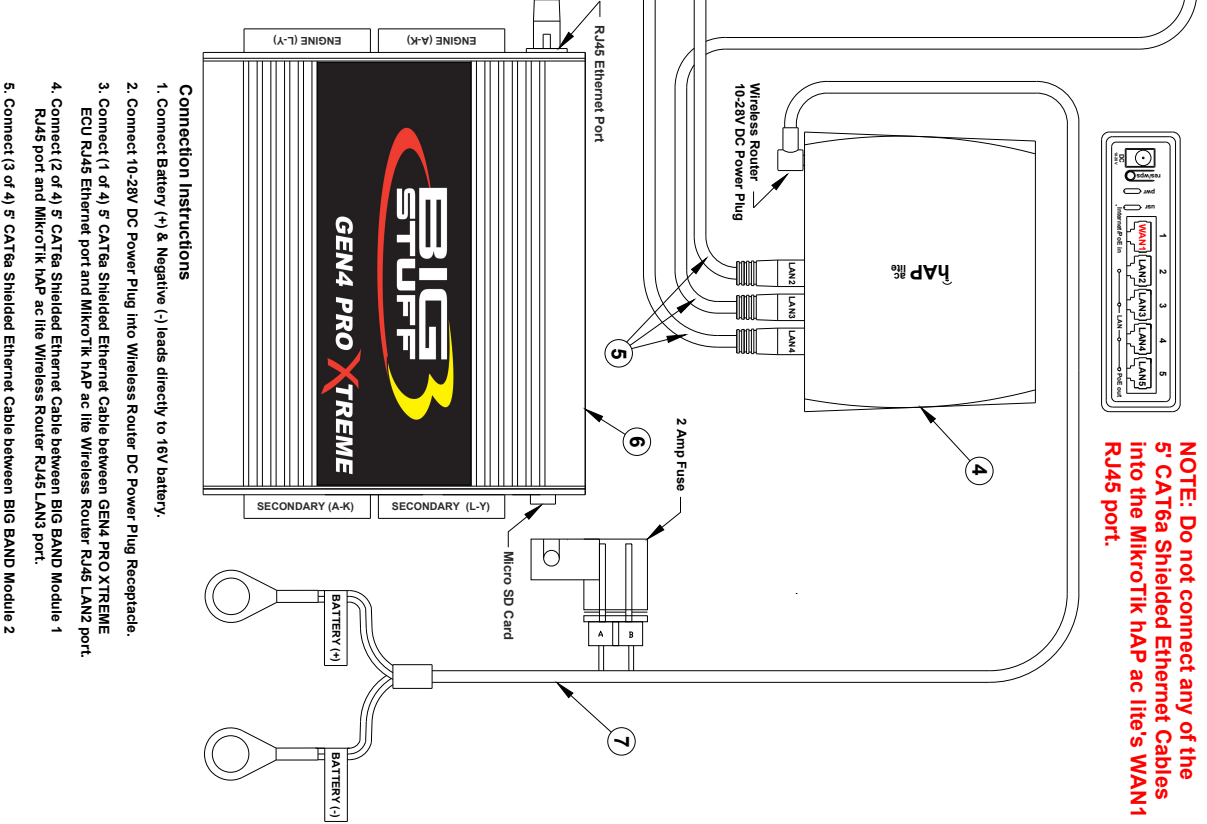
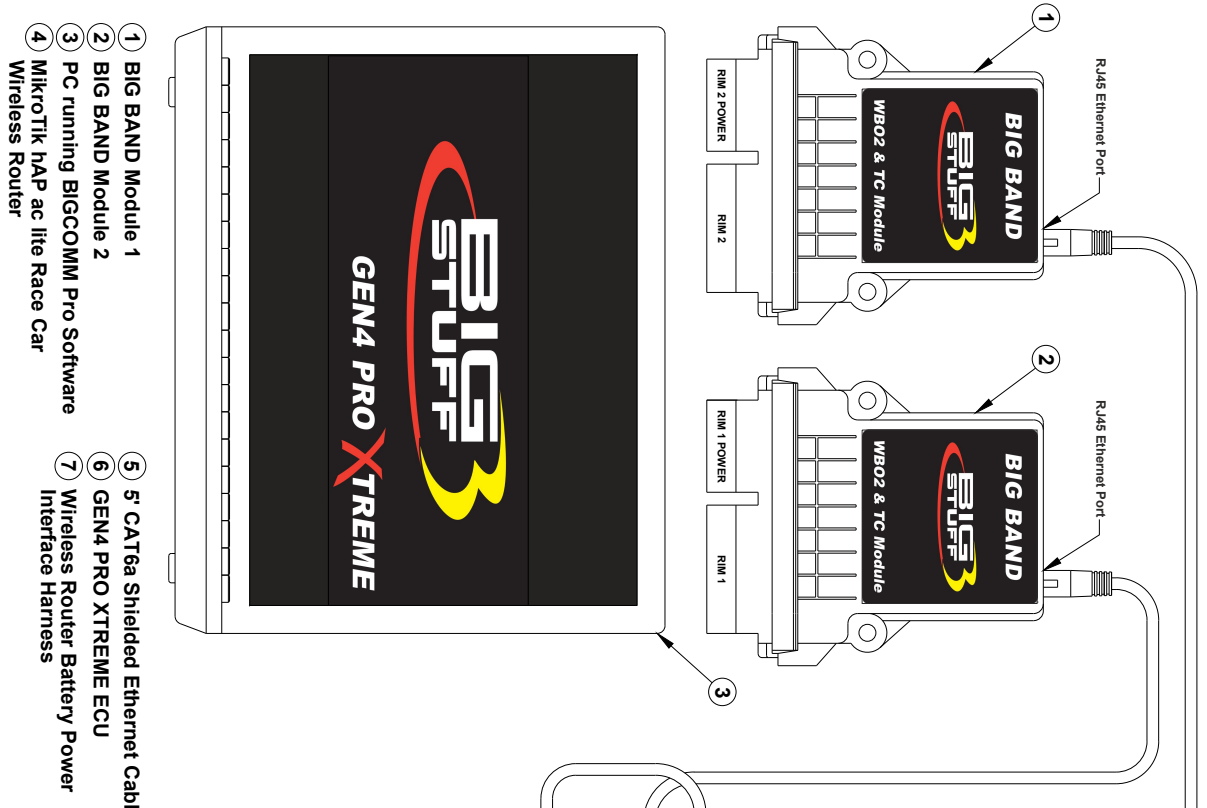
Connection Instructions

1. Connect one end of the 5' CAT6a, Shielded Ethernet Cable to the Wireless Router's RJ45 LAN port and the other end to the GEN4 PRO XTREME ECU's RJ45 Ethernet port.

2. There are (3) options to provide the required 5V/1A power to the GLiNET In-Vehicle Wireless Router. In each case, one end of the Micro USB / USB 2.0 Power Cable connects to the GLiNET In-Vehicle Wireless Router's Micro USB port and the USB 2.0 end of the cable can connect to the PC's USB port or one of the Car Charger Adapters's USB ports or the Universal 5V/1A Battery Pack's USB port.

Wireless Ethernet Network 2 configuration for “Race Car” & Dyno applications

GEN4 PRO XTREME ECU / BIG BAND / PC / MikroTik hAP ac lite Race Car Wireless Router Network Configuration



NOTE: Do not connect any of the 5' CAT6a Shielded Ethernet Cables into the MikroTik hAP ac lite's WAN1 R445 port.

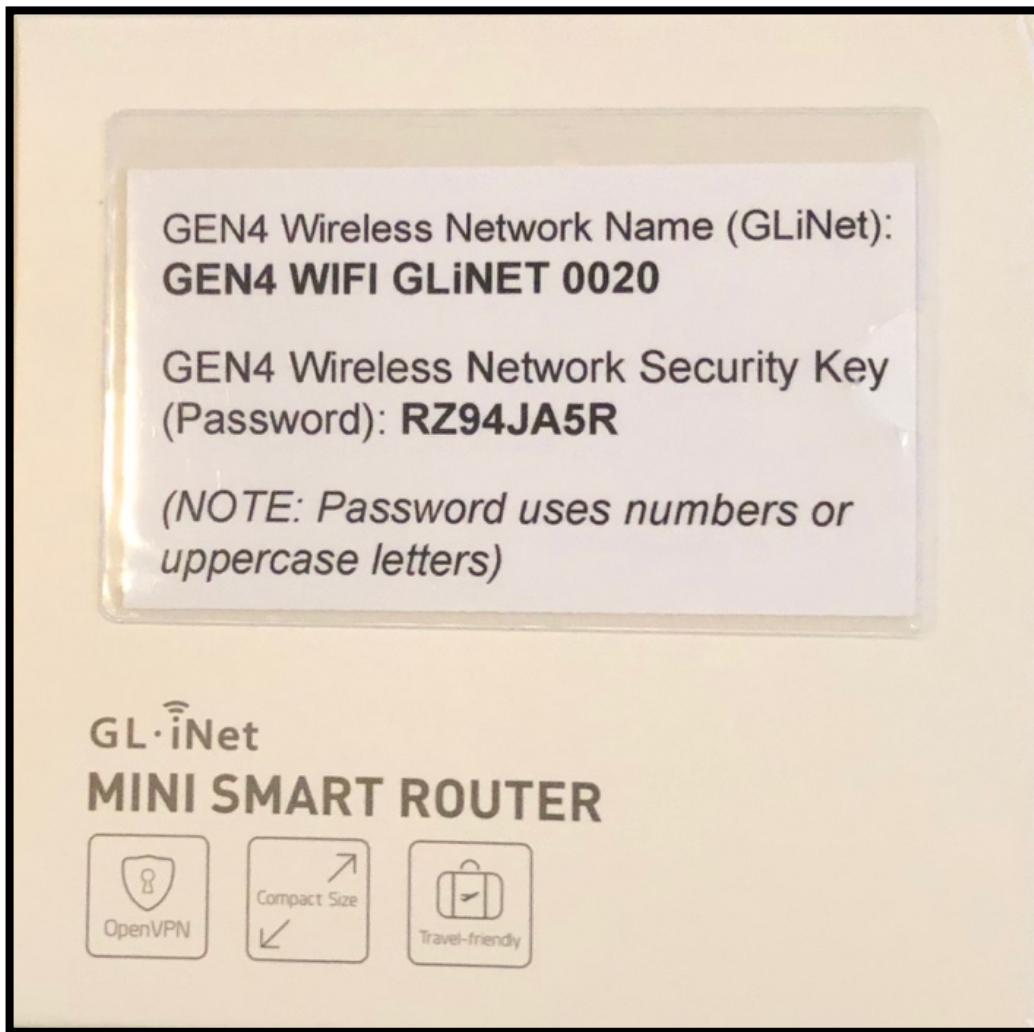
- 1 BIG BAND Module 1
- 2 BIG BAND Module 2
- 3 PC running BIGCOMM Pro Software
- 4 MikroTik hAP ac lite Race Car Wireless Router
- 5 5' CAT6a Shielded Ethernet Cable
- 6 GEN4 PRO XTREME ECU
- 7 Wireless Router Battery Power Interface Harness

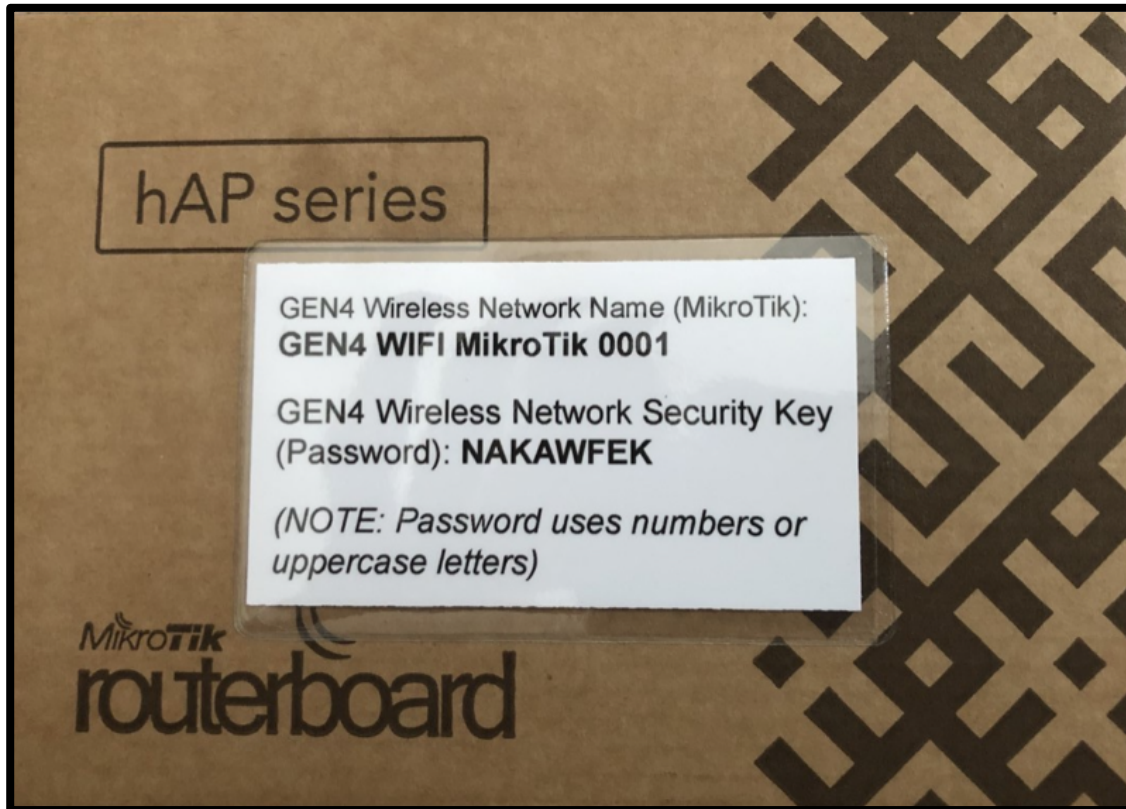
- Connection Instructions**
1. Connect Battery (+) & Negative (-) leads directly to 18V battery.
 2. Connect 10-28V DC Power Plug into Wireless Router DC Power Plug Receptacle.
 3. Connect (1 of 4) 5' CAT6a Shielded Ethernet Cable between GEN4 PRO XTREME ECU R445 Ethernet port and MikroTik hAP ac lite Wireless Router R445 LAN2 port.
 4. Connect (2 of 4) 5' CAT6a Shielded Ethernet Cable between BIG BAND Module 1 R445 port and MikroTik hAP ac lite Wireless Router R445 LAN3 port.
 5. Connect (3 of 4) 5' CAT6a Shielded Ethernet Cable between BIG BAND Module 2 R445 port and MikroTik hAP ac lite Wireless Router R445 LAN4 port.

GEN4 PRO XTREME Initial Setup Instructions for “Wireless Ethernet” – MikroTik & GLiNet

The following steps detail how to establish a Wireless Ethernet Connection between a PC with the BigComm Pro GEN4 software installed and GEN4 Wireless Network using the yellow GLiNet Wireless Router for In-Vehicle applications or the MikroTik hAP ac lite Wireless Router for Race Car applications. It assumes the In-Vehicle or Race Car Wireless Router Network connections detailed on page 15 or 16 have been established.

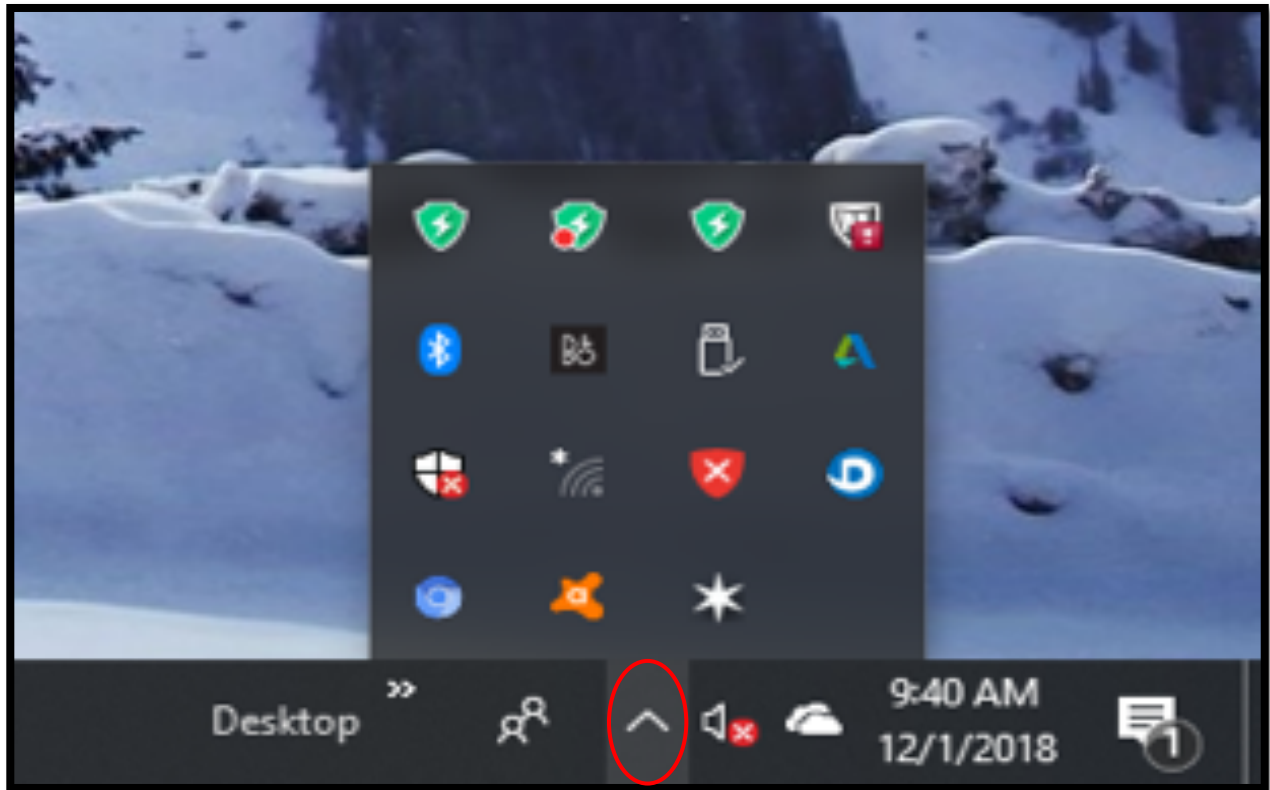
Note: The GEN4 PRO XTREME system includes an ID card that identifies the GEN4 Wireless Network Name (GLiNet or MikroTik) and Security Key (Password) as shown below. The ID card is located in the sleeve attached to the GLiNET Mini Smart Router box or MikroTik hAP ac lite Router box. The GEN4 Wireless Network Name (GLiNet or MikroTik) and Security Key (Password) are required to establish the initial wireless connection between the BigComm Pro software running on a PC and GEN4 PRO XTREME ECU. Be sure not to misplace the GEN4 Wireless Network Name and Security Key (Password) ID card and do not share it with others.



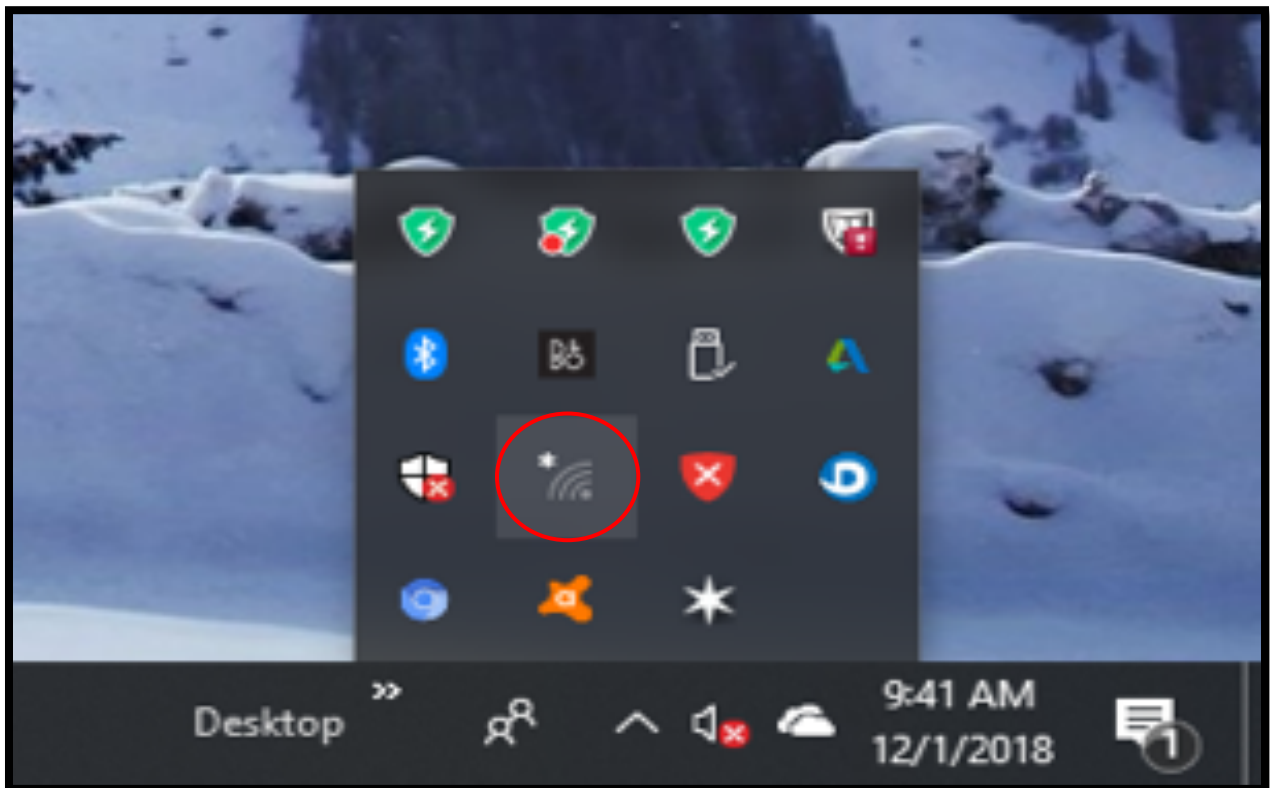


GEN4 PRO XTREME Initial Setup Instructions for “Wireless Ethernet” – MikroTik & GLiNet

Step 2.1 – Once the PC is powered on, left mouse click on the **up arrow** in the lower right-hand corner of the tool bar as shown below.



Step 2.2 - Left mouse click on the **Wireless Network** icon as shown below.

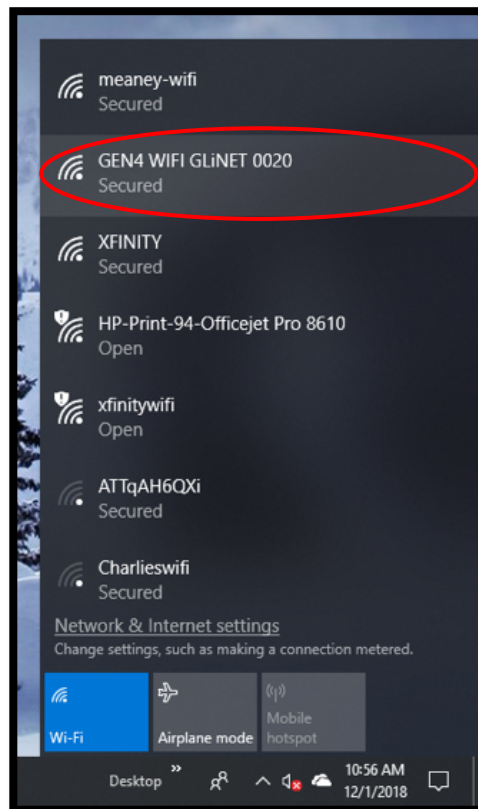


GEN4 PRO XTREME Initial Setup Instructions for “Wireless Ethernet” – MikroTik & GLiNet

Step 2.3 - Once the **Wireless Network** window opens, highlight and left mouse click on the GEN4 Wireless Network name as shown below. For this example, the GEN4 Wireless Network Name is; **GEN4 WIFI GLiNET 0020**, per the above GEN4 Wireless Network Name (GLiNet or MikroTik) and Security Key (Password) ID card.

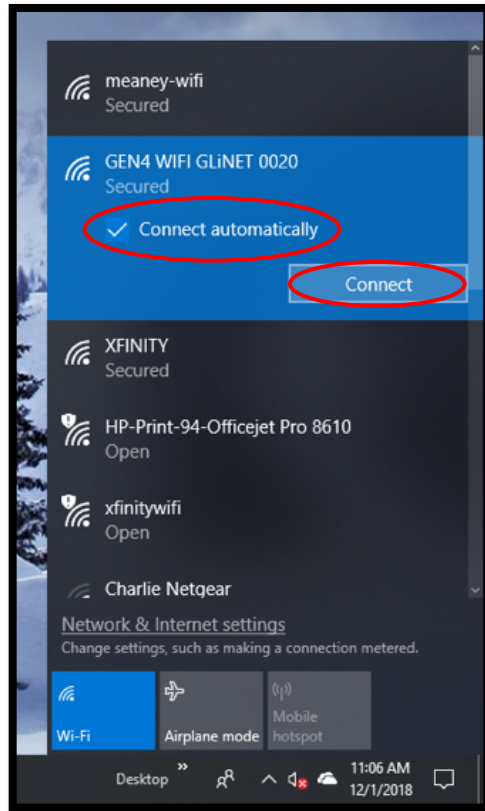
Always be sure to highlight and left mouse click on the GEN4 Wireless Network Name (GLiNet or MikroTik) that appears on the ID card included with your GEN4 PRO XTREME system.

Note: The GEN4 Wireless Network uses two naming conventions dependent on which wireless router is being used. If the yellow GLiNet “In-Vehicle” wireless router is being used, the GEN4 Wireless Network naming convention is “**GEN4 WIFI GLiNET 0001 thru 9999**”. If the MikroTik hAP ac lite “Race Car” wireless router is being used, the GEN4 Wireless Network naming convention is “**GEN4 WIFI MikroTik 0001 thru 9999**”.



GEN4 PRO XTREME Initial Setup Instructions for “Wireless Ethernet” – MikroTik & GLiNet

Step 2.4 - Once the GEN4 WIFI GLiNET Wireless Network dialogue window opens as shown below, check the **Connect automatically** box and then left mouse click on **Connect**.



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Step 2.5 - Once **Connect** is selected from Step 2.4, the following dialogue window will open. It has a blank dialogue box under the **Enter the network security key** text. This is where the network security key needs to be entered.

Key Point!!! The **Network Security Key** is also referred to as the **GEN4 Wireless Network Security Key (Password)**.

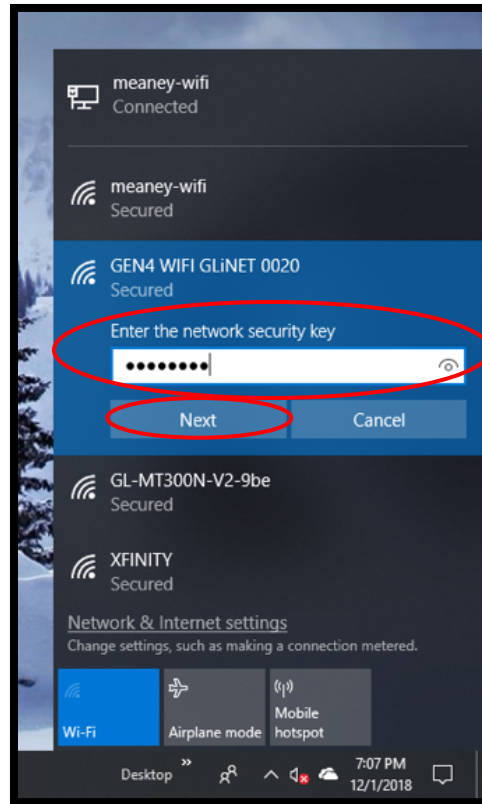
For this example, the GEN4 Wireless Network Security Key (Password) is; **RZ94JA5R**, per the above GEN4 Wireless Network Name (GLiNet) and Security Key (Password) ID card.

Note: Be sure to use the **GEN4 Wireless Network Security Key (Password)** as it appears on the GEN4 Wireless Network Name (GLiNet or MikroTik) and Security Key (Password) ID card included with your GEN4 PRO XTREME system. All GEN4 Wireless Network Security Keys (Passwords) use numbers and/or uppercase letters.



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Step 2.6 - Type the **GEN4 Wireless Network Security Key (Password)** under the **Enter the network security key** dialogue box as shown below and highlight and left mouse click on **Next**.

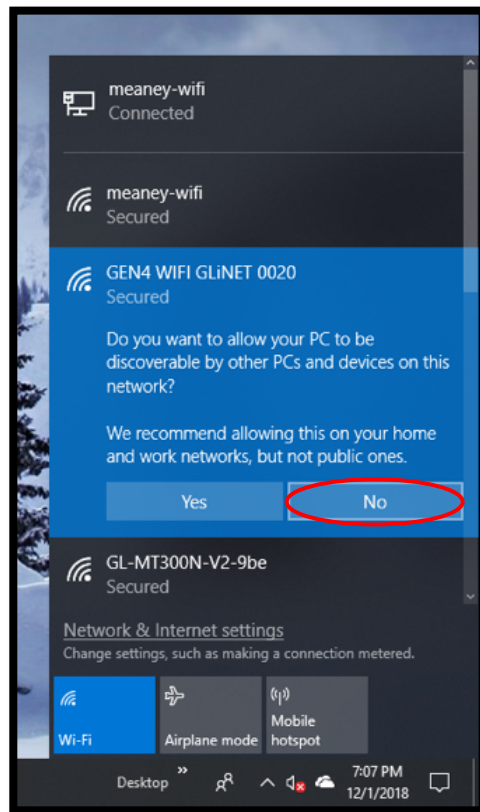


Note: The provided GEN4 Wireless Network Security Key (Password) is not required to be entered again after the initial wireless connection between a specific PC & GEN4 Wireless Network has been established. The only time the provided Wireless Network Password is required to be entered again is to establish a new wireless connection between a different PC running the BigComm Pro software and GEN4 PRO XTREME ECU.

Note: You can change the GEN4 Wireless Network Name and/or Password. You may want to change the GEN4 Wireless Network Name to easily associate it to a specific vehicle if running multiple vehicles with multiple GEN4 PRO XTREME Wireless Networks. Instructions on how to change the GEN4 Wireless Network Name and/or Password are located on the BS3 website under the GEN4 PRO XTREME section.

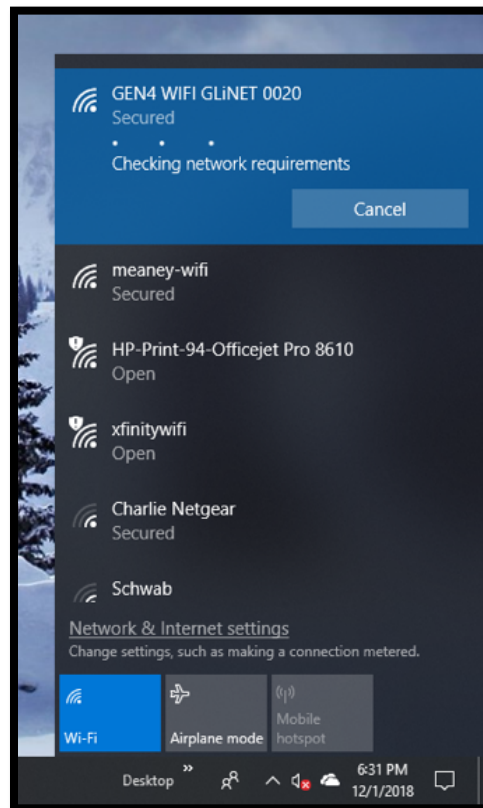
GEN4 PRO XTREME Initial Setup Instructions for “Wireless Ethernet” – MikroTik & GLiNet

Step 2.7 - After left mouse clicking on **Next** from Step 2.6, the following dialogue window will open asking; “**Do you want to allow your PC to be discoverable by other PCs and devices on this network?**”, Highlight and left mouse click on **No**.



GEN4 PRO XTREME Initial Setup Instructions for “Wireless Ethernet” – MikroTik & GLiNet

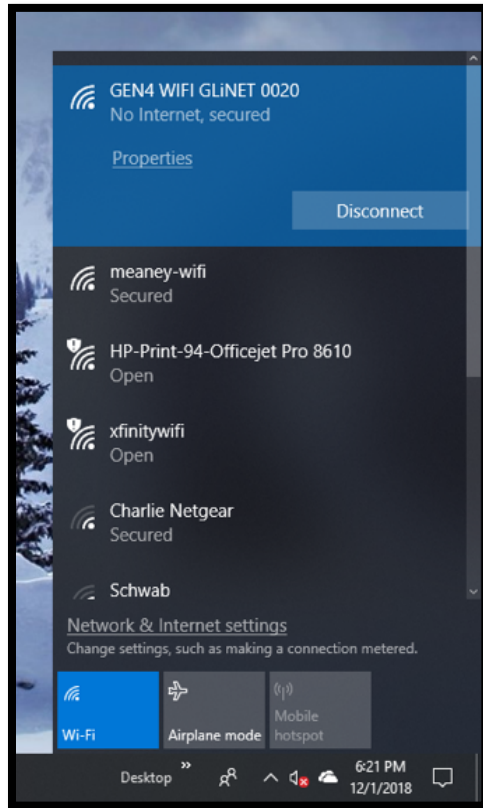
Step 2.8 - Once **No** is selected from Step 2.7, the following window will open showing your specific GEN4 WIFI GLiNET (0001 thru 9999) network is **Checking network requirements** and is attempting to establish a wireless connection with the PC.



GEN4 PRO XTREME Initial Setup Instructions for “Wireless Ethernet” – MikroTik & GLiNet

Step 2.9 - After a brief period of time, the following window will open to indicate the wireless network connection has been established between the PC and your specific GEN4 WIFI GLiNET (0001 thru 9999) or GEN4 WIFI MikroTik (0001 thru 9999) wireless router.

Reminder: The GEN4 Wireless Network name will be GEN4 WIFI GLiNET (0001 thru 9999) if using the yellow GLiNET “In-Vehicle” wireless router. The GEN4 Wireless Network name will be GEN4 WIFI MikroTik (0001 thru 9999) if using the MikroTik hAP ac lite “Race Car” wireless router.

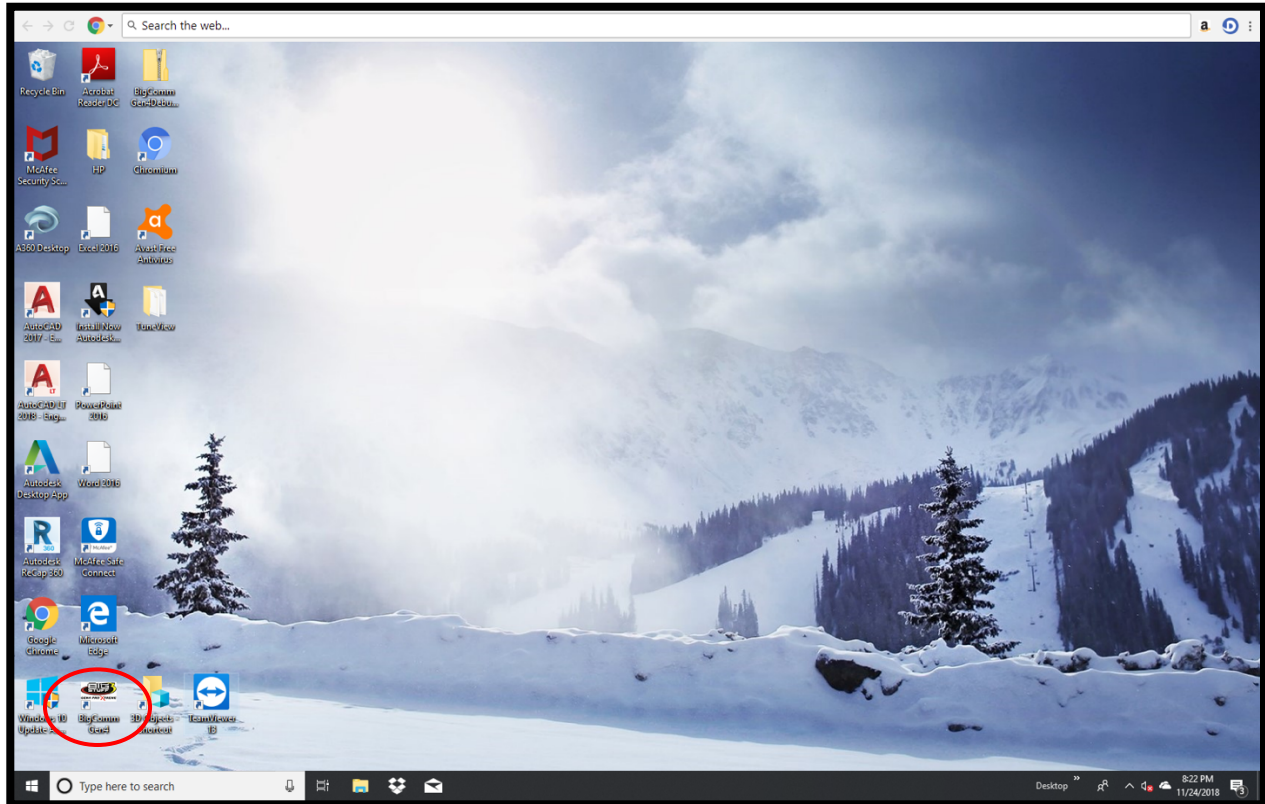


Once the Wireless Network Connection has been established as detailed in Steps 2.0 thru 2.9, an initial online communication can be established between the PC running the BCP software and GEN4 PRO XTREME ECU connected to the GEN4 WIFI GLiNET (0001 thru 9999) or GEN4 WIFI MikroTik (0001 thru 9999) wireless router.

GEN4 PRO XTREME Initial Setup Instructions for “Wireless Ethernet” – MikroTik & GLiNet

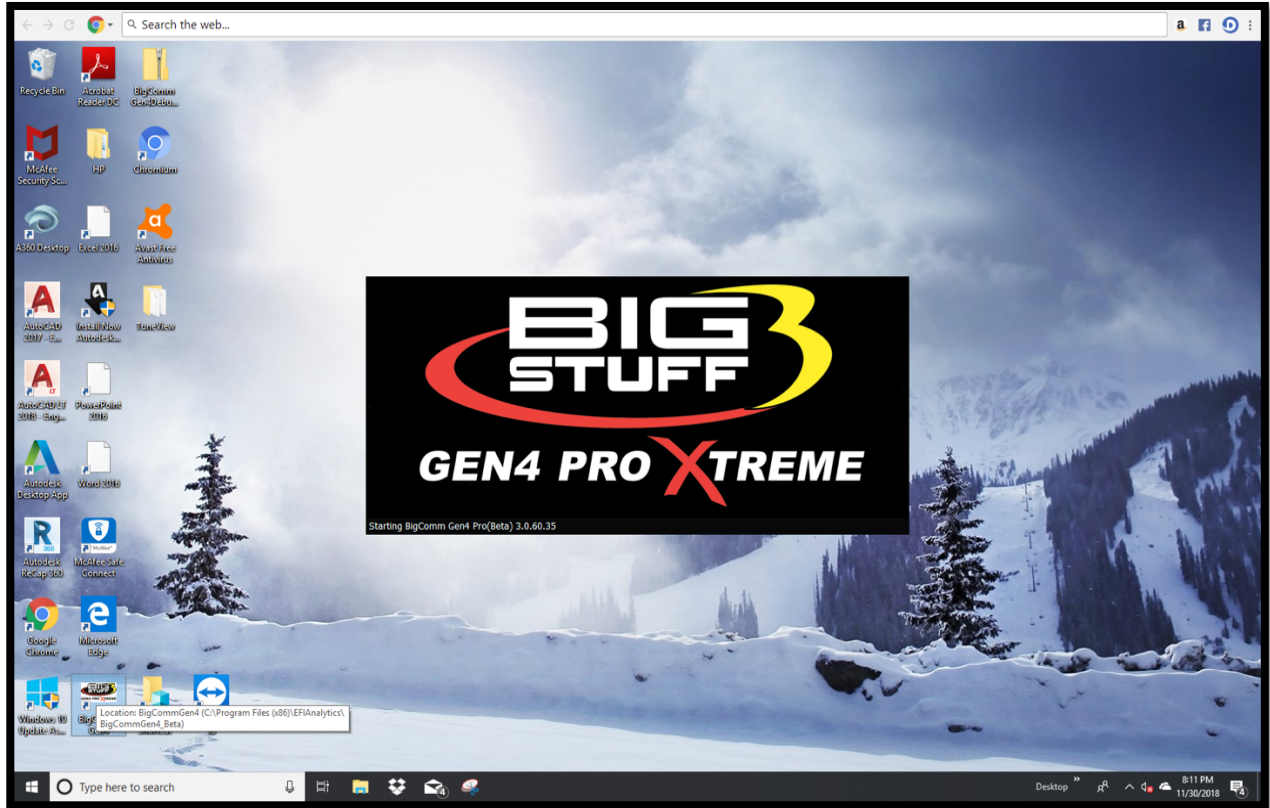
STEP 3.0 - Activate the BCP software and GEN4 PRO XTREME ECU interface to enable BCP software to create initial Project (STEP 3.0 only occurs when connecting between a PC running the BCP software and GEN4 PRO XTREME ECU for the first time)

Step 3.1 - Once a Wireless Ethernet 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 “Wireless Ethernet” – MikroTik & GLiNet

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



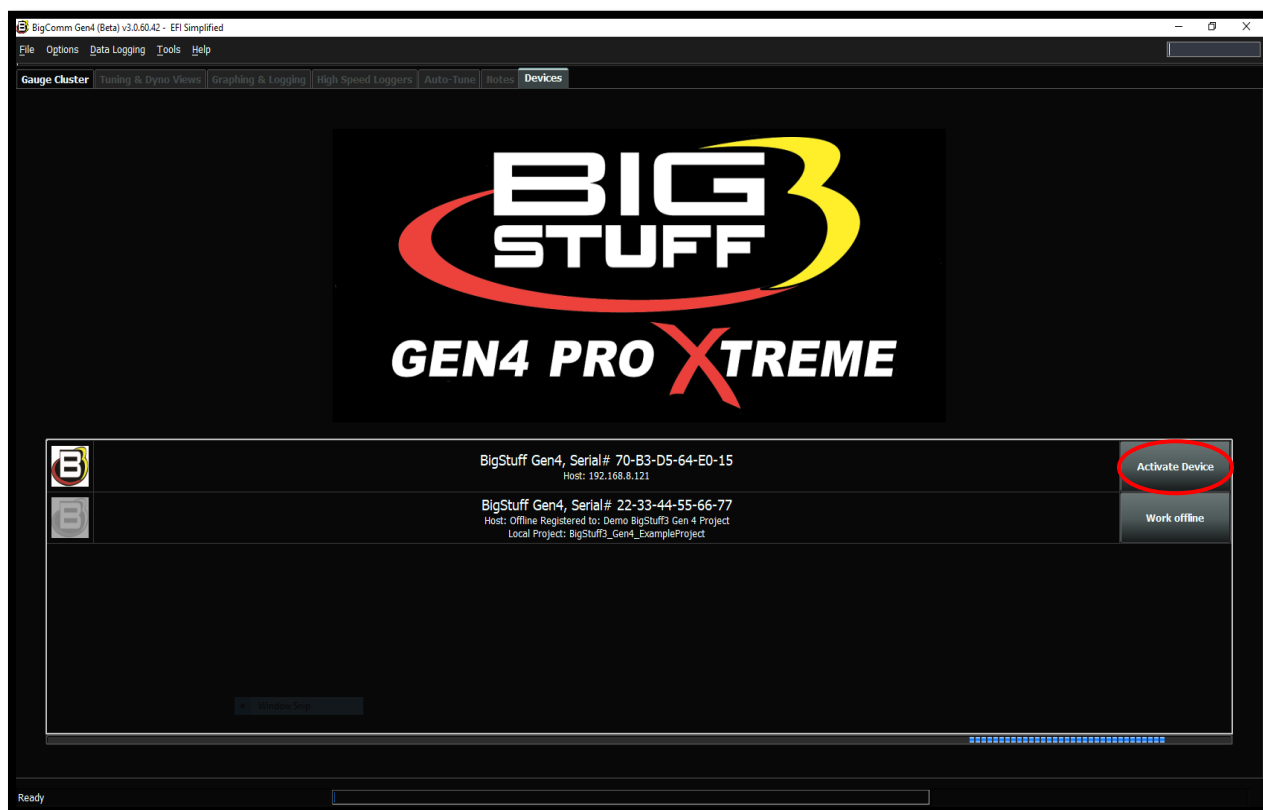
GEN4 PRO XTREME Initial Setup Instructions for “Wireless Ethernet” – MikroTik & GLiNet

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.

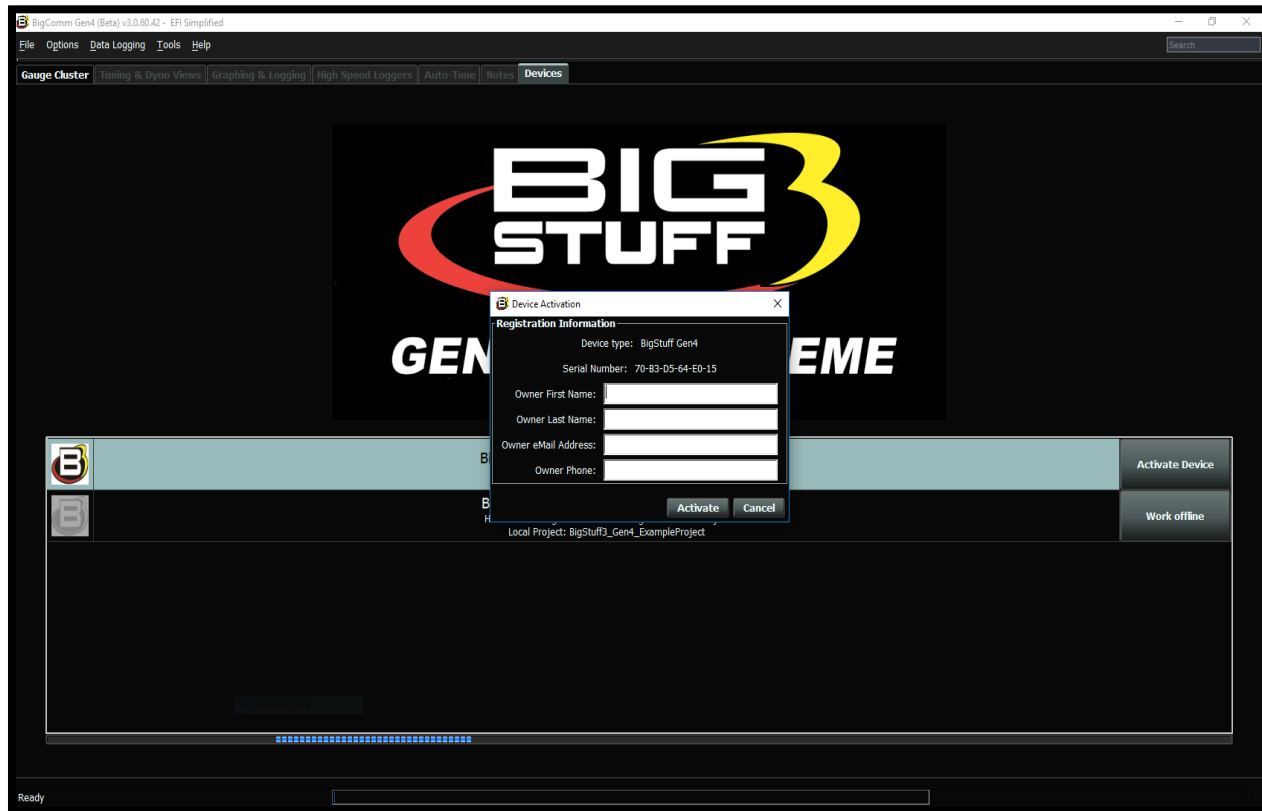
The second is: **Bigstuff Gen4, Serial# 22-33-44-55-66-77**. This is the default serial number associated with the example Local Project: **Bigstuff3_GEN4_ExampleProject** running offline on the PC. The example Local Project: **Bigstuff3_GEN4_ExampleProject** was included as part of the BCP software 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**.

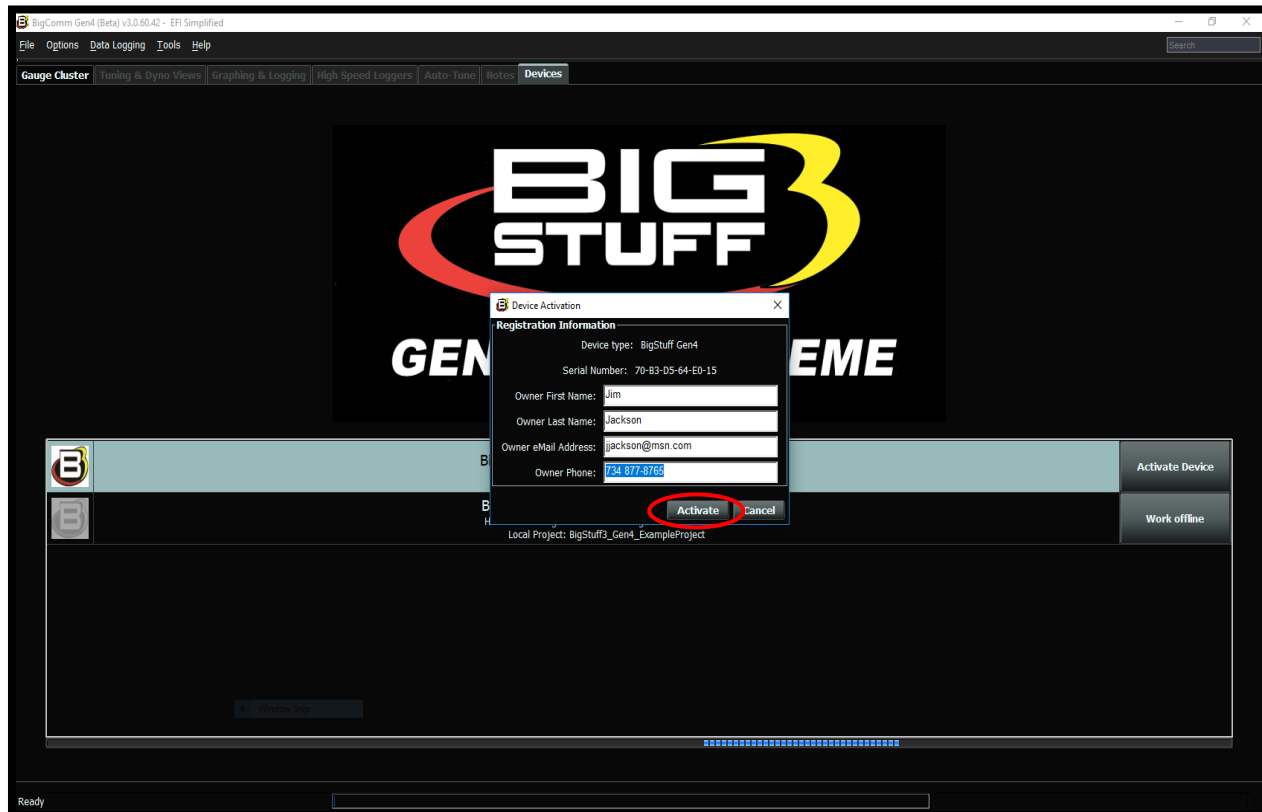


GEN4 PRO XTREME Initial Setup Instructions for "Wireless Ethernet" – MikroTik & GLiNet

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**.

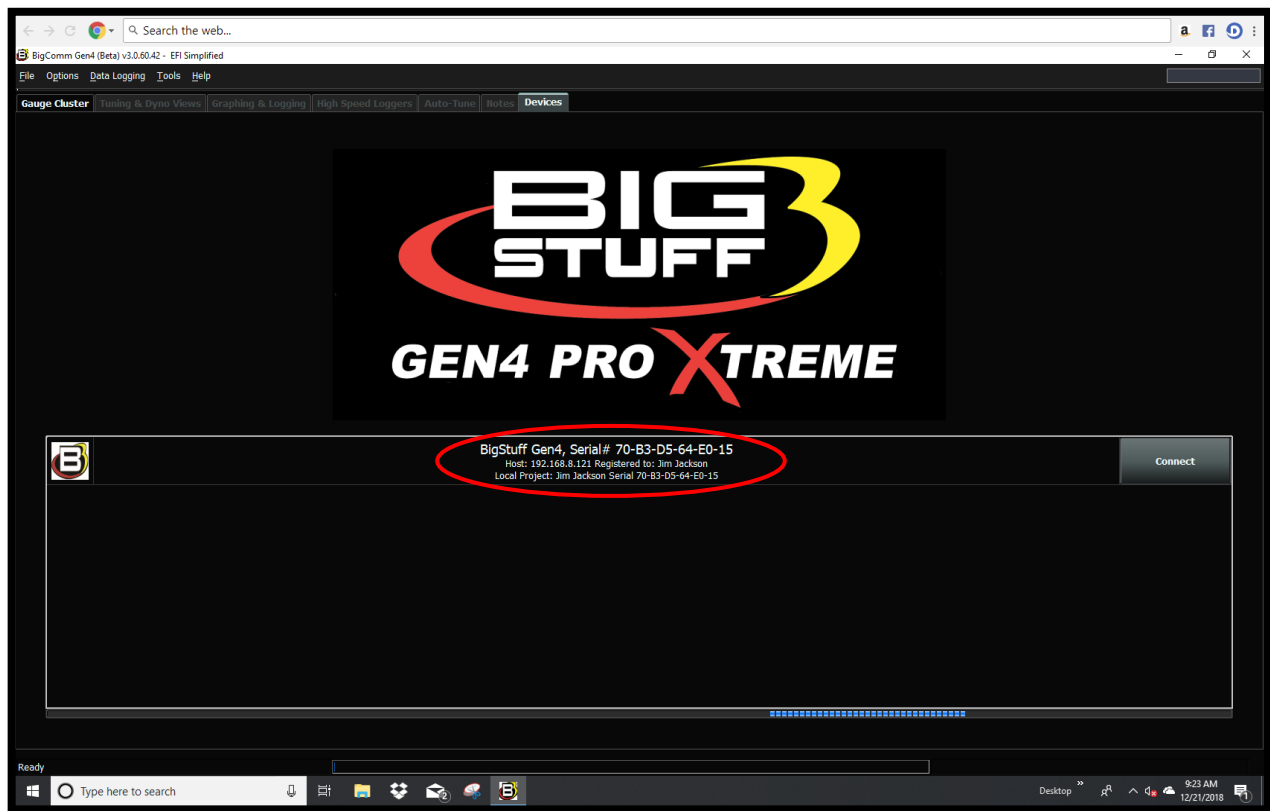


GEN4 PRO XTREME Initial Setup Instructions for “Wireless Ethernet” – MikroTik & GLiNet

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.



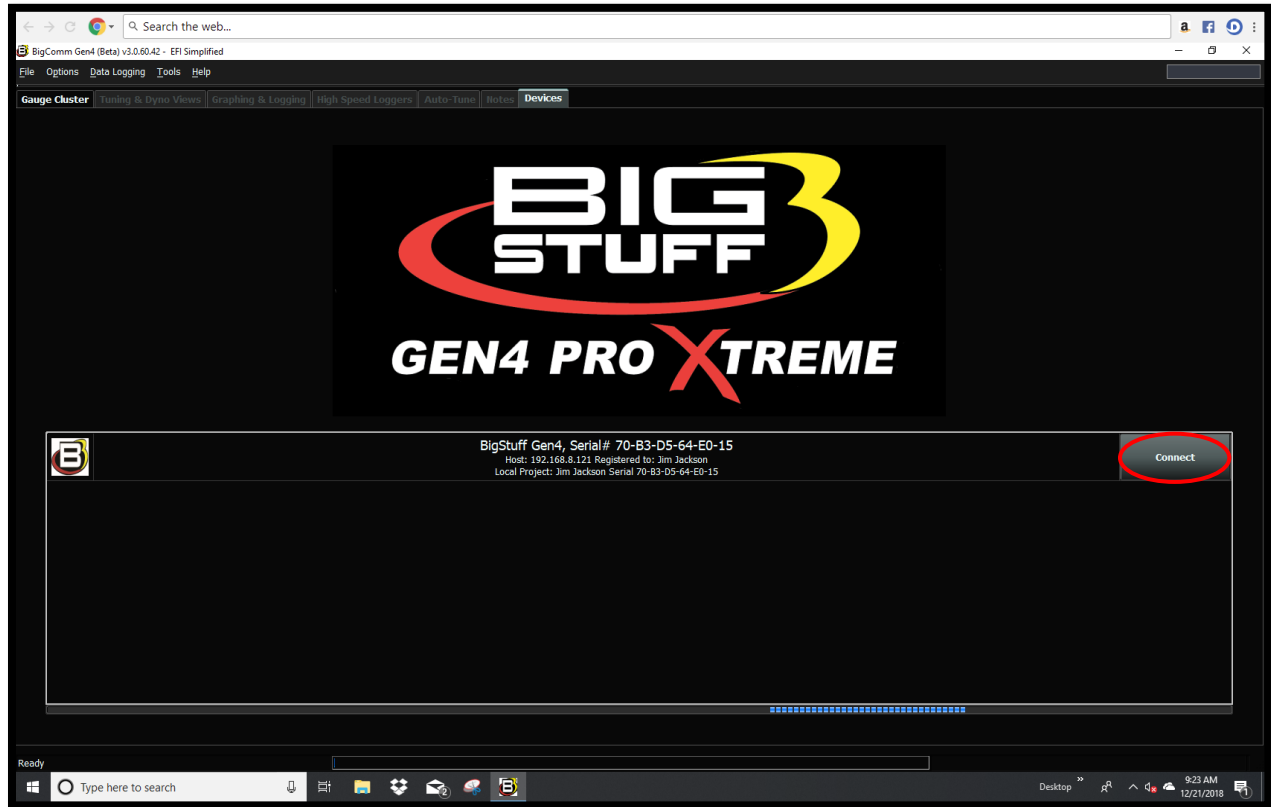
There are a couple of key things that occur when **Activate Device** is selected;

- 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.

GEN4 PRO XTREME Initial Setup Instructions for “Wireless Ethernet” – MikroTik & GLiNet

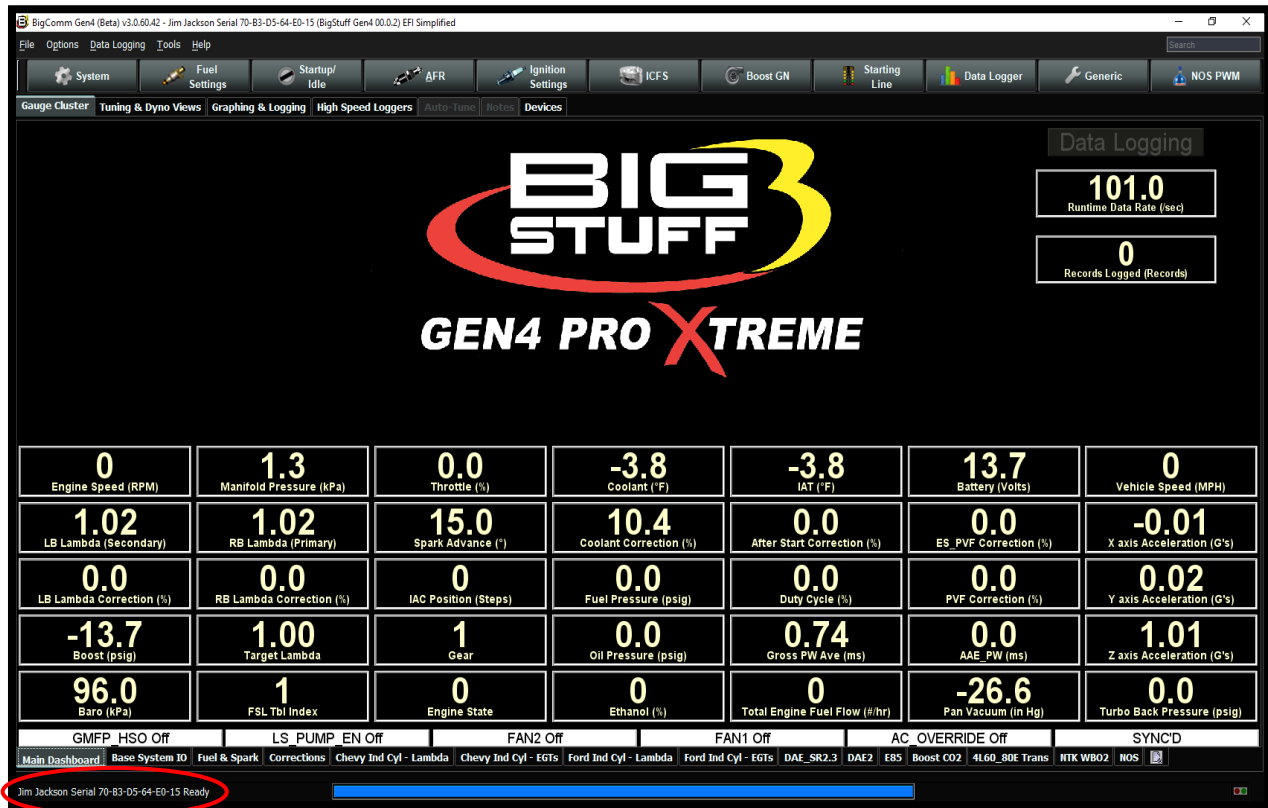
Step 4.0 - Connect to the GEN4 PRO XTREME ECU to establish online wireless Ethernet communication

Step 4.1 - To establish online wireless 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 couple key things that occur when **Connect** is selected;

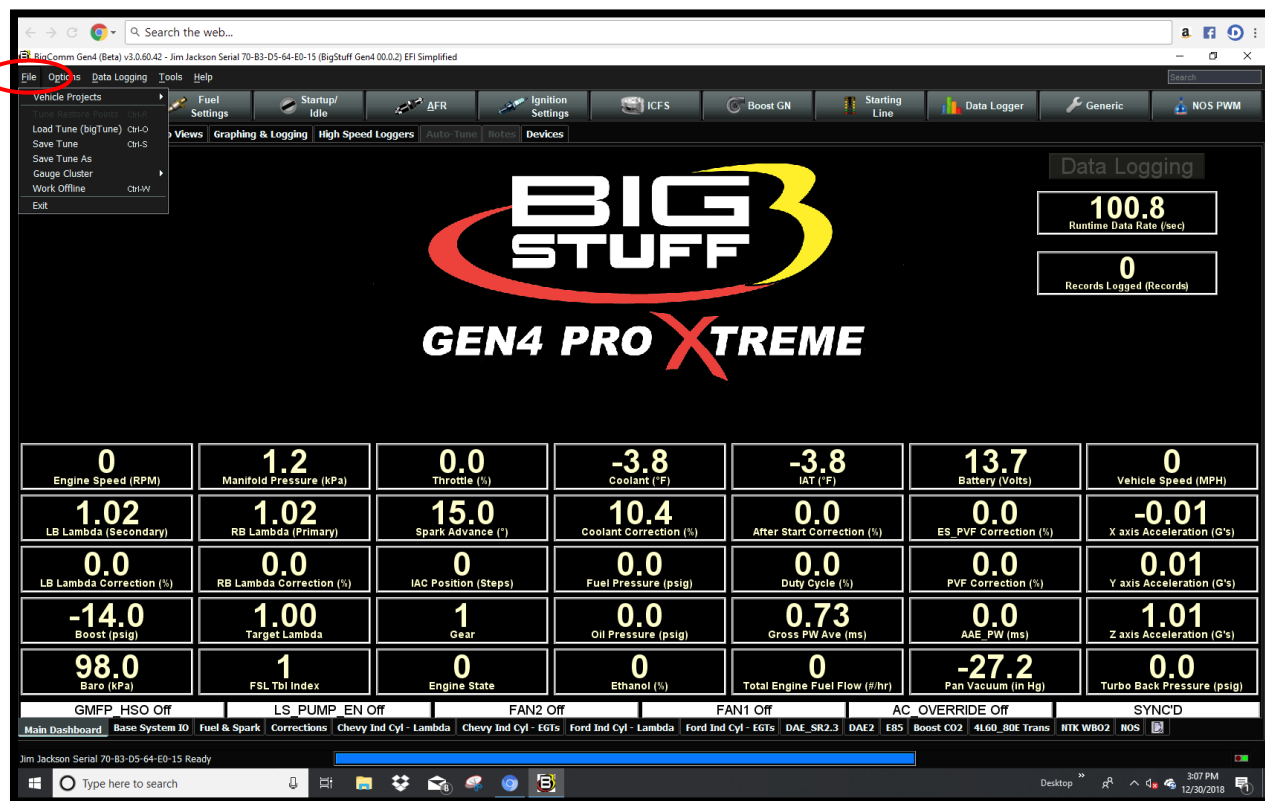
- Online wireless Ethernet communication is established between the PC running the BCP software and GEN4 PRO XTREME ECU.
- The calibration file included with the GEN4 PRO XTREME ECU is uploaded into the BCP software running on the PC.

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.

GEN4 PRO XTREME Initial Setup Instructions for “Wireless Ethernet” – MikroTik & GLiNet

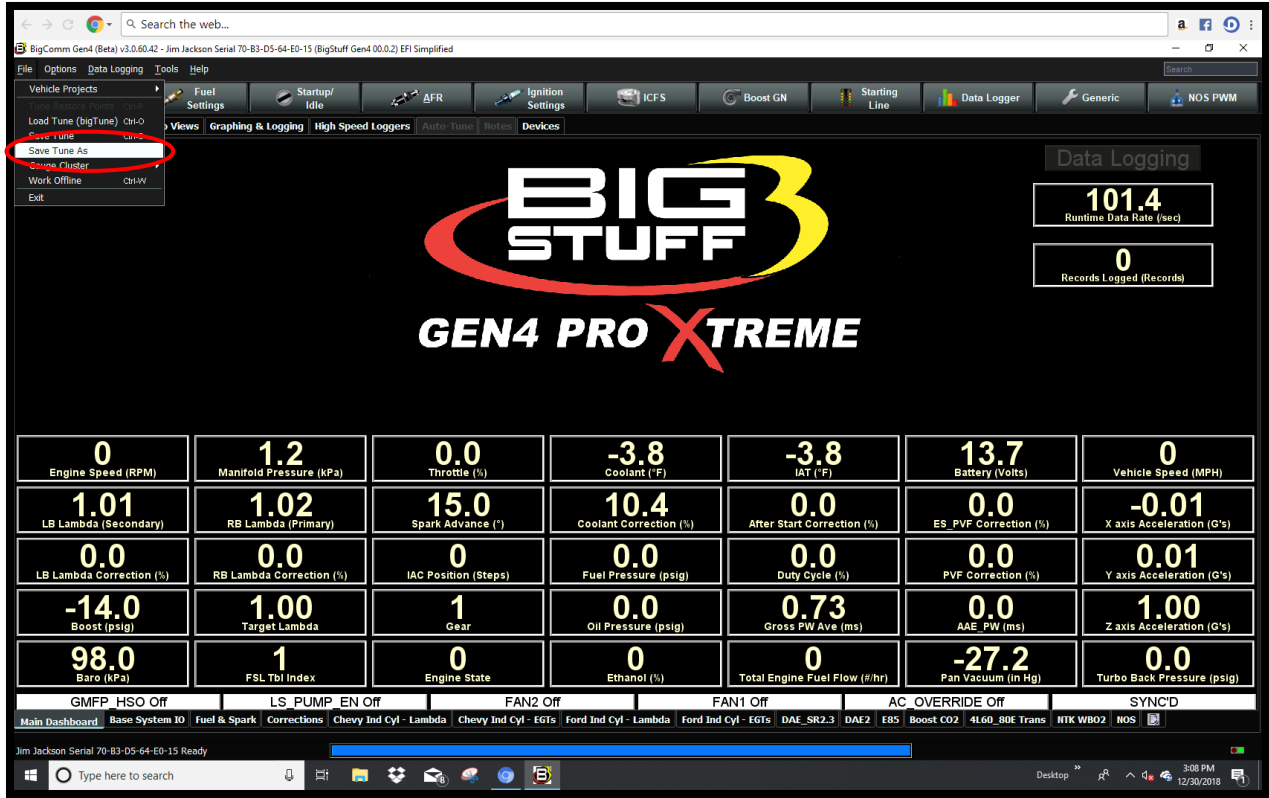
STEP 5.0 - Save the calibration file, also known as “Tune”, included with the GEN4 PRO XTREME ECU into the initial Project

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.



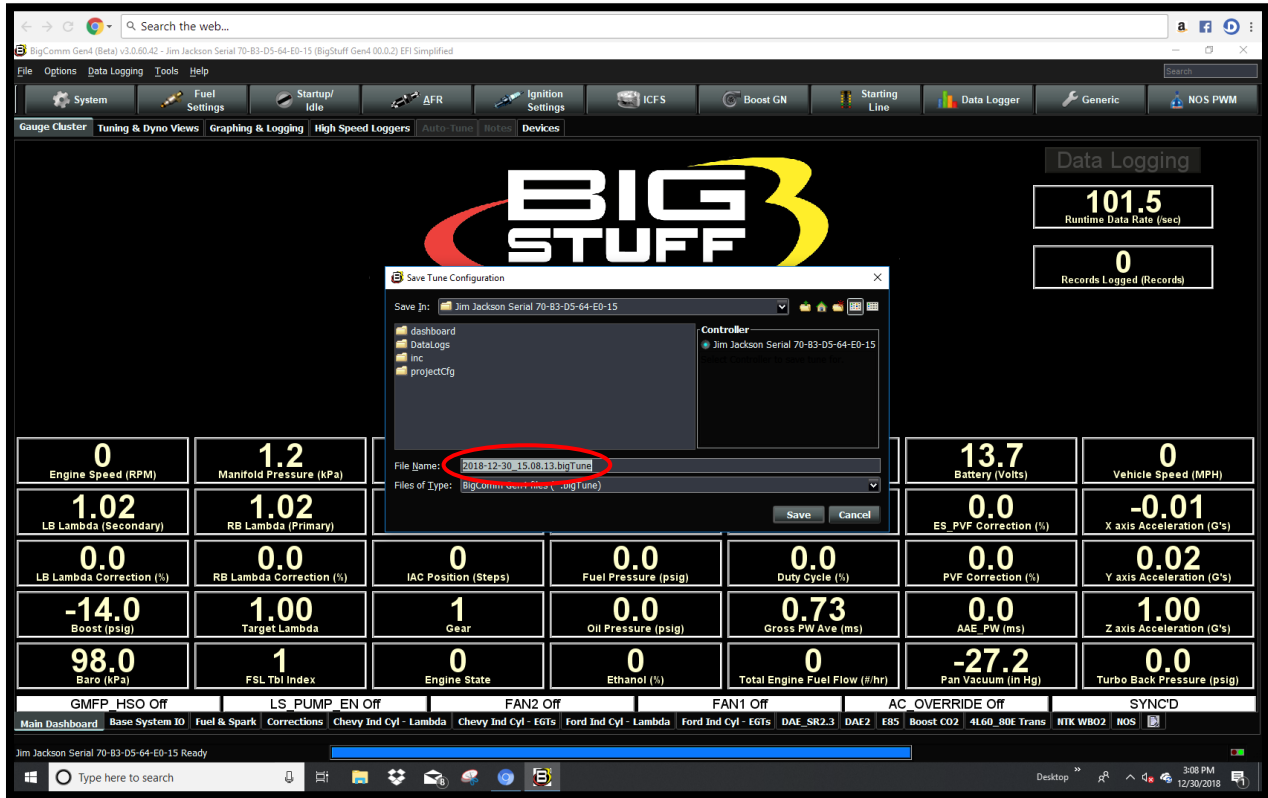
GEN4 PRO XTREME Initial Setup Instructions for "Wireless Ethernet" – MikroTik & GLiNet

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.



GEN4 PRO XTREME Initial Setup Instructions for “Wireless Ethernet” – MikroTik & GLiNet

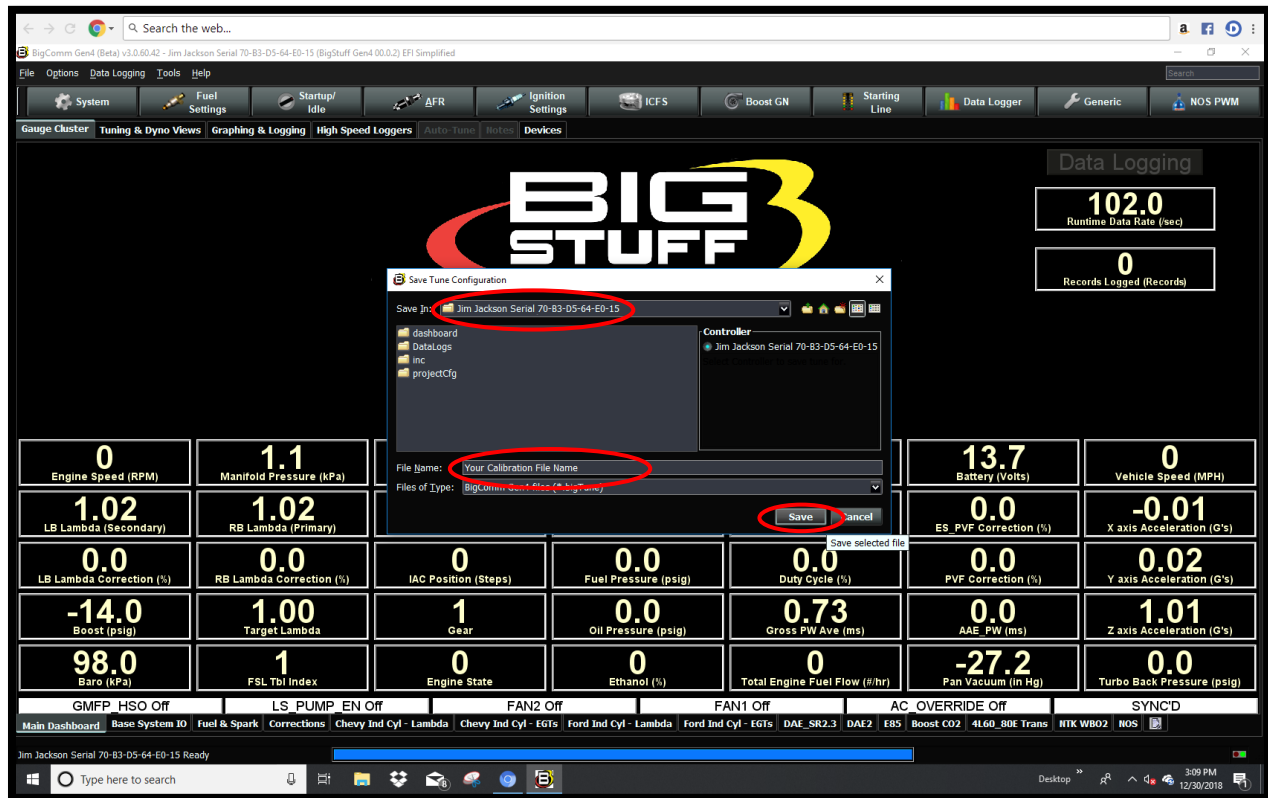
Step 5.3 - Once **Save Tune As** is selected in Step 5.2, a **Save Tune Configuration** dialogue window will open as shown below. Once opened, you will see a **BCP File Name** automatically assigned to the calibration file as shown below. The automatically assigned calibration file name for this example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



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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 wireless 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 Wireless Ethernet seems to take quite a few steps. Fortunately, subsequent connections are straight forward and only require the following steps;

1. Power up wireless router network and make sure the CAT6a shielded Ethernet cable is connected between the wireless router's RJ45 Ethernet LAN port and the GEN4 PRO XTREME ECU's RJ45 Ethernet port.
2. Select the GEN4 Wireless Network from the PC's wireless network selection window.
3. Power up the GEN4 PRO XTREME ECU (+12V Switch Ignition and VBATT (+) & (-)).
4. Once the 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!