

Vehicle Data Recorder Quick Start Connection Guide



Valid For VDR Versions:

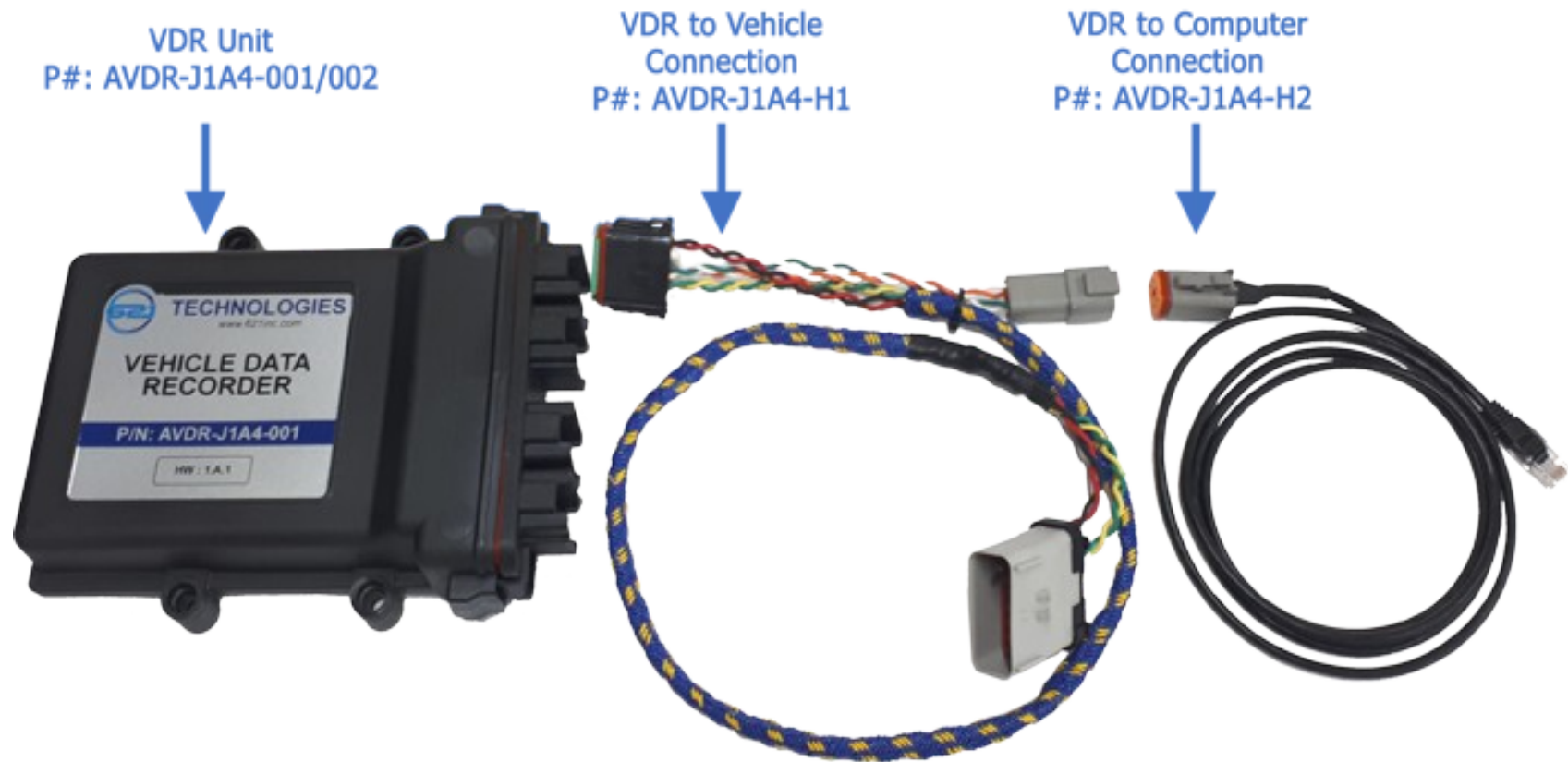
AVDR-J1A4-001-x

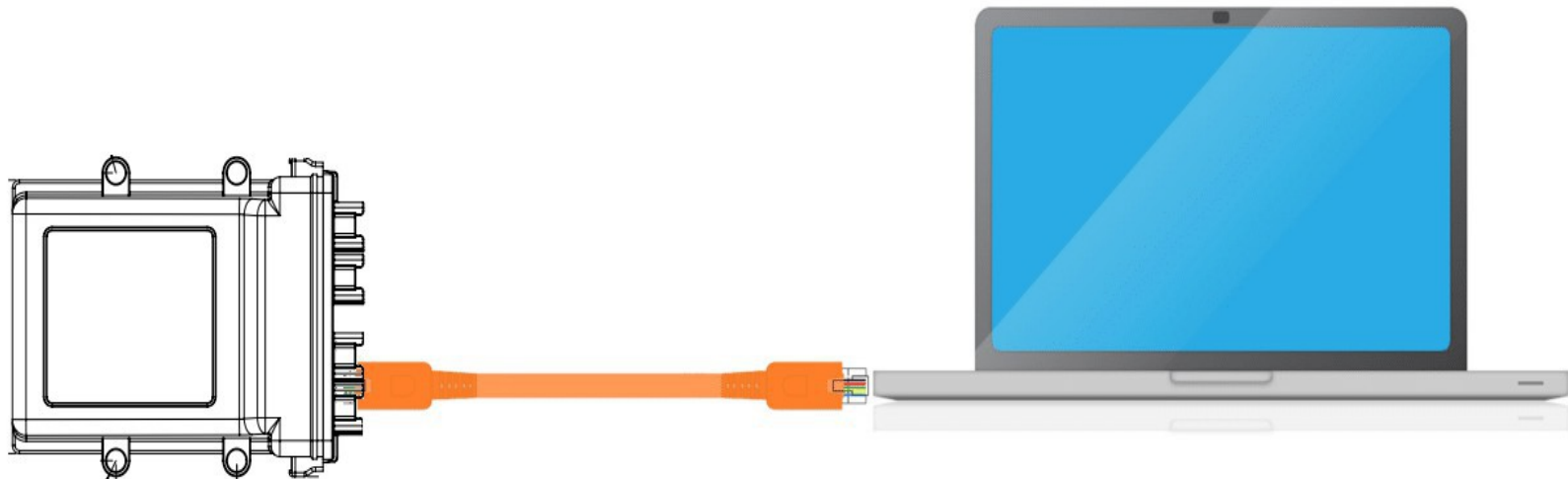
AVDR-J1A4-002-x



VEHICLE DATA RECORDER QUICK START CONECTION GUIDE

Once purchased, the VDR will come in a kit with only the VDR to Vehicle Wire Harness, while the VDR to Computer Wire Harness can be purchased separately for embedded interface access. The VDR to Vehicle Wire Harness allows you to connect the VDR to a variety of different vehicles allowing for an easy way to collect vehicle data such as engine RPM, the speed of the vehicle, and a wide variety of other vehicle data. With the VDR to Computer Wire Harness, you can easily access the data gathered by accessing the embedded interface once the VDR is connected to the computer. Analysis of data is extremely useful in reconstructing accidents, and in determining the main cause to other events.





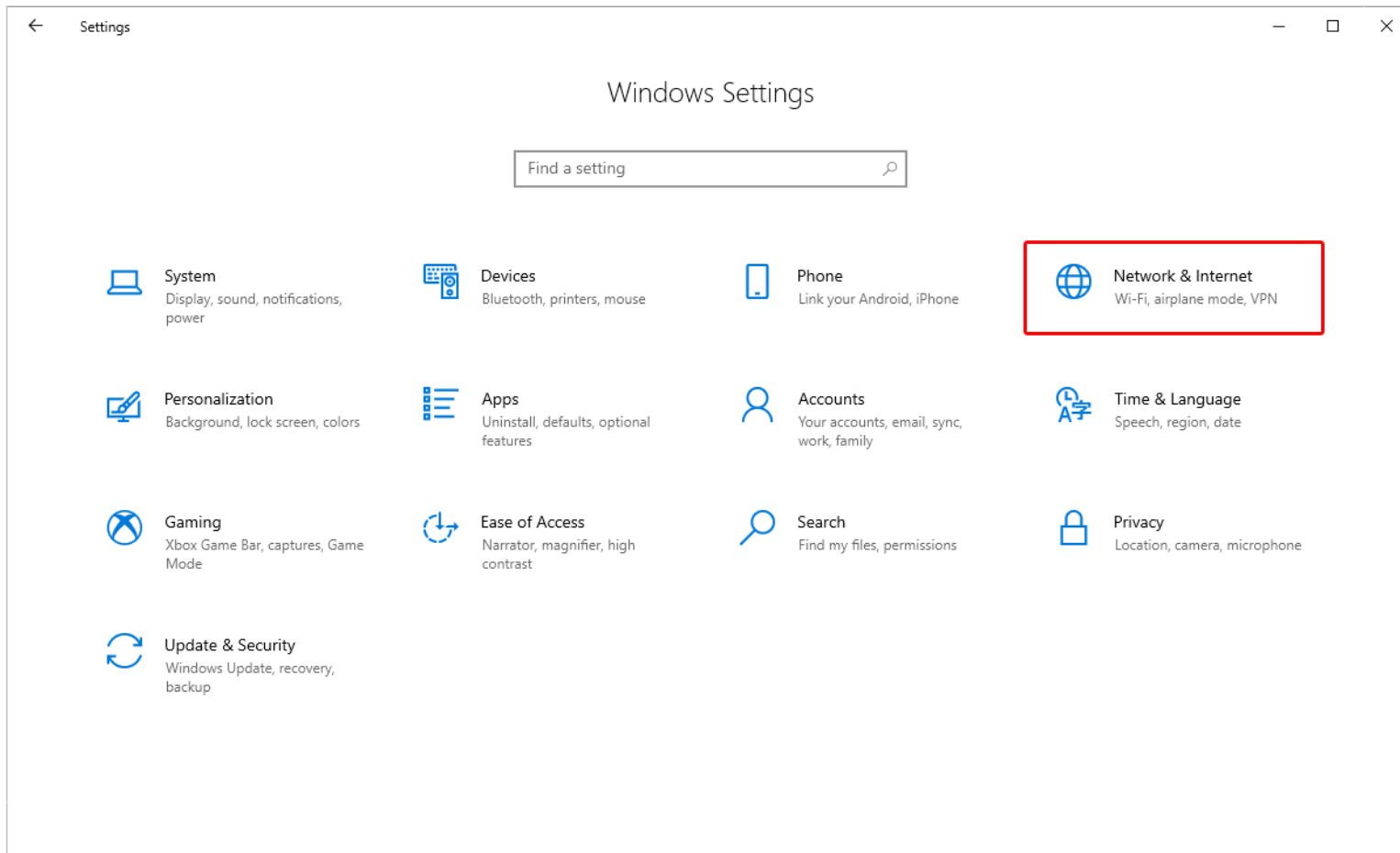
Direct Ethernet Connection



CONFIGURE THE ETHERNET PORT

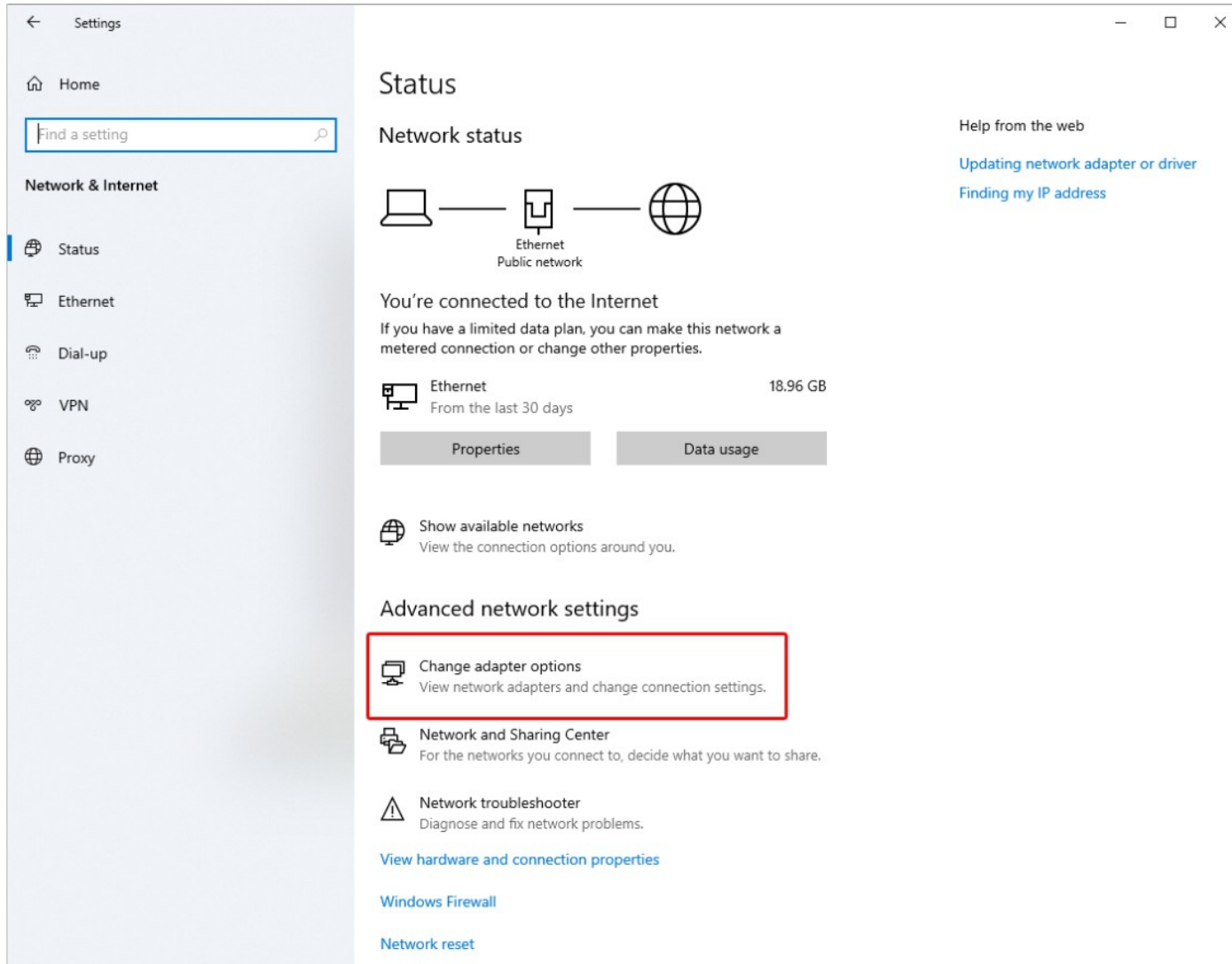
Before connecting the VDR to your computer, you must first configure the Ethernet port so that your computer can access the embedded interface. To access the “Network Connections” window first open Settings and click on “Network and Internet”.

NOTE: The steps listed for the configurations of the Ethernet Port are for Windows 10. For earlier versions of windows, the “Network Connections” window can be found through the Control Panel.



CONFIGURE THE ETHERNET PORT

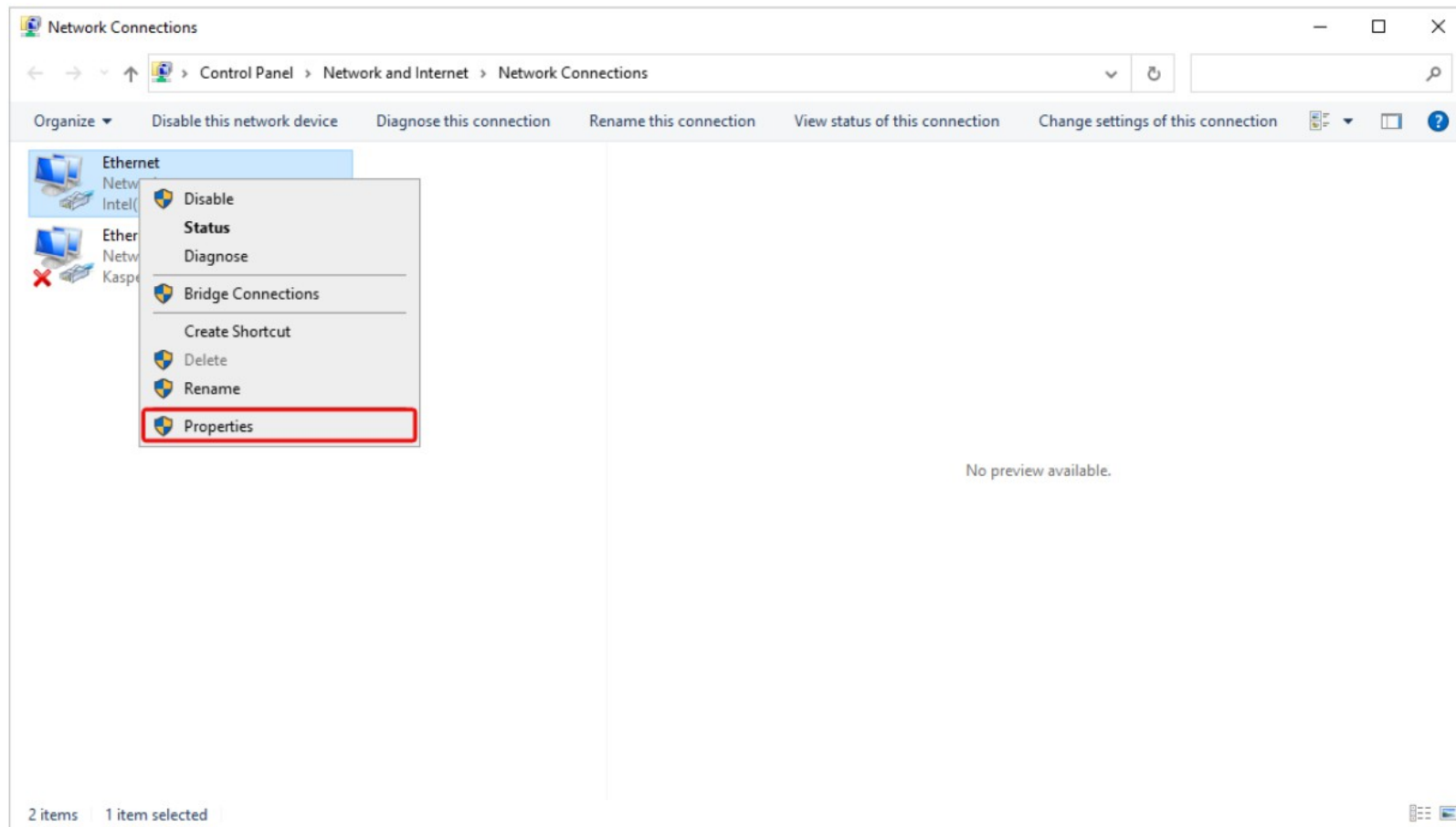
Next, scroll down and click on “Change adapter options” in the “Advanced network settings” section.



CONFIGURE THE ETHERNET PORT

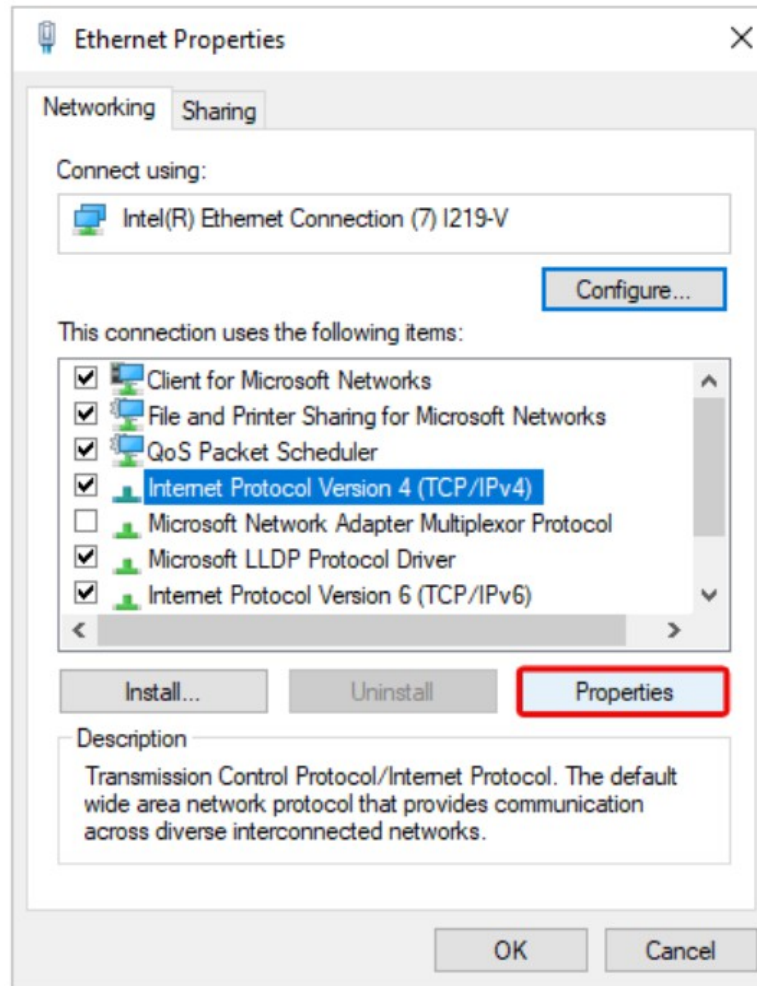
After clicking on “Change adapter options”, a window called “Network Connections” should appear. In this window right click on the active Ethernet port which you plan on using and click on “Properties”.

NOTE: If you do not have administrative permissions, windows won't allow you to access these properties. Make sure that you have administrative permissions, or are logged in as the administrator.



CONFIGURE THE ETHERNET PORT

A window called “Ethernet Properties” should have appeared. Select “Internet Protocol Version 4 (TCP/IPv4)” from the list. If you don't see this option, make sure you scroll down and check the list again. Once selected, click the “Properties” button.



CONFIGURE THE ETHERNET PORT

In the “Internet Protocol Version 4 (TCP/IPv4) Properties” window, select “Use the following IP address” and fill in the **IP address**, **Subnet mask**, and **Default gateway** fields as shown below. Make sure that “Use the following DNS server addresses” is selected and that the Preferred and Alternate DNS server fields are left blank. Once that is done, click “Ok” and click “Close” on the rest of the windows.

Congratulations! You have successfully setup the Ethernet Port for the VDR. Continue onto the next step to connect the VDR to your laptop.

Internet Protocol Version 4 (TCP/IPv4) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

Obtain an IP address automatically

Use the following IP address:

IP address: 192 . 168 . 0 . 1

Subnet mask: 255 . 255 . 255 . 0

Default gateway: 192 . 168 . 0 . 2

Obtain DNS server address automatically

Use the following DNS server addresses:

Preferred DNS server: . . .

Alternate DNS server: . . .

Validate settings upon exit

Advanced...

OK Cancel

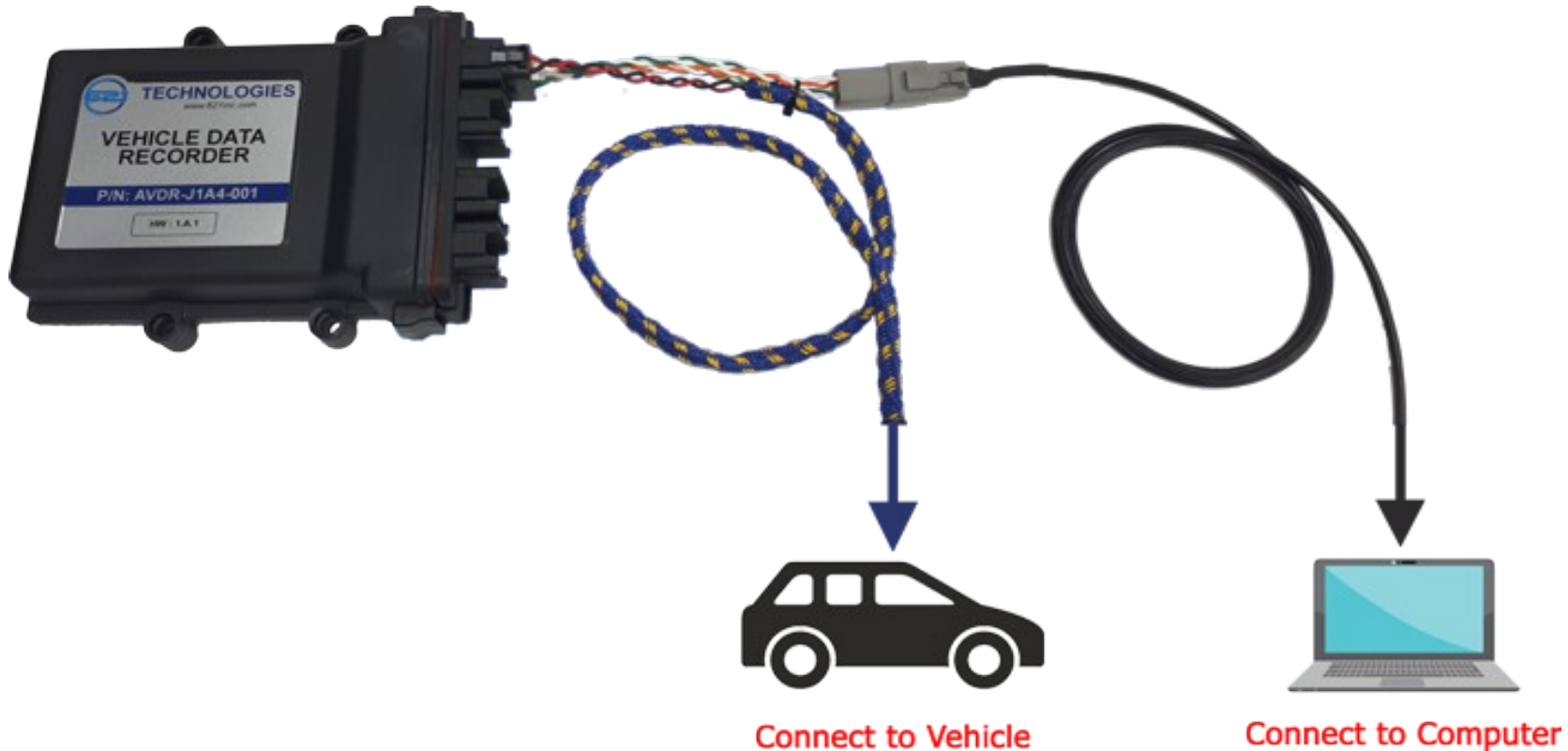
VEHICLE DATA RECORDER QUICK START CONNECTION GUIDE

CONNECTING TO THE VDR

Before getting started, make sure that you have purchased the VDR to Computer Wire Harness.

To successfully connect the VDR to your computer, first connect the VDR to Computer Wire Harness to the VDR to Vehicle Wire Harness as shown below. Next, connect the VDR to Computer Wire Harness to your computer using the Ethernet port. After that, connect the VDR to your vehicle using the VDR to Vehicle Wire Harness. Make sure that the car is either in the ignition state, or is running (engine is on).

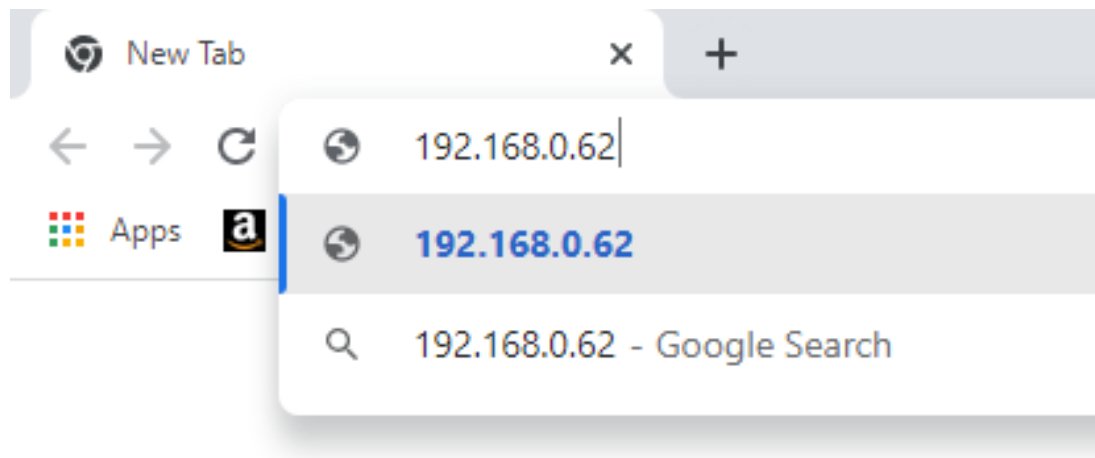
NOTE: The VDR must be connected to the vehicle, and the vehicle must either be in the ignition state or running (engine is on) to make sure that the VDR is provided power.



CONNECTING TO THE VDR

Before you try to connect to the VDR, wait approximately 30-45 sec from the moment that you have connected the VDR to the vehicle with the ignition on. This is the time required for the VDR to activate the embedded interface. After the required amount of time has passed, open a web browser such as Google Chrome or Microsoft Edge and type into the search bar “192.168.0.62”.

NOTE: If the embedded interface does not appear after more than 1 minute, disconnect the VDR from your vehicle, wait 1 min for it to fully turn off. Then connect it back to your vehicle, refresh the page, and wait 30-45 seconds for it to appear.



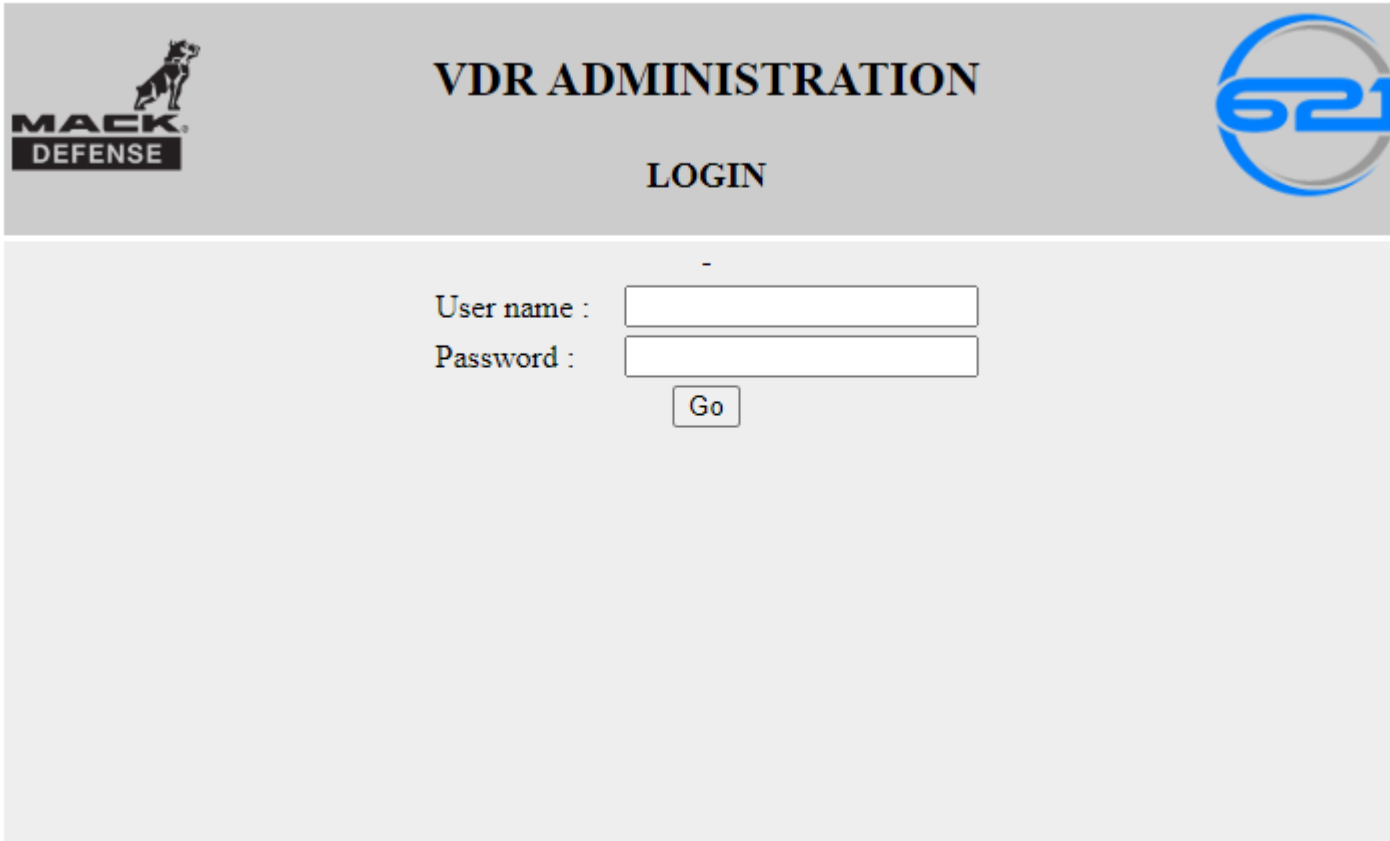
CONNECTING TO THE VDR

Once the page has loaded, you should see a screen like the one below. To login into the VDR the default username and password are “admin”.

Username: admin

Password: admin

NOTE: If the above username and password do not allow you to login, that means that the username and password have been changed.



MACK DEFENSE

VDR ADMINISTRATION

621

LOGIN

User name :

Password :

Go

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CONNECTING TO THE VDR

After logging in, a page similar to the one below should appear. Here you will have access to the data the VDR recorded, a possibility to update the device if needed, and many other options.

MACK DEFENSE

VDR ADMINISTRATION

621

MAIN

<< [Log out](#) RUN

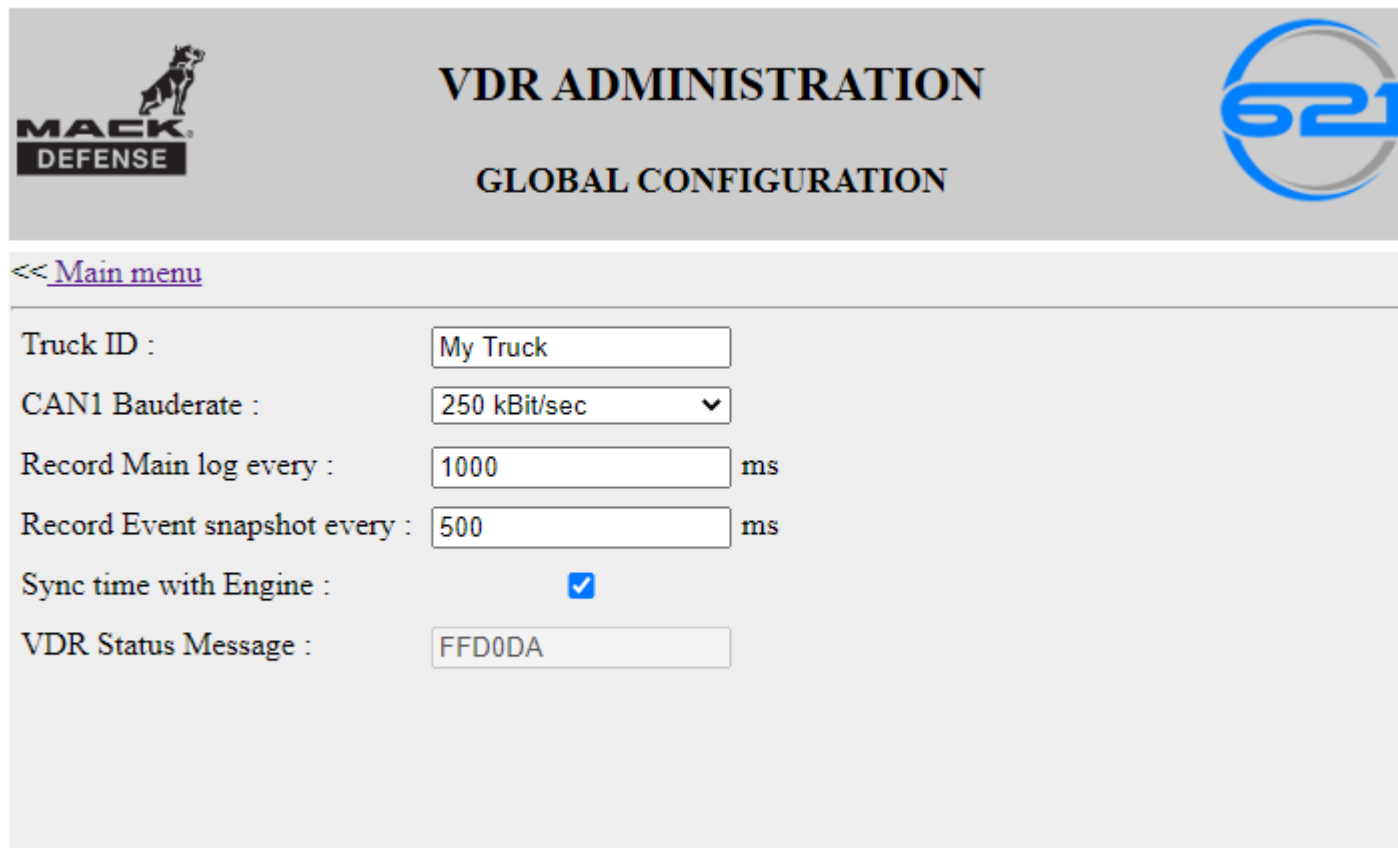
MAIN MENU	VDR INFO
<ul style="list-style-type: none">• Global configuration• Data dashboard• Collected Data viewer• Events log• Manage administration access• Device Update	<p>VDR Software : 1.0.0.005</p> <p>Date & Time : 2022-06-02 10:32:25</p> <p>VDR Health : OK</p> <p>CAN 1 : (250kBt) OK</p> <p>CAN 2 : N/A</p> <p>VDR Temp : (31.48 C) OK</p>

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VDR FEATURES – Global Configuration

These settings allow you to change and customize your VDR's CAN BUS speed, and the rate at which data is collected under both normal (Main log rate) and emergency (Event snapshot rate) circumstances. On top of that, this is where the VDR status message signal is displayed.



The screenshot shows the 'VDR ADMINISTRATION GLOBAL CONFIGURATION' web interface. At the top left is the 'MACK DEFENSE' logo featuring a dog. At the top right is the '621' logo. Below the title bar, there is a link '<< [Main menu](#)'. The configuration fields are as follows:

Truck ID :	<input type="text" value="My Truck"/>
CAN1 Bauderate :	<input type="text" value="250 kBit/sec"/> ▼
Record Main log every :	<input type="text" value="1000"/> ms
Record Event snapshot every :	<input type="text" value="500"/> ms
Sync time with Engine :	<input checked="" type="checkbox"/>
VDR Status Message :	<input type="text" value="FFD0DA"/>

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VDR FEATURES – Data Dashboard

The Data Dashboard displays all the parameters that the VDR collects displaying their values, their CAN BUS addresses, and refresh rate.

<< [Main menu](#) RUN

[Download CSV](#)

PGN	SA	Name	Units	Value	Status	Cycle	Byte	Bit	Bits	Scaling
▼ SA:17 (7 items)										
▼ MSG:FEE617 (6 items)										
MSG:...	SA:17	Month	M	6	RUN	261	3	0	8	1.0000
MSG:...	SA:17	Day	D	2	RUN	261	4	0	8	0.2500
MSG:...	SA:17	Hours	h	10	RUN	261	2	0	8	1.0000
MSG:...	SA:17	Minutes	m	43	RUN	261	1	0	8	1.0000
MSG:...	SA:17	Seconds	s	43	RUN	261	0	0	8	0.2500
MSG:...	SA:17	Year	Y	2022	RUN	261	5	0	8	1.0000
▼ MSG:FEC117 (1 item)										

First Prev 1 Next Last

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VDR FEATURES – Logged Data

Here you can find all the data the VDR has collected. By selecting the starting date and ending date the VDR will display all the data within that time frame. You also have the option to download the collected information in the form of a CSV file.

VDR ADMINISTRATION

LOGGED DATA

<< [Main menu](#)

From to

Date	Mileage (m)	Speed (km/h)	RPM	Accelerator position (%)	Power supply
▼ 2022.06.02 (624 items)					
▼ 2022.06.02 10:00:00 (624 items)					
2022-06-02 10:31:29	12860	101.09	0	255	3
2022-06-02 10:31:30	12870	101.09	1844	255	3
2022-06-02 10:31:31	12870	101.09	1839	255	3
2022-06-02 10:31:32	12870	101.09	1751	255	3
2022-06-02 10:31:33	12870	101.09	1672	255	3
2022-06-02 10:31:34	12870	101.09	1668	255	3
2022-06-02 10:31:35	12870	101.09	1690	255	3
.....

First Prev **1** Next Last

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VDR FEATURES – Events

The Events window gives the user the possibility to browse through the recorded events based on date, time, and event type. Here you can download the collected information in the form of a CSV file.

<< [Main menu](#)

From to

Date	Event	Milage
▼ 2022.06.02 (2 items)		
▼ Emergency Stop data (1 item)		
2022-06-02 10:31:30	Emergency Stop data	12860
▼ Hard Breaking (1 item)		
2022-06-02 10:31:30	Hard Breaking	12860

First Prev 1 Next Last

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VDR FEATURES – Administrative Access

In Administrative Access you have the ability to change the username and password required to login. Recall that the default username and password is “admin”.

MACK DEFENSE

VDR ADMINISTRATION

ADMINISTRATION ACCESS

<< [Main menu](#)

Current User name * :

Current Password * :

New user name * :

New password * :

Repeat password * :

Mandatory requirements:
- not less than 5 symbols;
- case sensitive;

* Required fields

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VDR FEATURES – Device Software Version Control

In this section you can manage the current VDR software. This includes updating the software to the latest release which can be found on the official 621 Inc website (<https://621inc.com>), and reverting back to previous software versions. It should be noted that the VDR saves all uploaded versions of software making it simple and easy to revert to a previous version if needed.



The screenshot shows the VDR Administration interface. At the top left is the Mack Defense logo, and at the top right is the 621 logo. The main heading is "VDR ADMINISTRATION" and "DEVICE SOFTWARE VERSION CONTROL". Below this is a navigation link for the "Main menu". The interface is divided into two main sections. The first section, titled "You can upload a new SW package to the device.", contains a "Select a file to upload" field with a "Choose File" button and the text "No file chosen". Below this is an "Upload File and Update SW" button. The second section, titled "Manage existing SW packages.", shows "Detected ~ 1 ~ available SW versions saved on the device :". A dropdown menu is open, showing the selected package "vdr-sw-2021_06_28_v1_0_006.pkg". Below the dropdown is an "Install selected SW package" button.

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