

Standalone Data Logging

Overview	3
Requirements	3
Setup	3
Starting up Standalone Data Logging	5
Creating triggers (optional)	5
Starting & Scanning	7
Download and View	7
Troubleshooting	8
Standalone Data Logging is not starting (no log file created)	8
Standalone Data Logging is not stopping	8
Data log is created but channel values are blank	8
FAQ	8

Overview

Standalone Data Logging lets you log data directly to your MPVI2's internal storage without being tethered to a laptop. It is now easier than ever to collect data while driving. Easily record your vehicle's data on the go with a press of a button or pre-set start/stop triggers. Then, at your convenience, evaluate and customize start/stop conditions right on your PC or laptop.

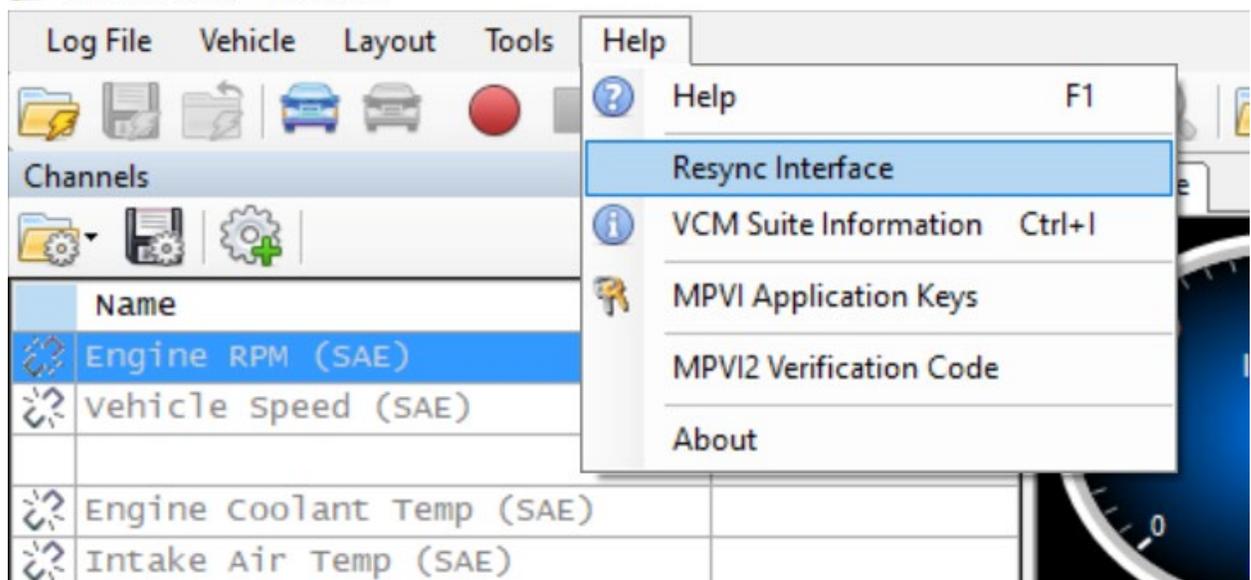
Requirements

- MPVI2 with Pro Feature set.
- VCM Scanner Beta 4.9.238 or higher (download from www.hptuners.com/downloads/).
- Firmware v3.1.2 or higher.

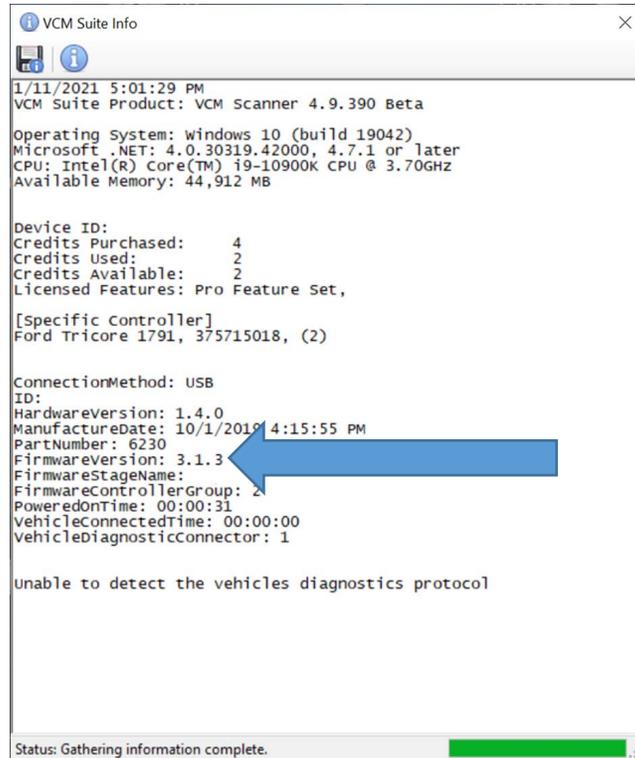
Setup

1. Download and open the latest VCM Scanner Beta.
2. Connect your MPVI2 to your computer with the USB cable.
3. Go to the **Help** tab and click on **Resync Interface**. The firmware will update automatically.

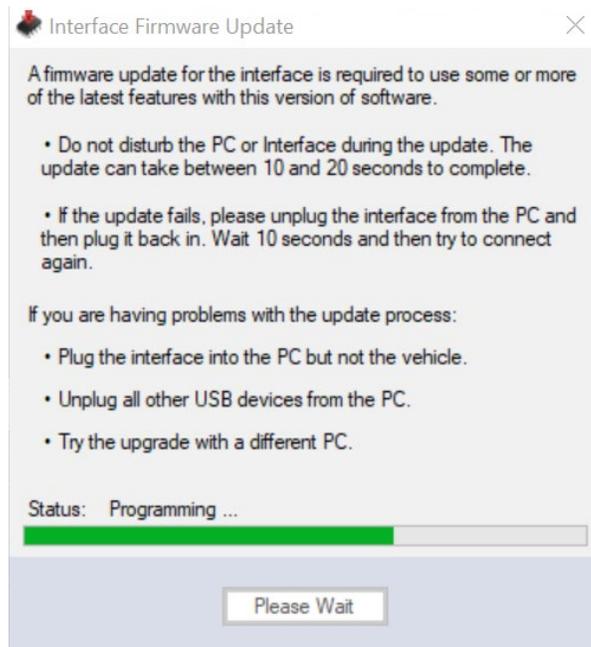
⚡ VCM Scanner - Offline: ,



4. Type CTRL + I to bring up the **VCM Suite Information** window. Alternatively, you can click on the **Help** tab and find the VCM Suite Information option there or click on the icon.
5. Once in the **VCM Suite Information** window, click on the "i" icon to create an Infolog. Search down to list to see where your firmware version is listed. Standalone Data Logging is only available on firmware v3.1.2 or higher.



6. Locate the **Vehicle** tab in VCM Scanner. From the dropdown, select **MPVI2 Data Logging**.
 - a. Click the **Resync Interface Resources** button. It will take 10-15 seconds to update your MPVI2.
 - b. *Optional: Use Write Channels Config* to push your current channel config to the MPVI2. Otherwise, leave it set to **Vehicle Defaults**.



Starting up Standalone Data Logging

Standalone Data Logging will only start when:

- USB and Bluetooth are disconnected (not being used by VCM Suite or TrackAddict, for example). If these were recently in use, please allow a few minutes for the system to reset.
- The MPVI2 is plugged into an OBD port and power is detected.
- One of the **Start Trigger** conditions is satisfied (see the section below).

After the MPVI2 has been connected to VCM Scanner via USB, there's a one to two minute lockout period during which the MPVI2 won't start data logging. Either power cycle the MPVI2 after writing the channel config, or wait for at least two minutes before starting the log. To perform a power cycle, unplug both USB and OBD, then plug the interface into the OBD alone.

Standalone Data Logging will typically take around five to ten seconds to start after detecting the trigger. The first time you log a particular vehicle, please allow an additional five seconds for the system to initiate.

If it takes longer than twenty seconds to start, please submit a ticket and attach a copy of the `Infolog`.

If the data logging fails during startup (for example, if the vehicle's ignition is turned off) the program will abort and await another start trigger.

During startup, the OBD and Host lights will flash and may occasionally pause. This is normal.

Creating triggers (optional)

Triggers are used to start and stop the Standalone Data Logging action. They can be user-initiated (button press) or event-based (time, acceleration, or RPM).

Start Triggers

You can enter a single condition (trigger) or multiple conditions. When using multiple conditions, data logging will begin when ANY of the conditions are met.

1. While still in the MPVI Data Logging Window, select the middle tab: **Start/Stop Triggers**.
2. Under both **Start Triggers** and **Stop Triggers**, the **Short Button Press** box will be checked. This is the default configuration, which requires you to press the BT button on the MPVI2 to begin or stop logging data.
3. Under the **Start Triggers**, you can enter either an instantaneous acceleration OR a sustained acceleration value. Instantaneous acceleration will trigger the logging to start whenever that acceleration value has been reached. When choosing sustained acceleration, you must indicate a duration for which the acceleration exceeds the threshold value (for example, *0.05 G for 1 second*).

Note: If you are using an OBD extension cable, we recommend not using the accelerometer G-force start triggers. The MPVI2 is only secure when it is plugged directly into the vehicle's OBD port. If the MPVI2 is connected via a cable, it might move independently of the vehicle's acceleration. As a result, the accelerometer readings might be inaccurate and could result in a false trigger.

Stop Triggers

1. The default **Stop Trigger** is also set to **Short Button Press**. To stop the data logging, press the BT button again. *Note: If there is no movement and zero RPM for 1 minute, the data logging will stop automatically.*

2. There are two blue boxes underneath the **Stop Triggers** heading.
 - a. The OR trigger group allows you to set numerous conditions. If ANY of these conditions are met, the data logging will stop. *Note: If Sustained Acceleration or RPM values are inputted, a time value must also be included.*
 - b. The AND trigger group allows you to set multiple conditions that must ALL be true in order for the data logging to end.

By selecting the **Street Car** or **Race Car** buttons near the top of the window, some values are pre-populated for you. For **Start Triggers**, the Sustained Acceleration and time values are added. For **Stop Triggers** in the OR group, RPM and time values are added.

MPVI2 Standalone Data Logging Functions

Channel Configs **Start/Stop Triggers** Log Files

Triggers are used to start and stop the standalone datalogging action. They can be user initiated (button press) or event based (time, acceleration, rpm).
Picking event based values that work for you can take some trial and error. You can keep it simple by using the User Initiated (Short Button Press) method. We do have some defaults to help you get started:

User Initiated Street Car Race Car Clear All Triggers

Start Triggers

-OR- Trigger Group

Short Button Press

Instantaneous Acceleration >= (G)

Sustained Acceleration >= (G) (s)

If any one of these conditions are met, the standalone datalogging process will start.
You can use a single condition or multiple conditions together.
A blank field indicates that the specific condition is not used.

Stop Triggers

Stop triggers support both OR condition groups and AND condition groups. You can use one or both groups at the same time. You can use any combination of individual conditions. If using the -OR- category, any condition can be met to stop the logging process. If using the -AND- category, all set conditions must be met to stop the logging process.

<p>-OR- Trigger Group</p> <p><input checked="" type="checkbox"/> Short Button Press</p> <p>Total Time Limit <input type="text"/> (min)</p> <p>Sustained Acceleration < <input type="text"/> (G) <input type="text"/> (s)</p> <p>RPM <= <input type="text"/> (rpm) <input type="text"/> (s)</p>	<p>-AND- Trigger Group</p> <p>Total Time Limit <input type="text"/> (min)</p> <p>Sustained Acceleration < <input type="text"/> 0.05 (G) <input type="text"/> 60 (s)</p> <p>RPM <= <input type="text"/> 0 (rpm) <input type="text"/> 60 (s)</p>
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Set Triggers

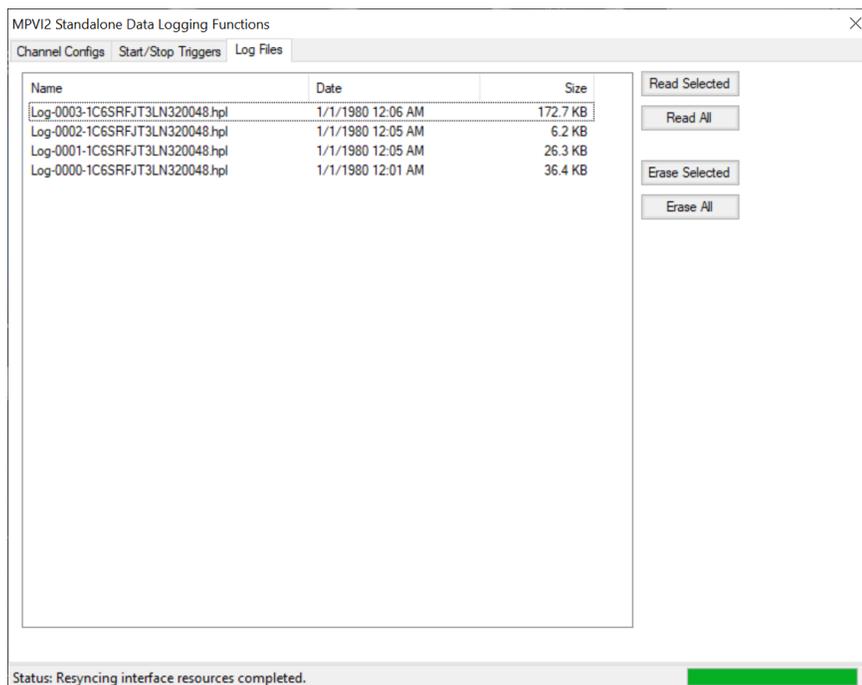
Status: Resyncing interface resources completed.

Starting and Scanning

- Once data logging is fully active, the amber OBD light will flash.
- To perform a **Quick Stop** and discontinue logging data, press the BT button.
- Do not unplug the MPVI2 without properly stopping the data logging. Doing so will result in some loss of data.
- If you connect to VCM Suite or TrackAddict while Standalone Data Logging is running, the data logging software will turn off and stop recording. Data collected up to that point will be saved.

Download and View

1. Open VCM Scanner Beta.
2. Connect your MPVI2 to your computer with the USB cable.
3. In the VCM Scanner software, click on the **Vehicle** tab and select **MPVI2 Data Logging** from the dropdown.
4. Click on the **Log Files** tab.
5. The newest log files will be sorted to the top. The name will contain the sequence number and the VIN.
6. The MPVI2 does not have a persistent clock, so dates will display the year 1980 unless you connected to VCM Suite or TrackAddict during that power cycle.
7. Click on the log file you want, click **Read Selected**.
8. Choose a destination folder in which to save the file.
9. You can now exit this menu and use VCM Scanner's File menu to open the file you just downloaded.



Troubleshooting

Standalone Data Logging is not starting (no log file created):

- 1) Verify that the firmware has been updated to v3.1.2 or higher.
- 2) Click the **Resync Interface Resources** button on the MPVI2 Data Logging screen.
- 3) Under **Start Triggers**, verify that the **Short Button Press** option is checked and enabled. If it is, use the BT button to initiate logging manually.
- 4) Ensure that the vehicle's ignition is on or the engine is running the entire time.
- 5) Remove the channels from the channel configuration and try again. Click the **Erase Channels Config** button in the MPVI2 Data Logging window to reset it to **Vehicle Defaults**.

Standalone Data Logging is not stopping:

- 1) Under **Start Triggers**, verify that the **Short Button Press** option is checked and enabled. If it is, use the BT button to initiate logging manually.
- 2) Remove the channels from the channel configuration and try again. Click the **Erase Channels Config** button in the MPVI2 Data Logging window to reset it to **Vehicle Defaults**.

A data log is created, but channel values are blank, or an error window pops-up when opening the file:

- 1) Ensure that the vehicle's ignition is on or the engine is running the entire time.
- 2) In VCM Scanner, right-click on the channel, navigate to **Polling Interval**, and ensure that it is set to a reasonable frequency.
- 3) Remove the channels from the channel configuration and try again. Click the **Erase Channels Config** button in the MPVI2 Data Logging window to reset it to **Vehicle Defaults**.

FAQ

Q1. Are all controllers currently supported?

A1. Most controllers supported by VCM Scanner are also supported here except for:

- JTEC SCI
- Ford EEC-V

Q2. How can I access support?

A2. If you encounter problems, submit a Kayako ticket via the help system at

<https://support.hptuners.com/index.php?/Tickets/Submit>. Please include:

1. An **Infolog** from VCM Scanner with the MPVI2 connected to the vehicle
2. Provide a detailed explanation of the issue. The more specific you can be, the better we will be able to help you.
3. Provide the HPL log file (if applicable).

Q3. After updating the firmware, the Host LED turns red. What should I do?

A3. Resync your interface by clicking on the Help tab and selecting Resync Interface from the dropdown menu. After a successful resync, the red LED will turn off. Your device should now be ready, and you can continue where you left off.

