POWER VISION 4

Installation Guide for: PV4-15-02

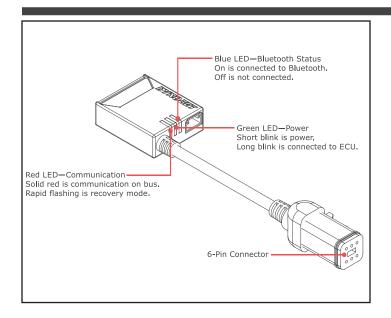
Model Coverage:

2014-2020 Harley-Davidson Touring Models 2011-2020 Harley-Davidson Softail Models 2012-2017 Harley-Davidson Dyna Models 2014-2022 Harley-Davidson Sportster Models 2015-2021 Harley-Davidson Street Models

PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION



INTRODUCTION



Thank you for purchasing the Power Vision 4 (PV4) from Dynojet Research. The Power Vision 4 is the most flexible and powerful flash tuner in the world. The Power Vision 4 uses reflash technology to change the parameters inside the stock Engine Control Module (ECM) that affects the way the engine will run.

The Power Vision 4 has three indicator lights:

- · Red LED-Communication. Solid red is communication on bus; rapid flashing is recovery mode.
- · Green LED-Power. Short blink is power; long blink is connected to ECU.
- Blue LED-Bluetooth status. On is connected to Bluetooth; off is not connected.

After the vehicle has been flashed, the Power Vision 4 does not need to remain connected to have full benefits of the device.

For state of the art technical support, please visit www.dynojet.zendesk.com.

LOCATING THE DIAGNOSTIC CONNECTOR



2012-2017 Dyna Models The diagnostic connector is located under the left hand side electrical cover. This connector is light grey in color with a black rubber plug installed.



2014-2021 Sportster Models **Including XR Models** The diagnostic connector is located under the left hand side electrical cover. This connector is light grey in color with a black rubber plug installed.



2011-2020 Softail Models The diagnostic connector is located under the seat attached to the frame by the rear fender. This connector is light grey in color with a black rubber plug installed.

LOCATING THE DIAGNOSTIC CONNECTOR



2015-2021 Street 500 and 750 Models
The diagnostic connector is located under
the right hand side electrical cover. This
connector is light grey in color with a
black rubber plug installed.



2002-2007 Touring Models
The diagnostic connector is located under
the right hand side electrical cover. This
connector is light grey in color with a black
rubber plug installed. Requires removing
the right saddle bag.



2008-2020 Touring Models
The diagnostic connector is located under
the left hand side electrical cover. This
connector is light grey in color with a black
rubber plug installed. Requires removing
the left saddle bag.



2021-2022 Touring Models
The diagnostic connector is located
behind the left hand side cover. This
connector is red, 6-pin. Requires removing
the left saddle bag.



2002-2017 V-Rod Models
The diagnostic connector is located under
the right front frame cover. This connector
is light grey in color with a black rubber
plug installed. Requires tools to access.



2021-2022 Sportster S
The diagnostic connector is located underneath the seat.
This connector is red, 6-pin.



2021-2022 Pan America
The diagnostic connector is located underneath the main seat.
This connector is red, 6-pin.

GETTING STARTED

- 1 Download and install the Dynojet Power Vision app from the Apple App or Google Play Store.
- 2 Verify Bluetooth and Location are enabled. Location permission is required for the app to access the phone's Bluetooth hardware.



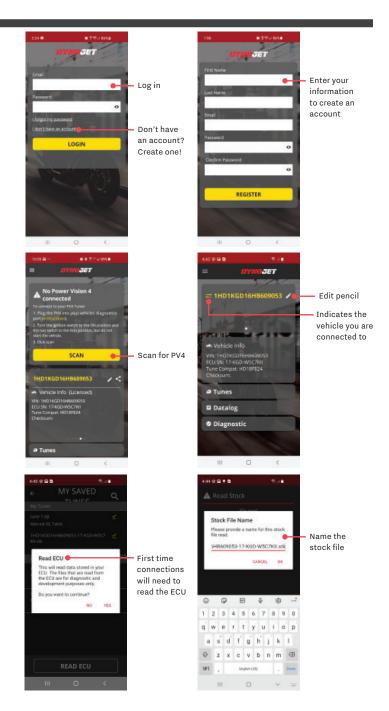
- **3** Connect the Power Vision to the vehicle diagnostic port.
- 4 Turn the ignition switch to the ON position and the run switch to the RUN position, but do not start the vehicle.
- **5** Open the Dynojet Power Vision app.
- 6 Log in using your Dynojet account login information. Don't have a Dynojet account? Press I don't have an account and create one. Enter your information and a password and press Register.
- 7 Press Scan.
- 8 Select the Dynojet PV4.



- 9 Press the Pencil to edit the vehicle name. Press Update to save.
- 10 Press Tunes.

Note: The first time you connect to a vehicle you will need to Read the ECU. Press Yes to continue.

11 Type in a stock file name. The VIN is used by default. This file will be uploaded to your Cloud account.

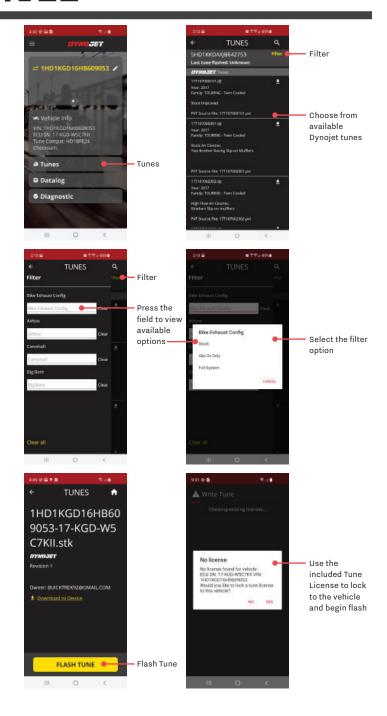


FLASHING YOUR VEHICLE

Your Power Vision 4 comes with one available Tune License. Before you can flash additional vehicles, you will need to purchase additional tune licenses from Dynojet.

- 1 Press Tunes.
- **2** Select a tune file (.djt) from the list of available Dynojet Tunes or press **Filter** to filter the list of tunes.
- **3** Tap a Filter field and select from the available options to narrow the results.
- **4** Once you have selected your filters, slide the filter screen to the left. Select a tune file from the filtered list.
- 5 Press Flash Tune.
- 6 Press **Yes** to use the included Tune License to lock the Power Vision 4 to this vehicle and flash the tune. **Do not turn off the key switch or disconnect the Power Vision during the flash.**

Note: After flashing the ECU, adhere the supplied E.O. label to the frame in a conspicuous location. Next to the stock emissions label is a good location. Make sure to clean the surface before attaching.





EDITING TUNES WITH POWER CORE

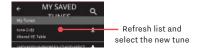
Use Dynojet's Power Core software to edit the ECU tables to improve your riding experience. When you are finished editing, save the tune to the Cloud and use the Dynojet Power Vision 4 App to flash your tune to the vehicle.

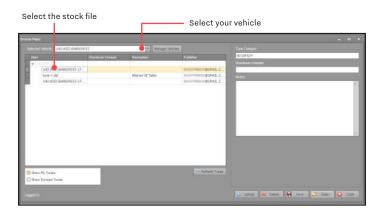
- 1 Open the Dynojet Power Core software.
- 2 Open C3 Tuning.
- **3** From the Home ribbon, click **Browse Cloud**. Log in using your Dynojet account login information.

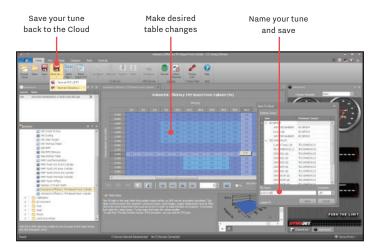
Note: If you do not already have an account, you will need to create an account to use the Browse Cloud feature. Click **Create Account** and follow the on-screen instructions.



- 4 Using the drop-down arrow, select your vehicle.
- **5** Select the stock file to edit and click **Open**.
- 6 Make your desired changes to the table(s).
- 7 Click Save As>Save to Cloud as.
- 8 Enter a name for your tune and click **Save**.
- **9** Enter any important tune notes and click **Save**.
- **10** Return to your phone and refresh the tunes list in the app.
- **11** Select your modified tune and press **Flash Tune**.





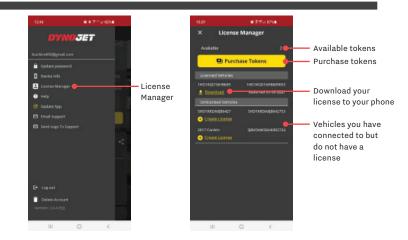


LICENSE MANAGER

View available tokens, redeem and purchase tokens for tune licenses, and download a license to store on your phone for use off line. Your Power Vision 4 comes with one available Tune License. Tune Licenses are transferable.

- 1 Press Menu and press License Manager.
- 2 View your available tokens or press **Purchase Tokens** to purchase tokens to use for a tune license.
- **3** Press **Download** to download and store your tune license on your phone.
- **4** Press **Create License** to purchase a license for a vehicle. You will need an available token to create a license.
- **5** Press **Yes** to redeem your token for a tune license.





POWER VISION 4

VIEWING LIVE GAUGES

Your Power Vision 4 allows you to configure digital and circular gauges for real time monitoring. The Power Vision must be connected to the vehicle to view live gauges.

- 1 Connect the Power Vision to the vehicle diagnostic port.
- 2 Start the vehicle.
- 3 Press Live Gauge.
- 4 Press + to add a gauge.
- **5** Add a digital gauge.
 - Press the **Channel** field to view a list of the available options for that field.

× Add gauge

Ambient Air Temperature

× Add gauge

4

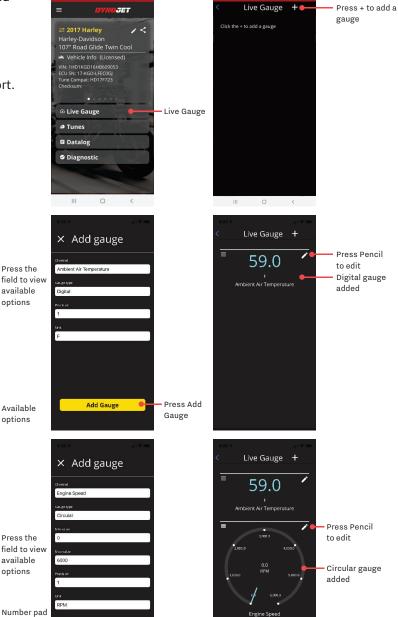
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- Press the **Gauge Type** field and select digital.
- Press the **Precision** field and select the precision.
- Press the **Unit** field and select a unit.
- 6 Once you have completed your selections, press Add Gauge.
- **7** Press the **Pencil** to edit or remove the gauge.
- 8 Add a circular gauge.
 - Press the **Channel** field to view a list of the available options for that field.
 - Press the **Gauge Type** field and select circular.
 - Press the Min Value and Max Value and use the number pad to enter your values.
 - Press the **Precision** field and select the precision.
 - Press the **Unit** field and select
- 9 Once you have completed your selections, press **Add Gauge**.
- **10** Press the **Pencil** to edit or remove the gauge.



Press Add

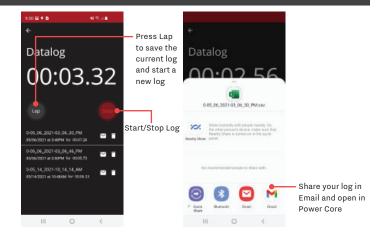
Gauge



LOGGING DATA

The Power Vision 4 allows you to log data and view the log using Power Core Software.

- 1 Press Datalog.
- 2 Press **Start** to begin logging data.
- 3 Press Lap to save the current log and start a new log.
- 4 Press Stop to stop logging.
- 5 Press the Envelope to share your log.
 Email the log to your computer and open the log using Power Core. Refer to the Power Core Help.



VIEWING THE DIAGNOSTIC CODES

Diagnostics allows you to read and clear diagnostic trouble codes (DTCs).

- 1 Press Diagnostic.
- 2 Press Read DTCs to read codes.
- 3 Press Clear DTCs to clear the codes.
- 4 Press the **Envelope** to share your log.

 If requested by Dynojet Technical Support, Email the file to pv4hdtech@dynojet.com.

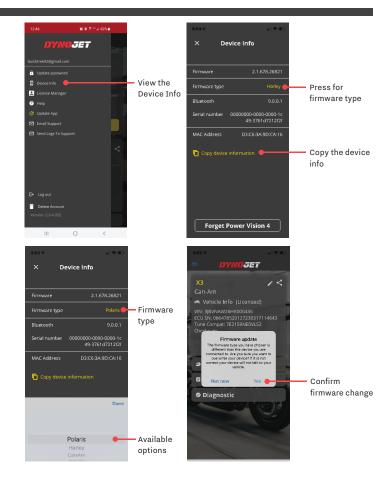


VIEWING THE DEVICE INFORMATION

Device Information allows you to view the Power Vision 4 firmware version, serial number and address, and copy the device information if needed, while Firmware type allows you to toggle between brands of firmware.

Note: Changing the firmware type will require you to use the correct diagnostic cable.

- 1 Press Tunes and press Device Info.
- **2** Press **Copy device information** to save a copy of the device information to your clipboard.
- **3** Press the **Firmware type** brand name to view a list of the available options.
- 4 Scroll through the brands and select a brand.
- **5** Press the **x** to close and initiate the firmware update.
- 6 Press Yes to confirm the firmware update.

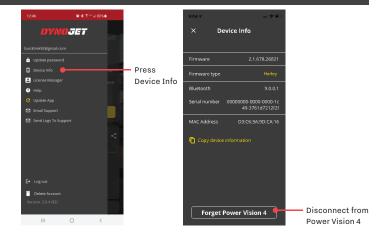




DISCONNECTING FROM THE POWER VISION 4

Manually disconnect from your Power Vision 4 and connect to another device.

Press **Menu** and press **Device Info** and **press Forget Power Vision 4**.



UPDATING THE APP

Check for updates and update the Dynojet Power Vision app.

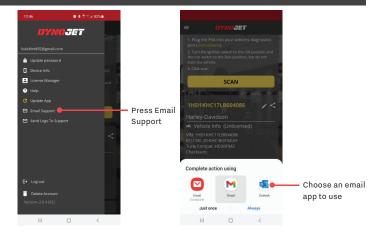
- 1 Press Menu and press Update App.
- 2 Follow the prompts to continue the update process.



REQUESTING EMAIL SUPPORT

Have questions or need additional support? Email Dynojet's state of the art technical support team.

- 1 Press Menu and press Email Support.
- 2 Select which email app to use.



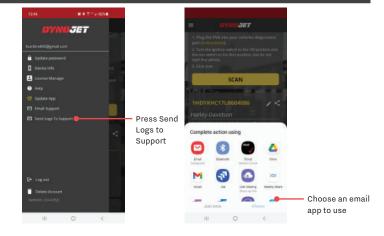
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INSTALLATION AND USER GUIDE

SENDING LOGS TO SUPPORT

Send your log files to technical support for diagnostic purposes.

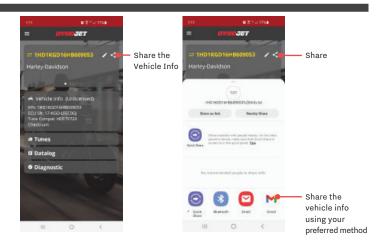
- 1 Press Menu and press Send Logs to Support.
- 2 Select the email app to use.



SHARING THE VEHICLE INFORMATION

Share the Power Vision 4 vehicle information for diagnostic purposes.

Press Share and using the share dialog, send your vehicle information for diagnostic purposes.



INSTALLING THE POWER CORE SOFTWARE

Download the Power Core software and take tuning to a whole new level.

Note: Downloading the Power Core software is optional and not necessary to use the Power Vision.

- 1 Go to www.dynojet.com/PowerVision.
- 2 From the top navigation menu, select Support>Downloads.
- 3 Click Power Core Software Download.
- **4** Double-click the saved file to begin installation. Follow the on-screen prompts. Refer to the Power Core Help for more information.





TROUBLESHOOTING

A few of the more common troubleshooting topics are listed below. For more topics visit the <u>Dynojet Knowledge Base</u>. For additional help, please contact <u>Dynojet Technical Support</u>.

UNABLE TO CONNECT TO BLUETOOTH

- 1 Verify you are within range.
- 2 Turn Bluetooth off and then on again.
- 3 Restart your phone. Restart the Power Vision 4.
- 4 Have your phone "forget" the Power Vision 4.
- 5 Clear the Bluetooth cache.

PHONE WILL NOT CONNECT TO POWER VISION 4

Location permission is required for the app to access the phone's Bluetooth hardware.

- 1 Locate the Dynojet Power Vision 4 app on your phone.
- 2 Long-press the app until the context menu appears.
- 3 Press App Info or the 1 icon.
- 4 Press Permissions.
- **5** Verify Location and Storage are both allowed.

ERROR FLASHING

- 1 Verify the Power Vision 4 app is up to date through either the Apple App Store or Google Play Store.
- 2 Connect the Power Vision 4 to your bike.
- **3** Verify the firmware is up to date.
- 4 Install the firmware update(s) if available.
- 5 Contact Dynojet Technical Support if the error persists.

HOW TO RECOVER THE ECU

You may need to recover the ECU if the flash was interrupted leaving the ECU in an incomplete flash state.

- 1 The Power Vision 4 will ask you to recover the ECU. Press **OK**. This will automatically flash the stock (.stk) file.
- 2 If the Power Vision 4 does not automatically flash the stock (.stk) file, you will need to manually choose a stock (.stk) file from your tunes. Ideally, this would be the stock (.stk) file you saved from your initial read.
- **3** Once the ECU is recovered, you will need to re-flash your tune.

HOW TO UPDATE THE FIRMWARE

- 1 Every time you connect to the Power Vision 4, the device automatically checks for new firmware. If newer firmware is found, the Power Vision 4 will ask you to update the device.
- 2 Press Yes to update the device.
- **3** You must update the device to continue. If you choose not to update the device, the app will close.

HOW TO MANAGE EXISTING TUNE LICENSES

Manage your existing Tune Licenses on the Dynojet website.

- 1 Log in to your <u>Dynojet.com</u> account using the same account you used to log in to the Power Vision 4 app.
- 2 Click My Account in the top, right corner of the browser.
- 3 Click Tune Licenses.

NO TUNE LICENSE AVAILABLE

Your new Power Vision 4 comes with one available tune license. Before you can flash additional vehicles, you will need to purchase additional tune licenses.

- 1 Log in to your Dynojet.com account.
- 2 Click My Account>Tune Licenses. View your purchased licenses. This will also show you which VIN the license file is associated with.
- **3** Purchase additional tune licenses to use with additional vehicles.

HOW TO PURCHASE A TUNE LICENSE

Through a Tune License, you can unlock the true potential of your Dynojet Power Vision 4. Your Power Vision 4 will be able to tune the original vehicle, as well as additional vehicles. Your Power Vision 4 device will remember each license that is applied, essentially multiplying the power of your device.

Each license is vehicle specific, not device specific, allowing you to load a Tune License onto any number of Power Vision units you have.

- 1 Visit https://www.dynojet.com/tuning-licenses/.
- **2** Log in to your Dynojet account.
- **3** Select the Tune License for the vehicle you wish to purchase and add to your cart.
- 4 Check out following the prompts.

UNABLE TO LOG INTO MY DYNOJET ACCOUNT

- **1** Verify there is not a typo in your email or password.
- 2 Verify you have entered your full email address. For example, "username@dynojet.com" instead of "username@dynojet."
- **3** Passwords are case sensitive. Verify caps lock is turned off.
- **4** Refresh your browser and try signing in again.
- 5 Did you forget your password? Click Forgot my password and follow the prompts.
- 6 Still having trouble, contact **Dynojet Technical Support**.

TRUTH IN PERFORMANCE