## **POWER VISION**

Installation Guide for: Polaris

Model Coverage: 2015-2023 Polaris RZR 900/S/4 2014-2023 Polaris RZR XP 1000/4 2013-2019 Polaris Ranger XP900 2016-2023 Polaris General 1000/4 2016-2021 Polaris RZR XP Turbo 2020-2023 Polaris Pro XP 2022-2023 Polaris Turbo R 2017-2023 Polaris Ranger XP1000 2016-2023 Polaris RZR S 1000 2017-2023 Polaris Sportsman 450/570/850/1000 2017-2023 Polaris Scrambler 850/1000 2017-2021 Polaris Ace 150/Ace 500/Ace 570/Ace 900 XC 2017-2023 Polaris RZR 200/RZR 570 2017-2023 Polaris Ranger 150/Ranger 500/Ranger 570 2018-2022 Polaris RZR RS1 2020-2023 Polaris Ranger 1000

### PARTS LIST

- 1 POWER VISION
- 1 REFLASH HARNESS
- 1 USB CABLE

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- 2 VELCRO
- 2 DYNOJET DECAL

#### PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION

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#### INTRODUCTION



Thank you for purchasing the Power Vision from Dynojet Research. At Dynojet, our mission is to make every ride the ultimate ride. The Power Vision allows you to tune your stock ECU to achieve optimal performance from your vehicle.

The Power Vision is the device to interface between your computer and the vehicle ECU. Use the buttons to navigate the device menus, make selections, cycle through the four full-color available gauge screens, and log data. Connect to the diagnostic port to flash a tune; use the USB connection to interface between the Power Vision and your computer.

Make your Power Vision device yours; display the channels you want to see with four user-customizable full-color gauge screens. Make the Power Vision your window into your vehicle; secure the Power Vision to your dashboard or handlebars to monitor any desired set of gauges such as Throttle Position, Engine Speed, and more. Wideband Air:Fuel Ratio and integrated belt temperature can be added as channels to the PV3's monitors by adding the accessories available at www.dynojet.com.

For state of the art technical support, please visit <u>www.dynojet.zendesk.com</u>.

#### INSTALLING THE POWER VISION



**INSTALL POWER VISION** 



1 Secure the Power Vision to the vehicle using the supplied Velcro. Make sure the Power Vision will not interfere with the operation and steering of the vehicle.

Visit <u>www.dynojet.com</u> for an array of mounting solutions for your Power Vision.

Note: The Power Vision does not need to be mounted to the vehicle, however, the Power Vision provides a window into your vehicle. Mount the Power Vision to your dashboard and gain access to customizable full-color gauge screens, along with data logging and troubleshooting screens.

 2 Attach the diagnostic cable to the diagnostic port on the Power Vision and to the diagnostic port on the vehicle.
 Ranger Models: located under the seat.
 RZR Models: located under the front cover near the coolant reserve bottle.

RZR PRO XP Models: located under the steering wheel. General Models: located under the front hood cover.

### GETTING STARTED

Use the Tune File Wizard to prepare your Power Vision device with the stock (stk) and tune (djt) files needed to flash your vehicle.

- **1** Connect the Power Vision to the vehicle.
- **2** Turn the key on. The Power Vision will scan for files. There are three possible file states:

File State 1: No compatible tune or stock files.

- File State 2: No compatible tune files.
- File State 3: All required files found.

**3** Gauges are displayed.

Connect the Power Vision to the vehicle diagnostic port to collect ECU information. Turn the key on.

CONNECT ECU	
Please connect to the vehicle diagnostic port to continue.	
PRESS 🍤 TO RETURN	

#### File State 1: Press the Enter button for ECU read to begin the tuning process. This process takes about fifteen minutes.

#### GETTING STARTED NO COMPATIBLE STOCK FILES An ECU read is required to begin the tuning process. PRESS TO TO READ ECU PRESS TO TO EXIT WYARD

READ ECU AN ECU READ CAN TAKE UP TO 15 MINUTES TO COMPLETE PRESS TO TO CONTINUE PRESS TO TO CONTINUE

#### File State 2:

Go to <u>tunes.dynojet.com/</u> to download tune files.

#### File State 3:

All required files found. The Power Vision is ready to flash a tune to the connected vehicle. GETTING STARTED

NO COMPATIBLE TUNE FILES To download tunes, visit: TUNES.DYNOJET.COM/ PRESS CD TO SEARCH AGAIN

#### **READY TO FLASH**

ALL REQUIRED FILES FOUND

PRESS 🖨 TO READ ECU Press 🍤 to exit wizard

#### FLASHING YOUR VEHICLE

The Power Vision must be paired to the connected vehicle ECU to function properly.

**Note:** Once paired to the vehicle ECU, the Power Vision will not work on another vehicle without purchasing a tune license.

**1** From the Main Menu, select **Flash Tune**.

- 2 Select the tune file (.djt) and press **Enter** to view the Tune Info. **Note:** The Dynojet tune file (.djt) is a tune file which is different (better than stock performance or the necessary file when bolting on an exhaust, for example); the stock file (.stk) is the direct duplicate of what the OEM shipped.
- **3** Press **Enter** to accept the tune and pair the Power Vision to the vehicle.

Note: Pair to vehicle will only happen on the first flash.

- **4** Press **Enter** to pair and lock the Power Vision to the ECU and to begin the flash. Do not turn off the key switch or disconnect the Power Vision during the flash.
- **5** After the flash is complete, turn the key off and wait 45 seconds before turning the key back on to start.





### VIEWING THE VEHICLE INFORMATION

This menu allows you to view the device status (paired/not paired), VIN #, Model ID, ECU serial number, tune compat, and checksum compat.

Select Vehicle Tools>Vehicle Information.

#### **VIEWING THE DIAGNOSTIC CODES**

This menu allows you to read and clear diagnostic trouble codes.

- 1 To read codes, select Vehicle Tools>Diagnostics>Active Codes.
- 2 To clear codes, select Vehicle Tools>Diagnostics>Clear Codes.

### READING THE ECU

This menu allows you to read the ECU. This process takes about fifteen minutes.

Select Vehicle Tools>Read ECU.

#### RESTORING THE ECU

This menu allows you to restore the ECU. Use Restore ECU if the device does not complete the flash or if your vehicle will not start.

Select Vehicle Tools>Restore ECU.

#### **CONFIGURING GAUGES**

Make your Power Vision device yours; display the channels you want to see with four user-customizable full-color gauge screens. Each gauge screen has one, two, or four configurable channels. Monitor channels such as Wideband, AFR, Boost, and integrated belt temperature sensor. Sample gauges shown here; for a complete list of monitors available, open the tune file in Power Core or scroll through the gauges on the device when configuring or selecting channels for the list of options.

**1** From the Main Menu, select **Device Tools>Configure Gauges**.

- **2** Select a gauge screen and press **Enter**.
- **3** Select a channel and press **Enter**.
- **4** Select a channel from the list and press **Enter**.
- **5** Select the precision or units for that channel and press **Enter**.
- 6 Continue setting up the remaining channels as desired.
- 7 Continue configuring the remaining gauge screens as desired.
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**VEHICLE TOOLS** 

**VEHICLE INFORMATION** 

DIAGNOSTICS

READ ECU

MAIN MENU

FLASH TUNE

**VEHICLE TOOLS** 

DEVICE TOOLS

VEHICLE INFO

PAIRED VEHICLE: DEVICE NOT PAIRED

VIN: 56KCCVAA4E3314940

MODEL ID: FOOHMOO186 TUNE COMPAT: VMB8FOA6BO

CSUM COMPAT: 9586AFB4







### LOGGING DATA

The Power Vision is a powerful logging tool to diagnose running issues. Use the Power Vision to log all vehicle operating data and review the data in the Power Core software. Troubleshoot an issue such as knock, speed/RPM limitation, throttle blade closure and more by keeping the Power Vision mounted to view and record channels.

- 1 Press the **Log** button to begin logging. The Power Vision screen will illuminate a bright red banner across the top when logging.
- 2 Press the Log button again to stop logging.
- **3** Use the Power Core software to view log files.

**Snapshot Log:** Press and hold the **Log** button for two

seconds to record the previous two minutes of operating time.

#### **DELETING DATA LOGS**

This menu allows you to delete data logs.

- 1 Select Vehicle Tools>Delete Data Log.
- 2 Select a specific log to delete or select \*Delete All Logs\*.

#### **VIEWING THE DEVICE INFORMATION**

This menu allows you to view the device firmware version, serial number, and stock code.

Select Device Tools>Device Information.

# MAIN MENU DEVICE TOOLS FLASH TUNE CONFIGURE GAUGES VEHICLE TOOLS DEVICE INFORMATION DEVICE TOOLS REFORMAT DISK

**VEHICLE TOOLS** 

DIAGNOSTICS

**DELETE DATA LOG** 

READ ECU

LOG FILES

\*Delete All Logs\*

19004101 LOG 1.wp8

19004101\_LOG\_2.wp8

19004101 LOG 3.wp8

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#### **REFORMATTING THE DISK**

This menu allows you to reformat the disk and erase all data. Select **Device Tools>Reformat Disk**.



### CHANGING THE SETTINGS

This menu allows you to rotate the screen allowing you to change the orientation of the Power Vision device along with adjusting the screen brightness. Turn the brightness up and make your screen pop!

Select **Device Tools>Settings>Rotate Screen** to flip the screen.

Select **Device Tools>Settings>Brightness** to change the screen brightness.









MAIN MENU

FLASH TUNE

**VEHICLE TOOLS** 

DEVICE TOOLS

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### UPDATING THE DEVICE

- This menu allows you to update the device with the latest firmware. 1 Go to www.dynojet.com.
- 2 From the top navigation menu, select **Support**>**Downloads**.
- 3 Click Power Vision 3.
- 4 Click the **Firmware** drop-down and download the Power Vision 3 Firmware for Polaris.
- **5** Save the file to your device.
- 6 Select Device Tools>Update Device.

#### DIAGNOSTIC ENABLE

This menu allows you to create a file containing device diagnostic information used by Dynojet Tech Support.

- **1** From the Main Menu, select **Device Tools>Diagnostic Enable**. This will turn on diagnostic logging. Logging will continue until the device is restarted.
- 2 If requested by Dynojet Tech Support, connect your Power Vision to a computer and email the diagnostic file to PV3tech@dynojet.com. Diagnostic log files are placed in the log files directory.

#### **USB MODE**

This menu allows you to connect your Power Vision to your computer and enables sending and receiving files.

**1** Connect the Power Vision to your computer using the included USB cable. The Power Vision will automatically enter USB Mode. OR

From the Main Menu, select USB Mode.

2 Transfer the desired files to your computer or to the Power Vision.

MAIN MENU	DEVICE TOOLS	UPDATE DEVICE
FLASH TUNE	REFORMAT DISK	PV3_2.15.8293.23438.dfu
VEHICLE TOOLS	SETTINGS	
DEVICE TOOLS	UPDATE DEVICE	



MAIN MENU	USB MODE	
DEVICE TOOLS	USB FILE TRANSFER ENABLED	
HELP		
USB MODE	PRESS 🖘 TO EXIT	
	PRESS 10 EXII	

### USING THE POWER VISION UPDATE CLIENT

This stand alone application will launch the Update Client allowing you to update your Power Vision with the latest firmware, retrieve additional tunes, or restore the Power Vision to the original Dynojet factory settings.

- 1 Connect the Power Vision to your computer using the included USB cable.
- **2** Navigate to the POWERVISION drive attached to your computer and run the **Update.exe** file.
- **3** Click **Update** to load the current firmware. If the Update button is grayed out, your Power Vision already has the latest firmware.
- 4 Click **Restore** to reload all original Dynojet tune and stock files.
- **5** Click **Get Tunes** to open the Dynojet Tune Finder. Follow the instructions to Upload your PV\_Info.txt file and retrieve new tunes.
- 6 Click Manual Firmware Update to navigate to and load a version of firmware already saved on your computer.



#### **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.
- 2 From the top navigation menu, select Support>Downloads.
- 3 Click Power Vision 3.
- **4** Click the **Software** drop-down and download the Dynojet Power Core software.
- **5** Double-click the saved file to begin installation. Follow the on-screen prompts. Refer to the Power Core Help for more information.



