

# POWER VISION

Installation Guide for:

PV3-2204C / PV3-2213C / PV3-2216C / PV3-2217C

PV3-2218C / PV3-2219C

Model Coverage:

2014-2022 Yamaha FZ-07 / MT-07

2016-2022 Yamaha XSR700

2017-2019 Yamaha Tracer 700

2020-2023 Yamaha Tenere 700

2014-2021 Yamaha XTZ1200

2022 Yamaha R7

## PARTS LIST



- |   |                 |   |                 |
|---|-----------------|---|-----------------|
| 1 | POWER VISION    | 2 | VELCRO          |
| 1 | REFLASH HARNESS | 2 | DYNOJET DECAL   |
| 1 | USB CABLE       | 1 | E.O FRAME LABEL |

PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION



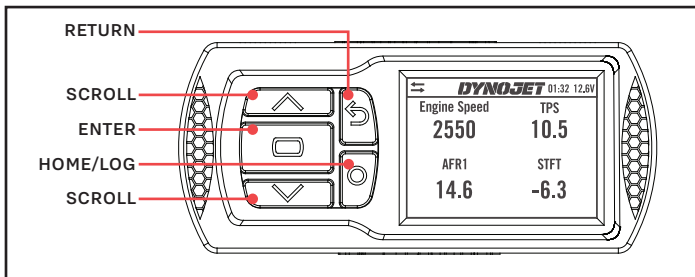
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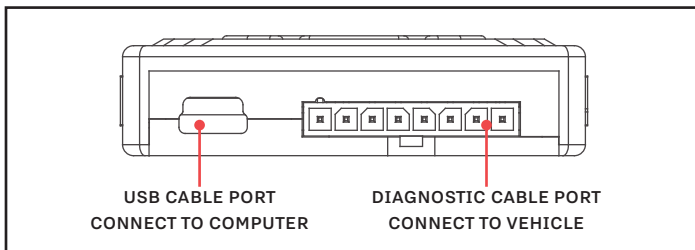
# DISCLAIMER

The Power Vision is designed to function properly on stock ECUs that contain the original OEM calibration. If your ECU has been flashed with an aftermarket tuning product, the Power Vision will not function as intended.

## INTRODUCTION



POWER VISION OVERVIEW—FRONT VIEW



POWER VISION OVERVIEW—SIDE VIEW

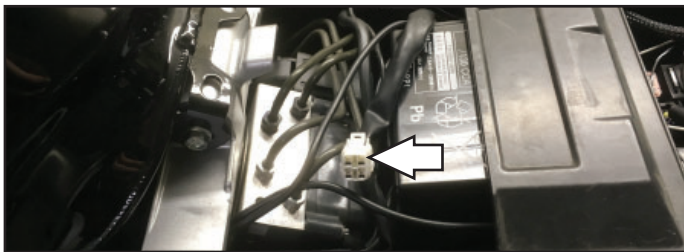
Thank you for purchasing the Power Vision from Dynojet Research. At Dynojet, our mission is to make every ride the ultimate ride. The Power Vision allows you to tune your stock ECU to achieve optimal performance from your vehicle.

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.

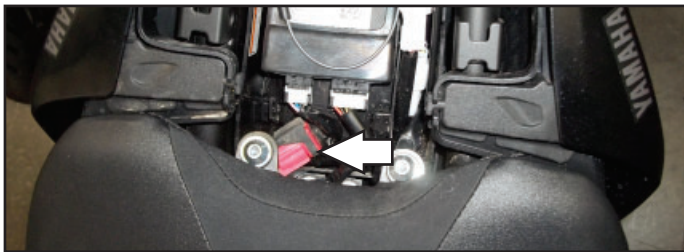
Make your Power Vision device yours; display the channels you want to see with four user-customizable full-color gauge screens. Make the Power Vision your window into your vehicle; secure the Power Vision to your dashboard or handlebars to monitor any desired set of gauges such as Throttle Position,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

For state of the art technical support, please visit [www.dynojet.zendesk.com](http://www.dynojet.zendesk.com).

# INSTALLING THE POWER VISION



DIAGNOSTIC PORT



DIAGNOSTIC PORT

- 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 [www.dynojet.com](http://www.dynojet.com) 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 or handlebars 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. The diagnostic port is located under the seat.

**Note:** Yamaha uses a 4-pin white connector or a 6-pin red connector.

- 3 Affix the supplied CARB E.O. label to a conspicuous area. Next to the original emissions label is a good location. On many of these models this is on the downtube of the frame. Make sure to clean the surface before attaching.

**When done riding, be sure to unplug the Power Vision to avoid draining the battery.**

## 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.



### File State 1:

Go to [tunes.dynojet.com/](http://tunes.dynojet.com/) to download stock and tune files.

#### GETTING STARTED

NO COMPATIBLE STOCK FILES

To download tunes, visit  
[TUNES.DYNOJET.COM/](http://TUNES.DYNOJET.COM/)  
PRESS  TO SEARCH AGAIN

### File State 2:

Go to [tunes.dynojet.com/](http://tunes.dynojet.com/) to download tune files.

#### GETTING STARTED

NO COMPATIBLE TUNE FILES

To download tunes, visit  
[TUNES.DYNOJET.COM/](http://TUNES.DYNOJET.COM/)  
PRESS  TO SEARCH AGAIN

### File State 3:

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

#### 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.

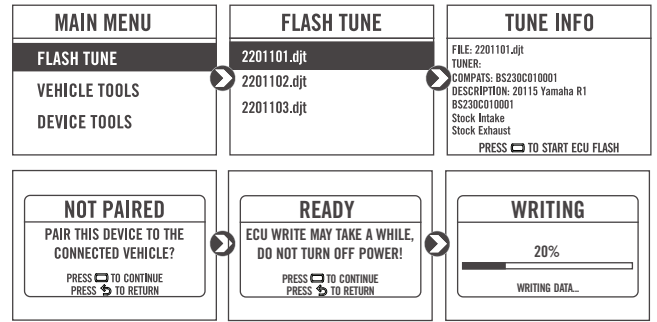
- 1 From the Main Menu, select **Flash Tune**.
- 2 Select the tune file (.djt) and press **Enter** to view the Tune Info. The Tune Info screen contains the technical notes showing what was changed in the tune.

**Note:** The PV3 filters out files which are not compatible with the connected vehicle based on year/trim delivered direct from the factory and result in varied tune Compat and CheckSum within the ECU. Additional files may be visible on the device when connected via USB or on the website; however, the PV3 will only display files which directly fit your vehicle.

**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, or restore the ECU to original stock (.stk) file, 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.

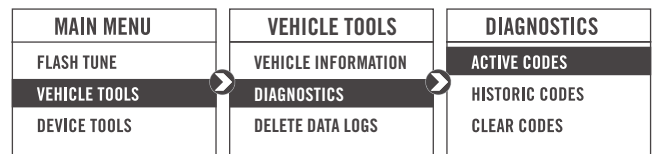
Select **Vehicle Tools>Vehicle Information**.



# VIEWING THE DIAGNOSTIC CODES

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

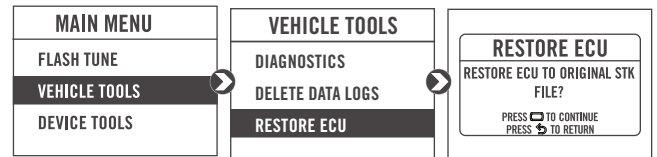
- 1 To read codes, select **Vehicle Tools>Diagnostics>Active Codes**.
- 2 To clear codes, select **Vehicle Tools>Diagnostics>Clear Codes**.



# 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.

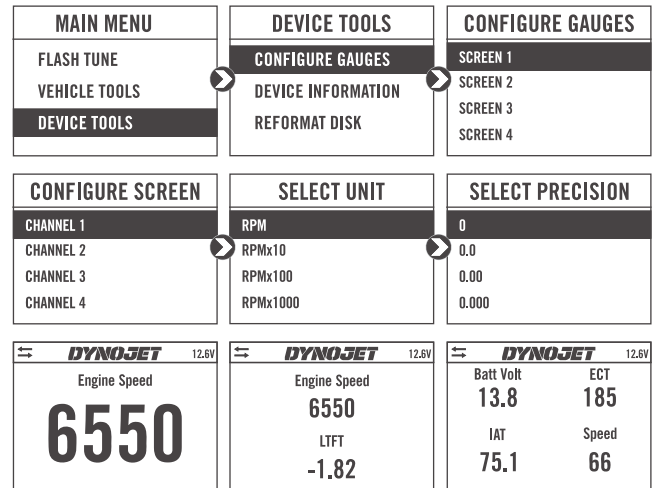
Select **Vehicle Tools**>**Restore ECU**.



# 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, and Boost. 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.

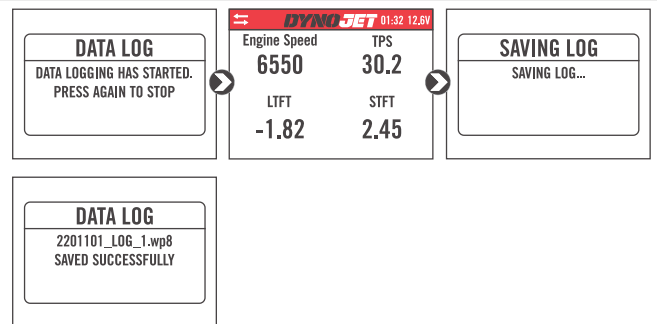
- 1 From the Main Menu, select **Device Tools**>**Configure Gauges**.
- 2 Select a gauge screen and press **Enter**.
- 3 Select a channel and press **Enter**.
- 4 Select a channel from the list and press **Enter**.
- 5 Select the precision or units for that channel and press **Enter**.
- 6 Continue setting up the remaining channels as desired.
- 7 Continue configuring the remaining gauge screens as desired.



# 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.

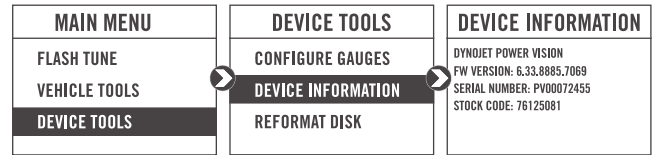
- 1 Select **Vehicle Tools**>**Delete Data Logs**.
- 2 Select a specific log to delete or select **\*Delete All Logs\***.



# VIEWING THE DEVICE INFORMATION

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

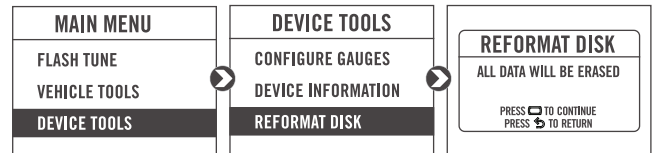
Select **Device Tools>Device Information**.



# REFORMATTING THE DISK

This menu allows you to reformat the disk and erase all data.

Select **Device Tools>Reformat Disk**.

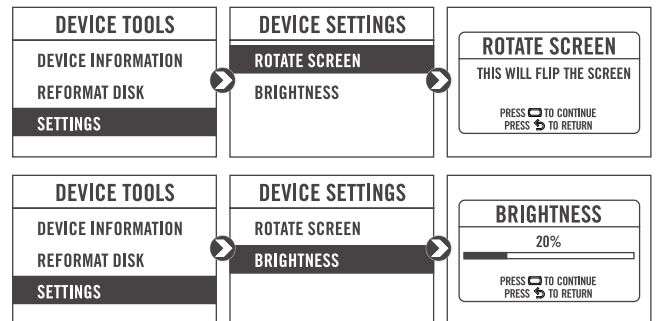


# CHANGING THE SETTINGS

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.

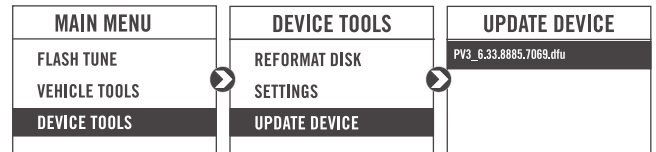
Select **Device Tools>Settings>Brightness** to change the screen brightness.



# UPDATING THE DEVICE

This menu allows you to update the device with the latest firmware.

- 1 Go to [www.dynojet.com](http://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 Yamaha.
- 5 Save the file to your device.
- 6 Select **Device Tools>Update Device**.



# COPY BACKUP FILE

This menu allows you to drop the paired vehicle stock file (.stk) to the device file system to open in Power Core.  
Select **Device Tools>Copy Backup File**.

MAIN MENU	DEVICE TOOLS
FLASH TUNE	UPDATE DEVICE
VEHICLE TOOLS	<b>COPY BACKUP FILE</b>
<b>DEVICE TOOLS</b>	COPY RECOVERY FILE

# COPY RECOVERY FILE

This menu allows you to drop the most recently flashed vehicle stock file (.stk) to the device file system to open in Power Core.  
Select **Device Tools>Copy Recovery File**.

MAIN MENU	DEVICE TOOLS
FLASH TUNE	UPDATE DEVICE
VEHICLE TOOLS	<b>COPY RECOVERY FILE</b>
<b>DEVICE TOOLS</b>	COPY BACKUP FILE

# EXPORT DIAG HISTORY

This menu allows you to export the diagnostic history log (a record of the most recent operations) to the file system for viewing or to send to technical support.  
Select **Device Tools>Export Diag History**.

MAIN MENU	DEVICE TOOLS
FLASH TUNE	<b>COPY BACKUP FILE</b>
VEHICLE TOOLS	COPY RECOVERY FILE
<b>DEVICE TOOLS</b>	<b>EXPORT DIAG HISTORY</b>

# 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	USB MODE
DEVICE TOOLS	USB FILE TRANSFER ENABLED
HELP	
<b>USB MODE</b>	PRESS  TO EXIT

# 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.

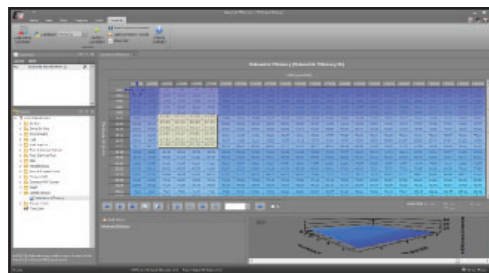


# INSTALLING THE POWER CORE SOFTWARE


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](http://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.







# TRUTH IN PERFORMANCE

800-992-4993 - [DYNOJET.COM](https://www.dynojet.com)

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