



## Wide Band Configuration

EFILive Support - 2021-06-25 - Comments (0) - V8 Scan and Tune Software

### Hardware Configuration

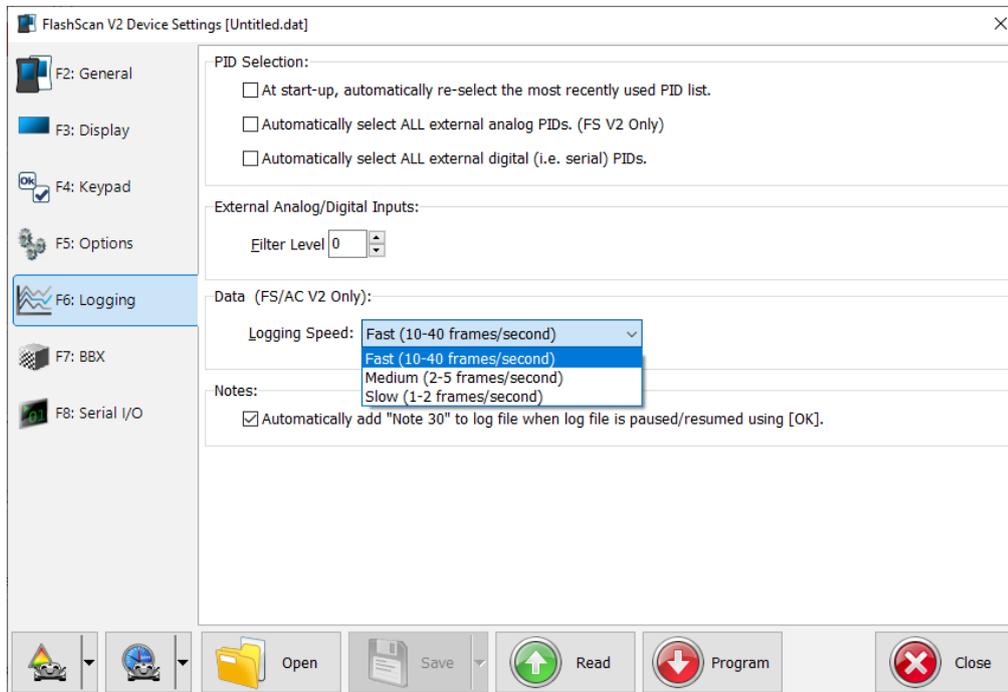
There are 2 different methods to access **Device Settings**. To access these;

1. Connect your **FlashScan/AutoCal** to your PC.
2. Open the **EFILive V8 Scan and Tune** application, and then select either:
  1. Select the **[F6: Devices]** option in the left-hand pane; or
  2. Select the **[F5: BBX] -> [F6: Quick Setup]** menu and select the correct device from the **Edit Device Settings** option.

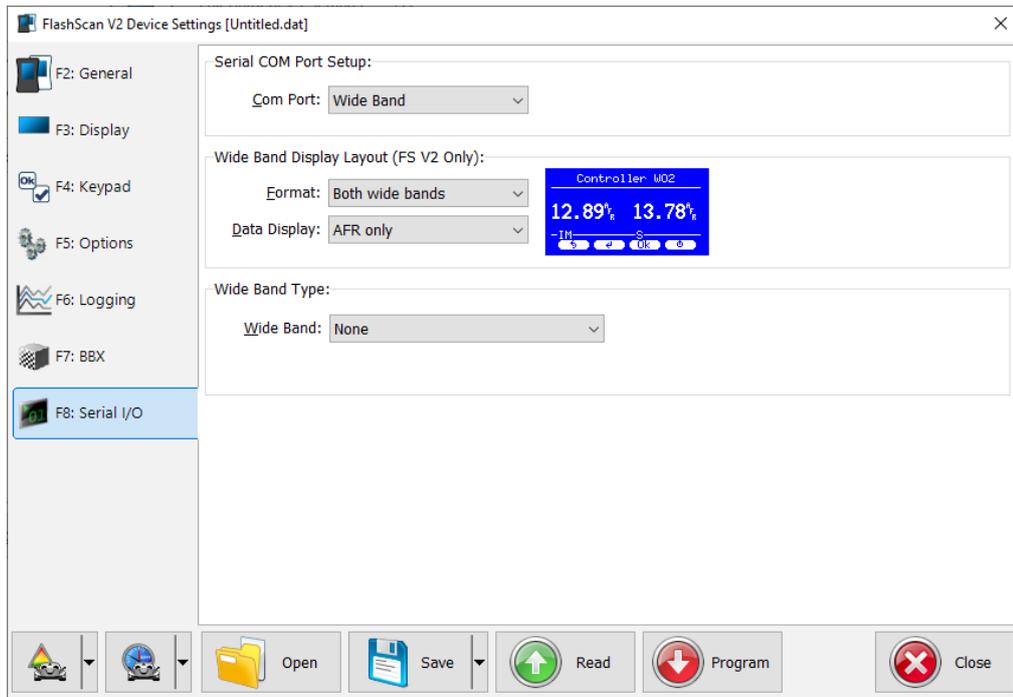
Both menu options perform the same function, however the option via the **[F5: BBX] -> [F6: Quick Setup]** allows these settings to be programmed in a single process along with all other BBX settings. The option via **[F6: Devices]** requires separate programming to other BBX settings.

Navigate to the **Device Settings** option using either of the above methods then;

1. For **FlashScan/AutoCal V2**, select **[F6: Logging]** and set **Logging Speed: Fast (10-40 frames/second)**.



2. Navigate to **[F8: Serial I/O]** and select appropriate **Com Port, Display Layout** and **Wide Band Type**.



3. Program **FlashScan/AutoCal** using the **Program** option, or
4. Select **Close** to return to the **Quick Setup**, select **Include current device settings**, and **Program Quick Setup**.

#### Logging Serial Wide Band O2 PIDs

For logging serial wide band O2 data the user should select one or more of these PIDs:

Available PIDs	
Name	Description
> ECM - Generic	SAE Defined PIDs
> ECM - Enhanced	Manufacturer Defined PIDs
> ECM - Custom	EFILive Defined PIDs
> TCM - Generic	SAE Defined PIDs
> TCM - Enhanced	Manufacturer Defined PIDs
> Calculated	Calculated PIDs
> Analog	External Analog PIDs
▼ Digital	External Digital/Serial PIDs
> <input type="radio"/> W02ST1	Wide band #1 State
> <input type="radio"/> W02ST2	Wide band #2 State
<input type="radio"/> W02LAM1	Wide band #1 Lambda
<input type="radio"/> W02LAM2	Wide band #2 Lambda
<input type="radio"/> W02AFR1	Wide band #1 AFR
<input type="radio"/> W02AFR2	Wide band #2 AFR
<input type="radio"/> W02EQR1	Wide band #1 EQRatio
<input type="radio"/> W02EQR2	Wide band #2 EQRatio
> Dyno	Mainline Dyno PIDs
> FPE	Fleece Performance XDL PIDs
> FPE1	Fleece Performance XDL2 PIDs
> FPE2	Fleece Performance UIO PIDs

Each PID has two options, identified by the final digit in the name.

1. Wide band controller 1
2. Wide band controller 2 (assuming 2 wide band controllers are in use).

The W02STn PID shows the state of the wide band, which will be one of:

- Unknown: Usually because of a communications failure - i.e. not plugged in.
- Lambda: The wide band controller is returning valid Lambda/AFR/EQR data.
- %O2: The wide band sensor has detected free air, i.e. it is not fitted to the exhaust and/or the engine is not running.
- Cal: The wide band controller is calibrating the wide band sensor.
- NoCal: The wide band sensor has not been calibrated.
- Warmup: The wide band sensor has not yet reached operating temperature.
- HCal: The wide band controller is calibrating the wide band sensor heater.
- Slow: The wide band sensor is slow to warm up.
- Cold: The wide band sensor is too cold.
- Hot: The wide band sensor is too hot.
- Error: An unknown error occurred.

Not all wide band controllers provide the same level of status reporting so some wide band controllers just show "Lambda" or "Error" or some other reduced combination of statuses.

When the WO2STn PID's value is "Lambda", then:

- The WO2LAMn PID contains the fuel ratio in Lambda units.
- The WO2AFRn PID contains the fuel ratio in AFR (Air Fuel Ratio) units.
- The WO2EQRn PID contains the fuel ratio in EQR (Equivalency Ratio) units.

For logging BEN factors with the serial wide band, the user should select one or both of these serial BEN factor PIDs:

- Select BEN\_1 for use with wide band controller 1
- Select BEN\_2 for use with wide band controller 2

Available PIDs	
Name	Description
ECM - Generic	SAE Defined PIDs
ECM - Enhanced	Manufacturer Defined PIDs
ECM - Custom	EFILive Defined PIDs
TCM - Generic	SAE Defined PIDs
TCM - Enhanced	Manufacturer Defined PIDs
Calculated	Calculated PIDs
fx BEN_1	Base Efficiency Numerator 1 - Analog
fx BEN_2	Base Efficiency Numerator 2 - Analog
fx BEN_1	Base Efficiency Numerator 1 - Serial
fx BEN_2	Base Efficiency Numerator 2 - Serial
fx WO2BEN	Base Efficiency Numerator (CAN-bus) (Dynar)
Analog	External Analog PIDs

Related Content

- [Configure FlashScan and AutoCal for BBX](#)
- [Device Settings](#)