



AutoCal V3 Hardware Implementation

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Prerequisites

Intended Audience

EFILive Customers looking to purchase FlashScan V3 or AutoCal V3.

Computer Knowledge

It is expected that readers have a basic understanding of:

- The Windows operating system;
- Starting and using Windows applications;
- Navigating folders using Windows Explorer.



Introduction

What is FlashScan V3 and AutoCal V3?

FlashScan V3 and AutoCal V3 are EFILive's new hardware scheduled to be available in the second quarter of 2020.

Technology advancements and availability of components has forced the retirement of FlashScan V2 and AutoCal, FlashScan HD and AutoCal HD.

V3 is a single hardware design that is housed in easily identifiable enclosures and branding to suit FlashScan V3 or AutoCal V3. FlashScan V3 and AutoCal V3 deliver a range of product advancements to end users while maintaining our signature robust design.

What is AutoCal?

AutoCal provides a convenient platform for tuners to distribute custom tunes to their customers. And for their customers to collect and submit logged data back to the tuner for analysis. It allows the tuner to update and optimize the original tune without shipping and/or removing controllers from customers' vehicles.

AutoCal can be configured in a variety of different ways to best suit Tuner's operational requirements and the needs of their customers.

Differences between FlashScan and AutoCal

There are significant differences between FlashScan and AutoCal for end users. It is important that both the tuner and the tuner's customer (end user) understand these differences.

- With FlashScan, all users have the ability to create, view, and modify tunes. With AutoCal, only the tuner has that ability.
- Tunes from multiple sources can be flashed with FlashScan, however AutoCal is limited to flashing tunes provided by a single tuner.

A FlashScan Device is Required

FlashScan is required to create tunes for an AutoCal device. AutoCal devices cannot create tunes.

AutoCal V3 Hardware Availability

AutoCal V3 will become publicly available at a time determined by EFILive. Factors to determine public release will include:

1. Beta test outcomes.
2. AutoCal stock levels.

AutoCal V3 release is independent of FlashScan V3 release.

EFILive Hardware Compatibility

AutoCal V3 can be used by tuners with FlashScan V3, FlashScan V2 or FlashScan HD. Upgrading to FlashScan V3 or AutoCal V3 is optional.



AutoCal V3

Specifications

AutoCal V3 Hardware Specification

- Large, easy to read color screen.
- Powerful ARM Cortex-M3, 32-bit CPU.
- Built in 512MB micro SD Card stores hundreds of tune files and/or hundreds of hours of logged data.
- Supports 600 VIN licenses.
- Built-in audible alarms.
- Upgradable boot block and firmware.
- Vehicle Input Voltage - Min 9V, Max 28V.
- Supported protocols CAN J1979, CAN J1939 (heavy duty) and VPW.
- Serial interface (RS-232).
- Battery backed real-time clock for accurate timestamps.
- Appears as a Windows USB drive in Windows Explorer.
- Files transfer up to 10 times faster than FlashScan/AutoCal V2.
- Built-in power supply prevents data corruption if external power supply is interrupted.
- Plug-and-Play, uses Windows' built in USB drivers.
- Connect a USB stick in the base of FlashScan V3 and AutoCal V3 to transfer tune files/data logs.
- Rugged Molex connectors.

EFILive Software Specification

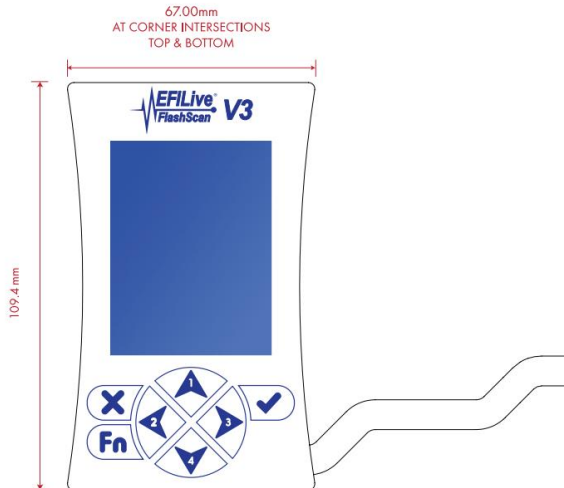
FlashScan V3 and AutoCal V3 work exclusively with EFILive V8 Scan and Tune software.

EFILive V7 Tune Tool and EFILive V7 Scan Tool are not compatible with FlashScan V3 and AutoCal V3 products.

PC/Systems Requirements

- PC or laptop running Win7 or higher.
- USB port.
- Color screen with 1280x960 or greater resolution.
- 1GB of available disk space.

PolyCarb Decal Specification



Tuners can brand AutoCal V3 as their own tuning device by placing their branding over the AutoCal V3 polycarb label upon receipt of the product.

Use the [AutoCal Decal Template.pdf](#) to create custom artwork in Adobe Illustrator.

AutoCal V3 Pricing

AutoCal V3 will be sold in bundles of 5 units and will be priced at:

Quantity	% Disc	Unit Price USD	Bundle Price USD
1 bundle (5 units)		\$508.00	\$2540.00
2 bundles (10 units)	7%	\$371.00	\$1855.00
4 bundles (20 units)	17%	\$331.20	\$1656.00
12 bundles (60 units)	34%	\$265.00	\$1325.00

Each AutoCal V3 will ship with two cables.

1. Vehicle cable (RJ45 to SAE-J1962).
2. PC cable (USB A to B).

One optional cable is available for purchase.

1. Serial cable (RJ12 to RS232 9-pin female).

Two optional adapters are available for purchase.

1. J1939 round 9 pin adapter to suit Cummins HD On-Road from 2001-2016.
2. J1939 round 9 pin adapter to suit Cummins HD On-Road from 2017+.

AutoCal V3 Hardware Configuration

AutoCal V3 will be configured with:

1. GM Tuning Option, Dodge Cummins Tuning Option, and the Cummins HD Tuning Option.
2. VIN Slot limit of one.
3. One VIN License.

FlashScan is required to create tunes for an AutoCal device. AutoCal devices cannot create tunes. A FlashScan device is required for linking/unlinking, changing VIN slot limits, and setting tune file security/permissions.

Licensing

Requirements

To flash a controller, the following licensing conditions must be met:

1. The Tuning Option that matches the controller type must be enabled.
2. A VIN License is available (if not already licensed) for engine and powertrain control modules. Supported transmission control modules do not require a VIN License.

Tuning Options

Tuning Options enable the ability to tune specific controller groups. Because the FlashScan device linked to the AutoCal controls tuning permissions, all Tuning Options are enabled on AutoCal V3.

VIN Slot Limits

Tuners can manage the number of available VIN slots they wish their AutoCal devices to hold. AutoCal V3 will ship with a default maximum VIN slot count set to 1. AutoCal V3 is configurable to a capacity of 600 VIN licenses.

Updating VIN slot limits is at the sole discretion of the tuner. EFILive (and other parties) cannot provide this service.

VIN Licensing

Each AutoCal V3 ships with one VIN license that may be used to tune one supported engine controller.

AutoCal V3 is configurable to a capacity of 600 VIN licenses. VIN Licenses are priced at \$125.00 USD.

Each engine and powertrain controller to be tuned requires an available VIN license. The license is allocated during the flashing process. Reflashing the same controller multiple times using the same device only uses one license. Supported transmission control modules do not require a VIN License.

VIN licenses cannot be copied from one FlashScan or AutoCal device to another device even if a tuner has previously licensed a controller to a FlashScan device.

Although AutoCal V3 can be used to return a vehicle to stock, doing so will not “reset” the VIN license that was used to flash the vehicle.

Once the controller is licensed, the vehicle's VIN will be stored in the VIN license on the AutoCal device, making it easier to keep track of which vehicles have licensed controllers.

VIN Licenses can be purchased through the EFILive store by providing both the AutoCal V3 serial number and Authentication code. The AutoCal V3 Serial number and Auth Code will be validated before the product can be added to the cart. The VIN slot limit must support the license purchase to pass validation.

VIN License activation codes are delivered via email usually 10 minutes of order placement. The activation code is also located within the order history on your EFILive store account.

AutoCal V2 to AutoCal V3 License Transfers

There is no AutoCal V2 to AutoCal V3 license transfer. AutoCal V3 is a standalone purchase.



FAQ

Do I need to upgrade?

No. EFILive will continue to fully support FlashScan V2 and AutoCal V2 hardware in line with the EFILive Life Cycle Policy. The introduction of new hardware is required to continue hardware production given the retirement of key manufacturing components for FlashScan V2 and AutoCal V2.

As a result of hardware redesign, EFILive has made additional improvements to meet key challenges relating to late model controller specifications, and changing customer requirements. In particular processor speed, interface communication methods and hardware storage capacity have been addressed.

Can I choose to upgrade anyway?

FlashScan V3

Yes. If you wish to purchase new hardware you can do so.

AutoCal V3

End users should discuss upgrading their AutoCal with their Tuner. Your tuner will need to:

1. Link your new AutoCal to the Tuner's FlashScan device.
2. Reconfigure tune file security for compatibility with the new device (Dependant on the tune file security settings used by the tuner).

Can I transfer Licenses between AutoCal V2 and AutoCal V3?

No, licenses cannot be transferred.

What happened to FlashScan HD and AutoCal HD?

The hardware specific differences between FlashScan V2/AutoCal V2 and FlashScan HD/AutoCal HD have been incorporated into FlashScan V3 and AutoCal V3 to provide a single hardware platform moving forward.

The Cummins HD Tuning Option is now available on FlashScan V3 and AutoCal V3 to support these platforms.