CSI-PRO-Ignition (Bluetooth / Android, iOS)

See also our website <u>www.csi-ignition.com</u> for a video explanation.



The CSI-Pro-Ignition is a programmable distributor for your classic car, you can adjust and program the advance curve yourself.

2 presets (**modes**) can be programmed, each with its own rpm and vacuum curve plus various other settings such as speed limiter, maximum total advance and minimum rpm speed for activating the vacuum advance.

Furthermore, the CSI-PRO-Ignition has the unique possibility, even while the engine is running, to write the curves and other settings to the distributor and to have the changes take effect immediately!

The static setting (**offset** of 0 degrees) can also be shifted in steps of 1 degree, up to 10 degrees positive and up to 10 degrees negative, without having to rotate the distributor itself.

An acceleration timer measures the time between 2 preset rpms to measure and compare the engine's performance.

A switch (see also the connection diagram) can be used to switch which **mode, 1 or 2**, is active.

The CSI-Pro-Ignition can be connected either with a USB or with a bluetooth module, so that programming can be done on a laptop or on a smartphone. Free software is provided for Windows, Android and iOS.

Changing settings (edit), save (save) and write (write) to the CSI-PRO-Ignition is of course possible, any save, open or write function, will include all curves and settings except the offset value, which is intended for temporarily shifting and testing the curves. This offset function is performed in real time.

General settings (Bluetooth / Android, iOS)

The CSI distributor must be connected and adjusted according to the installation manual. With the external switch, you can choose between mode 1 or mode 2. If the LED flashes (possibly turning the crankshaft a bit), it will light up once or twice after a pause, depending on the position of the switch.

For use with a smarphone with Android or iOS, you use the Bluetooth module and for the Windows version the USB module is intended.

The screen layouts of all applications are broadly the same, but each has a separate manual with screenshots.

First install and adjust the CSI distributor according to the Installation manual.

Then;

- 1 Switch on the ignition with the Bluetooth module connected.
- 2 Launch CSI-Pro application.



3 Message: **Searching**; search for a linked Bluetooth connection, Set the **1s**t time via the **Settings** menu, Search device, select CSI device (and enter the PIN code 0000)

After the message **Connected**, the settings and curves are copied from the CSI-Pro-Ignition to the application.

- 4 You can now view and use the various menus and all settings can be changed (Edit), saved (Save) and sent (Write) to the distributor.
- 5 Immediately after the **Write** function (also with the engine running), are the new settings active.
- 6 The Offset value is executed in real time, but these values are not saved by the **Write** or **Save** function.

Dashboard (Bluetooth / Android, iOS)



The dashboard contains 5 analog meters (and with digital values) for:

- **RPM;** engine speed, with a red area of the set speed limiter.
- Advance; Current, actual total advance, the possible share of the vacuum advance is highlighted with a green bar.
 - The red bar indicates the limitation of the max. Advance. (set at Limiters)
- Vacuum; The current measured vacuum value (Inch Hg)
- **Current**; the measured ignition coil current in Amperes. The red areas mark the limit values.
- **Battery**; the current on-board voltage in Volts, the red areas mark the limit values.

Further to the right the arrow buttons (**Offset**) for the (temporary) shift of the curves in steps of 1 degree positive / negative with a range of -10 to +10 degrees.

The indication **Mode 1** or **Mode 2**; the actual selected curves / settings, depending on the position of the external switch.

RPM Advance (Bluetooth / Android, iOS)





By choosing **Mode 1 or 2** here, you will see the corresponding curve. With the **Edit** function you can delete values, adjust and insert new lines. You can then save the changes in the CSI-Pro-Ignition with the **Write** button and with the **Save** button on your phone or laptop.

A previously saved curve can also be loaded with the **Open** button.

Some values are pre-programmed; 0 degrees to 300 rpm which is actually the static setting of 0 degrees (Top Dead Center), above 300 rpm you can set an advance value, for example 10 degrees, and similarly, for example, 1000 rpm, also 10 degrees. This straight line generally ensures a stable idling.

Vacuum Advance (Bluetooth / Android, iOS)





Here too, by choosing **Mode 1 or 2**, you will see the corresponding curve.

With the **Edit** function you can delete values, adjust and insert new lines. You can then save the changes in the CSI Pro with the **Write** button and with the **Save** button on your phone or laptop.

Limiters (Bluetooth / Android, iOS)

Dashboard RPM advance Vacuum advance Limiters Tune Settings						
Mode 1 Mode 2						
RPM limit: 6000						
Vacuum advance disabled if RPM is lower than: 1250						
Maximum allowed advance: 36.0	•					
Edit						
Searching						
Dashboard RPM advance Vacuum advance Limiters Tune Settings						
Dashboard RPM advance Vacuum advance Limiters Tune Settings Mode 1 Mode 2						
Dashboard RPM advance Vacuum advance Limiters Tune Settings Mode 1 Mode 2 RPM limit: 5000						
Dashboard RPM advance Vacuum advance Limiters Tune Settings Mode 1 Mode 2 RPM limit: 5000 Vacuum advance disabled if RPM is lower than: 1000 Vacuum advance disabled if RPM is lower than:						
Dashboard RPM advance Vacuum advance Limiters Tune Settings Mode 1 Mode 2 RPM limit: 5000 Vacuum advance disabled if RPM is lower than: 1000 Maximum allowed advance:						
Dashboard RPM advance Vacuum advance Limiters Tune Settings Mode 1 Mode 2 RPM limit: 5000 Vacuum advance disabled if RPM is lower than: 1000 Maximum allowed advance: 38.0						

Here too 2 modes,

- **RPM Limit**; the engine speed limiter.
- **Vacuum advance disabled if RPM is lower then**: Vacuum advance disabled at a lower speed than the rpm value.
- **Maximum allowed advance**; the maximum total advance, so including vacuum advance.

With the **Edit** function you can delete values, adjust and insert new lines. You can then save the changes in the CSI Pro with the **Write** button and with the **Save** button on your phone or laptop.

TUNE (Bluetooth / Android, iOS)



This allows you to measure the acceleration time between the 2 rpm settings.

The time between those 2 values gives an idea of the engine performance. The measurement must then be done at full throttle and in 2nd or 3rd gear. The time starts when the lowest value is reached and stops at the highest value.

Tip: Choose the same route for every measurement to be compared. Start with a constant speed that is 500 rpm lower than the low set rpm value (so in this case 2000 rpm)

This results in a more reliable measurement.

Settings (Bluetooth / Android, iOS)

Dashboard RPM advance Vacuum advance Limiters Tune Settings	
Device	
Device: CSI_586B Id: 04:91:62:22:58:6B	
Change pin code	
Immobilizer UIT	

Various general settings can be made here;

- Device; here you can see the id number of the bluetooth module, by pressing the magnifying glass symbol, then the bluetooth module is searched for. The default pin code is 0000
- **Change pin code;** the pin code can be changed here.
- **Immobilizer**; When the immobilizer is switched on, a connection with the **CSI-PRO** is required to drive. If not, the engine will shut off after 5 seconds.
- When the **Immobilizer** is switched off, the car can be used, even without a smartphone.
- The **Immobilizer** function can only be turned **on** or **off** when the app. is connected to the **CSI-PRO**.

Settings (Bluetooth / Android, iOS)

Dashboard RPM advance	Vacuum advance Limiters Tune	Settings
Immobilizer		AAN
	Coroon	
	Screen	
Screen always on		AAN

- Screen always on; by turning on, the phone does not enter the screen saver.

Screen rotation Auto Info	Dashboard RPM advance	Vacuum advance	Limiters Tune	Settings	
Info App version: A5.00.05 Distributor version: 6104 Bluetooth module version: 5	Screen rotation			Auto	
App version: A5.00.05 Distributor version: 6104 Bluetooth module version: 5					
App version: A5.00.05 Distributor version: 6104		Info			
	App version: A5.00.05 Distributor version: 6104 Bluetooth module version: 5				•

- **Screen rotation**: Screen position, selectable on **Auto**, for automatic rotation, or **Portrait** for vertical, or **Landscape** for horizontal display.
- Info: Version numbers of the App, Distributor and the Bluetooth module.

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