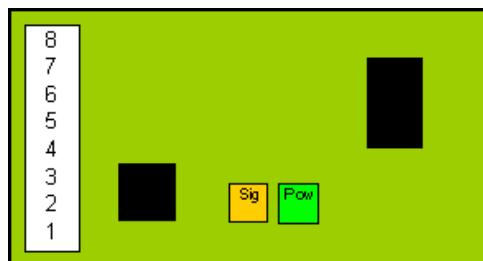




INSTALLATION GUIDE COIL ADAPTER



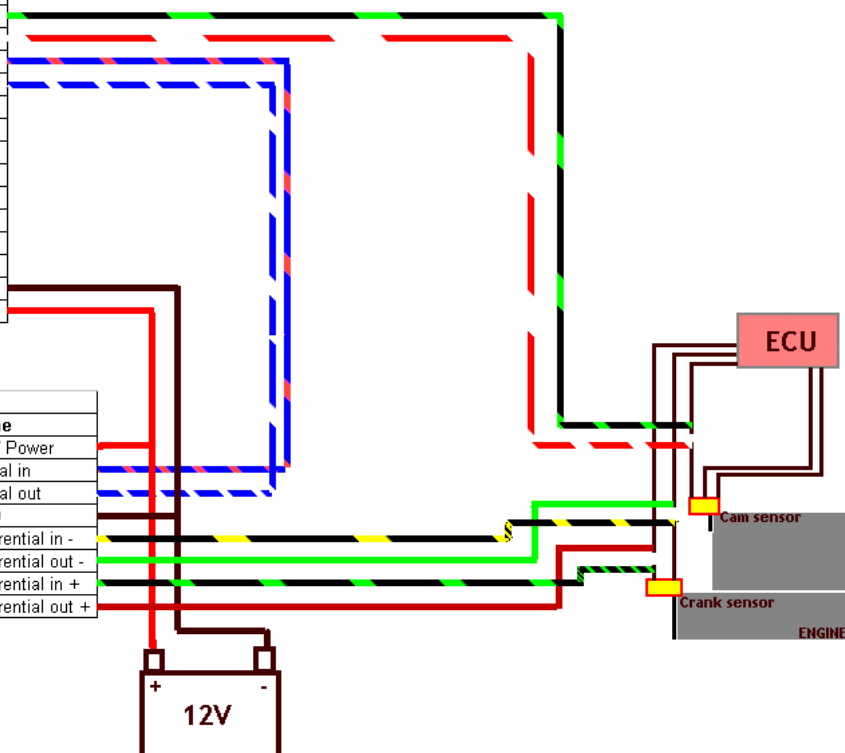
Coil adapter pin configuration				
Cable nr		Colour	Length	name
1		red	350 mm	12 V Power
2		blue / red	350 mm	Digital in
3		blue / white	350 mm	Digital out
4		black	350 mm	GND
5		black / yellow	350 mm	Differential in -
6		green	350 mm	Differential out -
7		black / green	350 mm	Differential in +
8		brown	350 mm	Differential out +

The Coil adapter converts differential inductive signals to digital 0-5V signals for connection of inductive sensors to the BC-system. The Coil adapter also converts 0-5V signals back to inductive signals, to be able to send back the signal to the stock PCM/ECU after retarding/advancing the signal.

HARNESS SPECIFICATION, COIL ADAPTER WITH BC500

Cable nr	Colour	name
1	black / white	signal GND
2	grey	5 V out
3		RS-232 TX
4		RS-232 RX
5	violette	PWM1 (boost)
6	blue	Analog 3 in
7	yellow	Analog 2 out
8	red / green	Analog 2 in
9	yellow / green	Analog 1 out
10	red / yellow	Analog 1 in
11	black / green	IgnitionB out
12	red / white	IgnitionB in
13	blue / red	IgnitionA out
14	blue / white	IgnitionA in
15	green / white	Fuel_D_OUT
16	white	Fuel_D_IN
17	brown / black	Fuel_C_OUT
18	brown / red	Fuel_C_IN
19	brown / blue	Fuel_B_OUT
20	brown / grey	Fuel_B_IN
21	brown / yellow	Fuel_A_OUT
22	brown / green	Fuel_A_IN
23	black	Power GND
24	red	12 V Power

Coil adapter pin configuration				
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4		black	350 mm	GND
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8		brown	350 mm	Differential out +





The harness is an ignition only harness with integrated coil adapter for the crank signal. The cam signal is connected to the BC-system directly without signal conversion. In many applications there is no need to connect the cam signal to the BC-system

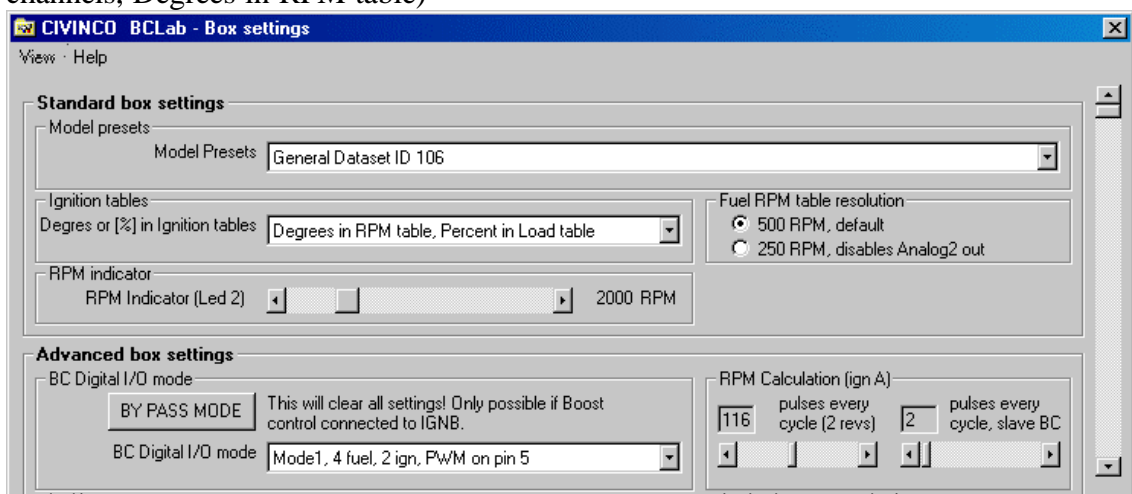
Installation of Coil adapter together with BC500

Make sure you have a inductive sensor. Typically the crank sensor is inductive. Sensors with 3 connections are normally not inductive. To be really sure, measure it with oscilloscope. We also recommend that you first install the BCLab software, to become familiar with it.

1. Connect the red wire to +12V
2. Connect the black and black/white wire to Gnd
3. Connect the serial cable between the BC-system and the PC.
4. From BCLab press the "Info" button and make sure that you can communicate with the BC-system. **Make sure this works before continuing to next step !!!**



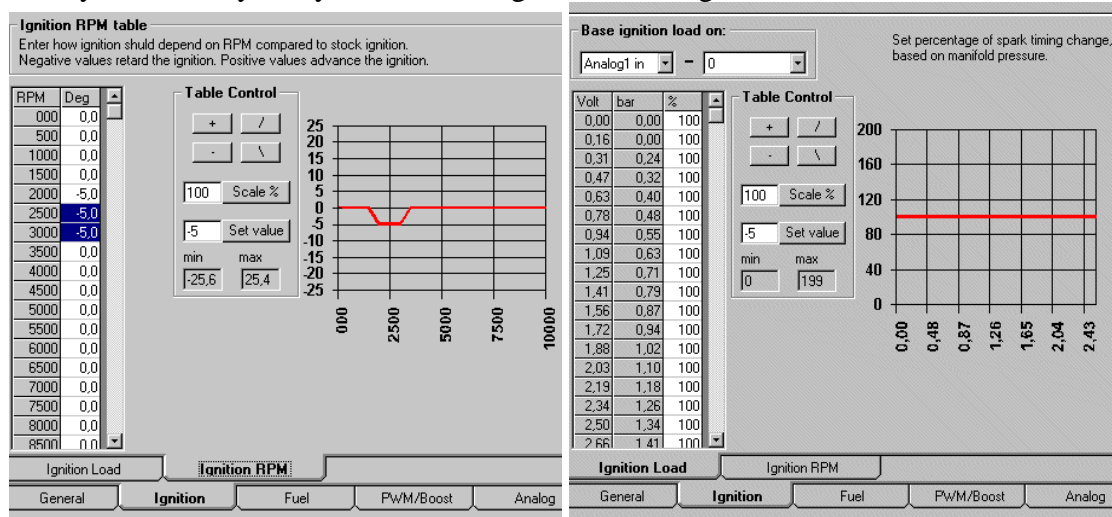
5. Connect wire 5 from the coil adapter to one of the pin from the inductive crank sensor
6. Connect wire 7 from the coil adapter to the other pin from the inductive crank sensor
7. Make sure the settings in BCLab is right regarding number of pins per engine cycle (For normal crank 60-2 wheel enter 116 pulses per engine cycles, Mode1 2 ignition channels, Degrees in RPM table)



8. Start the engine and start logging in BCLab and make sure the right RPM is indicated. **Make sure this works before continuing to next step !!!**



9. Cut the two wires from the crank sensor to the PCM/ECU, so that the coil adapter still are connected to the sensor.
10. Connect wire 6 from the coil adapter to the newly cut wire that goes to the PCM/ECU. (Use the same wire as was previous connected to wire 5 so that you keep + and – right)
11. Connect wire 8 from the coil adapter to the newly cut wire that goes to the PCM/ECU. (Use the same wire as was previous connected to wire 7 so that you keep + and – right)
12. Start the engine and start logging in BCLab and make sure the right RPM is indicated, and that the engine is still running OK.
13. Find the cam sensor signal (Normally one signal is Gnd, one is +5V, and one is the signal). Cut the wire.
14. Connect the red/white wire no12 from the BC-system to the cam sensor
15. Connect the black/green wire no11 from the BC-system to the cam sensor input at the ECU/PCM.
16. Start the engine and start logging in BCLab and make sure the right RPM is indicated, and that the engine is running OK.
17. Now you are ready to try to retard the ignition in the ignition table in BCLab.



Example of retarding ignition 5 deg between 2000-3000rpm for all loads.

18. After verifying that the installation was OK, you can continue to tune the ignition in BCLab or continue to install the fuel signals