Note Injector Numbers are in firing order not cylinder number

See attached notes.

All 5 volt and Sensor Gnd connections are equivalent (except Lambda Gnd). Use the ones which are most suitable for the sensors connected. If not using twisted pair wire, twist together separate wires especially the sensor connections with a pitch of approx. 2.5 cm

Crank sensor connections

Use twisted pair wire with overall screen for crank sensor

VR sensor pin outs (magnetic)

Ford
Pin 1 to pin 8
Pin 2 to pin 47
Shield to pin 47 at ECU

Vauxhall/Opel/BMW/Volvo/Saab/etc. (Bosch & Siemens)
Pin 1 to pin 8
Pin 2 to pin 47
Pin 3 to shield to pin 47 at ECU

Marelli
Pin 2 to pin 8
Pin 1 to pin 47
Shield to pin 47 at ECU

12 volt supply

Injectors MUST be 5 Ohms or more. If less use ballast resistor.

SEE ATTACHED NOTES

1 2 3 4 5 6 7 8

12 VOLTS ● 19
INJECTOR 1 ● 37
INJECTOR 2 ● 18
INJECTOR 3 ● 36
INJECTOR 5 ● 17
INJECTOR 6 ● 35
INJECTOR 8 ● 16

55 ● POWER GROUND
54 ● INJECTOR 4
53 ● INJECTOR 7

Ground (Earth)

POWER GROUND ● 34
POWER GROUND ● 15

52 ● 5 VOLTS
51 ● SIGNAL GROUND
50 ● UNDRIVEN WHEEL (optional)
49 ● LAMBDA EARTH
48 ● THROTTLE WIPER
47 ● SIGNAL GROUND
46 ● SIGNAL GROUND
45 ● AIR TEMP
44 ● ANALOGUE INPUT 3
43 ● AUX OUT 3
42 ● CAM PHASE VALVE/AUX OUT 4
41 ● FUEL PUMP RELAY
40 ● COIL 7
39 ● COIL 5
38 ● COIL 3

Micro Switch

SHIFT CUT ● 33
Toggle switch
TRACTION WET/DRY ● 14
Toggle switch
TRACTION ON/OFF ● 32
Toggle switch
MAP2/ALS/ANA1 ON/OFF
alt LAMBDA ON/OFF ● 13
Momentary Switch
LAUNCH BUTTON ● 31

Hall Sensor (5v, Sig, Gnd) Toothed wheel

LAMBDA SIGNAL ● 12
MAP ● 30
UNDRIVEN WHEEL (must) ● 11
LEFT DRIVEN ● 29
5 VOLTS ● 10
5 VOLTS ● 28
RIGHT DRIVEN WHEEL ● 9
CAM SENSOR ● 27
CRANK SENSOR ● 8
WATER TEMP ● 26
ANALOGUE INPUT 2 ● 7 OR LOG SWITCH
ANALOGUE INPUT 1 ● 25
SHIFT LIGHT ● 6
TACHO ● 24
AUX OUT 2 ● 5
TURBO A LAG ● 23
IDLE VALVE ● 4
COIL 8/or Aux5 ● 22
COIL 6 ● 3
TURBO PRESSURE VALVE ● 21
COIL 4 ● 2
COIL 2 ● 20
COIL 1 ● 1

Cam Wheel Has one Tooth

Crank Toothed wheel with missing teeth

Magnetic Sensor (Sig, Gnd)

Recommended LED on dash

12 Volt Supply

Turbo ALS Valve
Idle Speed Valve
Manifold Pres Valve

Typical 12v supply circuit

Battery + — Fuse 30 Amp — Relay Bosch 0332 014 112 or equiv
Ignition switch
Battery -
12 volt supply to Ecu and coils etc

Ground (Earth)

Hall Sensor (5v, Sig, Gnd) Toothed wheel

Grey on Bosch
Black On Bosch
Lambda

Note GM Map is
A = GND
B = Signal
C= 5 Volt

MAP Sensor Marelli
a b c

Throttle Pot (TPS)
500 - 10KOhm

5 Volts
Signal Gnd

Air
Water
Aux3
Aux4

Lucas SNB801 or Equiv
Lucas SNB802 or Equiv

Bosch Map
0261 230 004
1= 5 Volt
2= GND
3=Signal

12 volts

Shift Light LED
Tacho
Relay or LED
Fuel Pump Relay

8 7 6 5 4 3 2 1

Note coil outputs numbered in firing order not cylinder order.

See attached notes.

Latch end

DTA
Tel +44 (0)1274 667960
Fax +44 (0)1274 663627
Email office@dtafast.demon.co.uk

WIRING SCHEMATIC

FOR
P8PRO V29.0 FIRMWARE OR LATER

LAST UPDATED 01/10/2002
** SEE ATTACHED NOTES **

Serial Port Connections
1 -> 1
2 -> 2
3 -> 3 9 - 15 pin (Dyno Control Box uses the rest)
4 -> 4
5 -> 5

Throttle pot

Connect 5 v to side to which throttle wiper goes at full open

any value 500 Ohm to 20 K Ohm

Colvern (Jenvey) pot

red = wiper
green = 5v
yellow = Sensor GND

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Fax +44 (0)1274 663627
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WIRING NOTES

FOR
P8PRO V29.0 FIRMWARE OR LATER

LAST UPDATED 01/10/2002

Injector Wiring

Note all injectors must be high impedance types or use a ballast resistor.

Sequential

Remember that the outputs are numbered in firing sequence, that is 1 is the first to fire, 2 the second etc. For a 4 cylinder with a firing sequence of 1/3/4/2 connect wires as below.

Cyl	1	3	4	2
O/P	1	2	3	4

And similarly for 6 or 8 cylinder engines. 8 cylinders is the maximum that can be handled with sequential injection. A cam sensor MUST be fitted for sequential injection.

Non Sequential

Use O/P's 1,2 and 5,6. Balance numbers of injectors on each

Non Sequential Twin Injector

Injectors 1:- Use O/P's 1,2 and 5,6. Balance numbers of injectors on each

Injectors 2:- Use O/P's 3,4 and 7,8. Balance numbers of injectors on each

Coil Wiring

Coil Per Plug

Remember that the outputs are numbered in firing sequence, that is 1 is the first to fire, 2 the second etc. For a 4 cylinder with a firing sequence of 1/3/4/2 connect wires as below. A cam sensor MUST be fitted for coil per plug operation.

Cyl	1	3	4	2
O/P	1	2	3	4

And similarly for 6 or 8 cylinder engines.

Wasted Spark

Use the lowest outputs. For a 6 cylinder engine with a firing order of 1/3/6/4/5/2 wire as below.

Cyl	1	3	6
Cyl	4	5	2
O/P	1	2	3

Distributor

Use Coil output 1 or 2..

Twin Spark

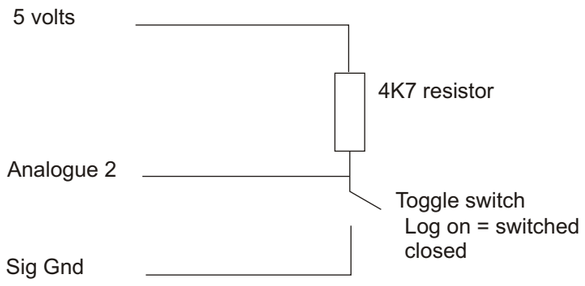
Coil O/P's 1 to 4 work as normal. Coil O/P's 5 to 8 are the matching second plug. For a 4 cylinder, coil per plug, twin spark wire as below.

Cyl	1	3	4	2	First Plug
O/P	1	2	3	4	
Cyl	1	3	4	2	Second Plug
O/P	5	6	7	8	

Four cylinder coil per plug or 8 cylinder wasted spark is the maximum for twin spark operation.

ANALOGUE 2 WIRING FOR LOG SWITCH

If using the analogue 2 input for switching the log on and off use the following wiring.



Special Considerations for Audi 5 Cylinder

The engine must have 5 coils and a 60 - 2 crank wheel at 60 degrees. Set to 10 cylinders in general engine settings. Set unequal firing and 1 coil per plug OFF in unequal firing angles. Set sequential injection OFF in injector phasing. You do not need a cam sensor.

Wire coils as below

Cyl	1	5	2	3	4
O/P	1	2	3	4	5

Wire Injectors as below

Cyl	1	5	2	3	4
O/P	1	2	5	6	6