K-Series and D17 Pinout

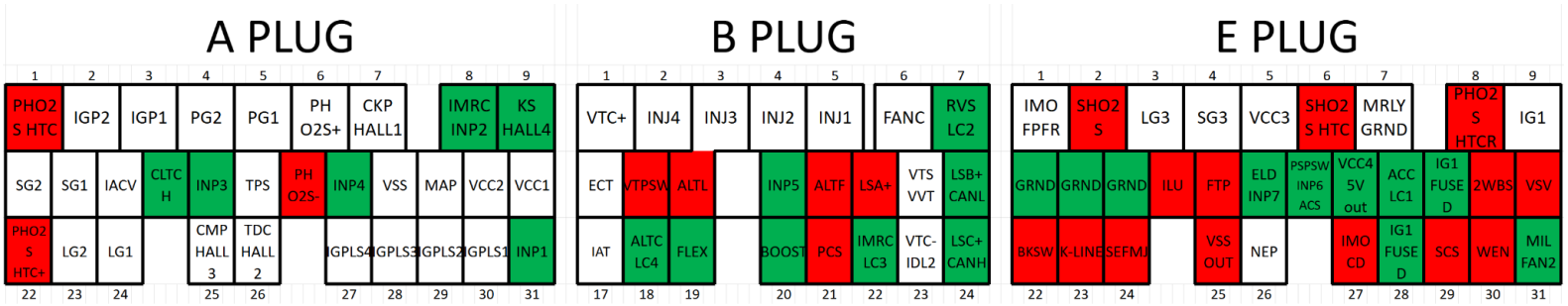
The Honda K-Series generally has 2 pinouts, the 02-04 and 05-06. Our PnPduino K-Series ECU uses the 02-04 pinout and if you are using the 05-06 harness, an 05-06 to 02-04 adapter harness is required like from HAMotorsports. The 01-05 Civic D17 is almost the same pinout as the 02-04 K-Series pinout (VTC is not available to D17).

Some important things to know about PnPduino Honda K-Series and D17:

- OEM Wideband or Narrowband Oxygen sensors are not used since there is no heater control. A wideband sensor + controller must be used such as AEM X Series. Use the provided connector and the wideband male plug on the top left of the ECU.
- PnPduino ECUs do not have OEM K-line, Multiplexer, SCS or OBD2 signals. Most signals going to OEM Dash require those signals.
- The K-Series can be used for K-Swap and OEM chassis from version 7 onwards. However, OEM Chassis that use K-line and OBD2 signals will not work.
- There is Knock Control in the current firmware but requires a separate knock controller.
- This is only applicable to manual transmission. It can be used for automatic transmission only as PIGGYBACK.
- By default, AC Switch is connected to PSPW E16 but can be changed to any spare input
- By default, Reverse Lockout for 6 Speed transmissions is connected to LC2. It can be used for a different output if using 5 Speed transmissions
- The injectors are connected as sequential from PnPduino. This means that INJ2 goes to actual injector 3, INJ3 to actual injector 4 and INJ4 to actual INJ2. It is the same with ignition.

We recommend printing this document to make sure wiring is correct. Remove all wiring connections from the ECU connector if it is not used from the ECU (Highlighted Green).

PnPduino K-Series & D17 Pinout viewed from the front of the male ECU Header



LEGEND
BLACK = Original Honda Pinout being used
GREEN = Added by PnPduino
RED = Original Honda Pinout NOT being used

Honda Label	Pin Terminal	Honda Description	PnPduino Connection	PnPduino Description	Tunerstudio Arduino Pin	Remarks
A PLUG						
PHO2S HTC	A1	AFR Sensor Heater Ctrl -	Not Used			
IGP1/IGP2	A2/A3	Power Source	12V	BATT		12V Battery
PG1/PG2	A4/A5	Power Ground	GRND	ECU Ground		Power Ground at the Head cover, not Chassis ground
PHO2S+	A6	Oxygen Sensor +	O2	Oxygen Sensor	A1	Wideband O2 Sensor Linear Output
CKP	A7	Crankshaft Sensor	HALL1	Hall Sensor 1	19	12+1 Crankshaft sensor signal
IMRC	A8	IMRC Valve Position Sensor	INP2	Input 2	A9	Intake Manifold Runner Valve Position Sensor or Spare Input 2
KS	A9	Knock Sensor	HALL4	Hall Sensor 4	21	Spare Hall Sensor or Spare Input
SG	A10/A11	Sensor Ground	GRND	ECU Ground		Sensor Ground
IACV	A12	Idle Air Control Valve	IDLE1	Idle 1	9	Idle 1
-	A13	-	CLUTCH	Clutch	37	Clutch Switch Input
-	A14	-	INP3	Input 3	A10	Spare Input 3
TPS	A15	Throttle Pos sensr	TPS	Throttle Pos sensr	A3	Throttle Position Sensor
PHO2S-	A16	Oxygen Sensor -	GRND	ECU Ground		ECU Ground
-	A17	-	INP4	Input 4	A11	Spare Input 4

VSS	A18	Vehicle Speed	VSS	Vehicle Speed	20	Vehicle Speed Sensor Input Low Frequency only
MAP	A19	Manifold Abs Pres	MAP	Manifold Abs Pres	A0	MAP Sensor
VCC	A20 /A21	Sensor Voltage	5V	5V Supply		5V Supply to Sensors
PHO2S HTC+	A22	AFR Sensor Heater Ctrl +	Not Used			
LG	A23 /A24	Logic Ground	GRND	ECU Ground		Logic Ground
CMP	A25	Camshaft Position Sensor	HALL3	Hall Sensor 3	3	Intake Cam Sensor 4 pulses
TDC	A26	Top Dead Center Sensor	HALL2	Hall Sensor 2	18	Exhaust Cam Sensor 4+1 pulses
IGPLS4	A27	Ignition Coil Pulse 4	IG3	Ignition 3	33	In Firing order 1-3-4-2 (IG3 of PnPduino is actual IG4)
IGPLS3	A28	Ignition Coil Pulse 3	IG2	Ignition 2	36	In Firing order 1-3-4-2 (IG2 of PnPduino is actual IG3)
IGPLS2	A29	Ignition Coil Pulse 2	IG4	Ignition 4	34	In Firing order 1-3-4-2 (IG4 of PnPduino is actual IG2)
IGPLS1	A30	Ignition Coil Pulse 1	IG1	Ignition 1	35	In Firing order 1-3-4-2
-	A31	-	INP1	Input 1	A8	Spare Input 1

B PLUG

VTC+	B1	VTC Oil Control +	12V	BATT		12V Battery (Not available for D17)
INJ4	B2	Injector 4	INJ3	Injector 3	6	In Firing order 1-3-4-2 (INJ3 of PnPduino is actual INJ4)
INJ3	B3	Injector 3	INJ2	Injector 2	7	In Firing order 1-3-4-2 (INJ2 of PnPduino is actual INJ3)
INJ2	B4	Injector 2	INJ4	Injector 4	5	In Firing order 1-3-4-2 (INJ4 of PnPduino is actual INJ2)
INJ1	B5	Injector 1	INJ1	Injector 1	8	In Firing order 1-3-4-2
FANC	B6	Fan Control	FAN	Fan 1	24	Thermo Fan
RVS	B7	Reverse Lockout	LC2	Low Current 2	27	Low Current Output 2
ECT	B8	Engine Coolant Temp	CLT	Engine Coolant Temp	A4	Engine Coolant Temp
VTPSW	B9	VTEC Pressure Switch	Not Used			
ALTL	B10	Alternator Lamp	Not Used			
-	B11	-				
-	B12	-	INP5	Input 5	A6	Spare Input 5
ALTF	B13	Alternator Field	Not Used			
LSA+	B14	A/T	Not Used			

VTS	B15	VTEC Solenoid	VVT	VVT	11	VTEC +12V output
LSB+	B16	A/T	CANL	CAN Lo		For STM32 Processor
IAT	B17	Intake Air Temp	IAT	Intake Air Temp	A5	Intake Air Temp
ALTC	B18	Alternator Control	LC4	Low Current 4	29	Low Current Output 4
-	B19	-	FLEX	Flex Fuel Sensor	2	Flex Fuel Sensor
-	B20	-	BOOST	Boost Solenoid	12	Boost Control Solenoid
PCS	B21	EVAP purge	Not Used			
IMRC	B22	IMRC Solenoid	LC3	Low Current 3	28	Low Current Output 3
VTC-	B23	VTC Oil Control -	IDLE2	Idle 2	10	VVT that controls IDLE2 pin which connects to VTC-
LSC+	B24	A/T	CANH	CAN Hi		For STM32 Processor

E PLUG

IMO FPR	E1	Fuel Pump Relay	FP	Fuel Pump	23	Fuel Pump
SHO2S	E2	Secondary Oxygen Sensor	Not Used			
LG3	E3	Logic Ground	GRND	ECU Ground		Logic Ground
SG3	E4	Sensor Ground	GRND	ECU Ground		Sensor Ground
VCC3	E5	Sensor Voltage	5V	5V Supply		Supply to Sensors
SO2S HTC	E6	SO2S Heater Control	Not Used			
MRLY	E7	PGMFI Main Relay	GRND	ECU Ground		ECU Ground
AFSHTCR	E8	AFS Heater Control Relay	Not Used			
IG1	E9	Ignition Switch	12V	BATT		12V Battery
-	E10	-	GRND	ECU Ground		Sensor Ground Additional by PnPduino
-	E11	-	GRND	ECU Ground		Sensor Ground Additional by PnPduino
-	E12	-	GRND	ECU Ground		Sensor Ground Additional by PnPduino
ILU	E13	ILU	Not Used			
FTP	E14	Fuel Tank Pressure	Not Used			
ELD	E15	Electric Load Detector	INP7	Input 7	A13	Spare Input 7
PSPW	E16	Power Steering Pressure Switch	INP6	Input 6	A12	Spare Input 6 Default to AC Switch
-	E17	-	5V	5V Supply		Supply to Sensors
ACC	E18	AC Compressor	LC1	Low Current 1	26	Low Current 1 Default to AC Compressor
-	E19	-	12V	Fused 12V		Fused 12V

2WBS	E20	EVAP bypass	Not Used			
VSV	E21	EVAP shut valve	Not Used			
BKSW	E22	Brake Switch	Not Used			
K-LINE	E23	SCAN signal	Not Used			
SEFMJ	E24	Multiplex	Not Used			
VSSOUT	E25	VSS Output	Not Used			
NEP	E26	Engine Speed Output	TACHO	Tachometer 12V	22	Tachometer 12V
IMOCD	E27	Immobilizer Signal	Not Used			
-	E28	-	12V	Fused 12V		Fused 12V
SCS	E29	Service Check Signal	Not Used			
WEN	E30	Write Enable Signal	Not Used			
MIL	E31	Malfunction Indicator Lamp	FAN2	Fan 2	25	Fan 2 Output programmable as MIL