AiM Infotech

Ford Focus

Release 1.04

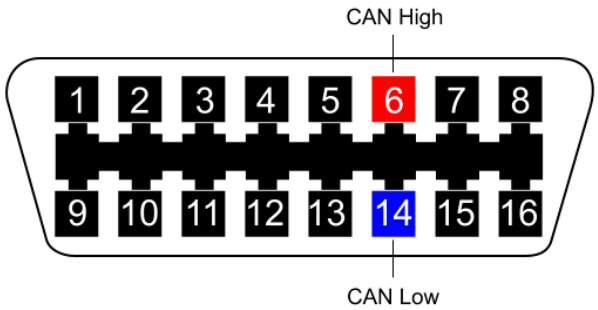
1 Car models and years

This tutorial explains how to connect Ford Focus cars to AiM devices. Supported car models and years are:

- Ford Focus 2003-2004 all models
- Ford Focus 2005-2007 all models
- Ford Focus 2008-2012 all models
- Ford Focus from 2013 all models

2 CAN bus connection

Ford Focus cars feature a data communication bus based on CAN on the OBDII plug normally placed left of the steering wheel as shown here below on the left. On the right you see the OBDII connector pinout while under connection table is shown.



Pin number	Pin function	AiM cable label
6	CAN High	CAN+
14	CAN Low	CAN-

3 AiM device configuration

Before connecting the ECU to AiM device set this up using AiM Race Studio software. The parameters to select in the device configuration are:

- ECU manufacturer “Ford” and, according to your Focus production year
- ECU Model
  - “Focus_PZEV_2003/04”
  - "Focus_2005/07"
  - "Focus_2008"
  - "Focus_2013"

4 Available channels

Channels received by AiM devices connected to Ford Focus depends on the selected protocol.

4.1 Ford "Focus_PZEV_2003/04" protocol

Channels received by AiM devices connected to "Ford" "Focus_PZEV_2003/04" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	F_RPM	RPM
ECU_2	F_SPEED	Speed
ECU_3	F_PEDAL_POS	Pedal position sensor
ECU_4	F_TENGINE	Engine temperature
ECU_5	F_FUEL_PULSE	Fuel pulse
ECU_6	F_FUEL_LEVEL	Fuel level
ECU_7	F_TYRE_FRONT	Front tyre circumference

ECU_8	F_TYRE_REAR	Real tyre circumference
ECU_9	F_BRAKE_SWITCH	Brake switch

Technical note: not all data channels outlined in the ECU template are validated for each manufacturer model or variant; some of the outlined channels are model and year specific and therefore may not be applicable.

4.2
Ford "Focus_2005/07" protocol

Channels received by AiM devices connected to "Ford" "Focus_2005/07" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	F_RPM	RPM
ECU_2	F_SPEED	Speed
ECU_3	F_PEDAL_POS	Pedal position sensor
ECU_4	F_WH_SPD_FL	Front left wheel speed
ECU_5	F_WH_SPD_FR	Front right wheel speed
ECU_6	F_WH_SPD_RL	Rear left wheel speed
ECU_7	F_WH_SPD_RR	Rear right wheel speed
ECU_8	F_TENGINE	Engine temperature
ECU_11	F_FUEL_PULSE	Fuel pulse
ECU_12	F_FUEL_LEVEL	Fuel level
ECU_13	F_TYRE_FRONT	Front tyre circumference
ECU_14	F_TYRE_REAR	Rear tyre circumference

Technical note: not all data channels outlined in the ECU template are validated for each manufacturer model or variant; some of the outlined channels are model and year specific and therefore may not be applicable.

4.3
Ford "Focus_2008" protocol

Channels received by AiM devices connected to "Ford" "Focus_2008" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	F_RPM	RPM
ECU_2	F_SPEED	Speed
ECU_3	F_PEDAL_POS	Pedal position sensor
ECU_4	F_WH_SPD_FL	Front left wheel speed
ECU_5	F_WH_SPD_FR	Front right wheel speed
ECU_6	F_WH_SPD_RL	Rear left wheel speed
ECU_7	F_WH_SPD_RR	Rear right wheel speed
ECU_8	F_ECT	Engine coolant temperature
ECU_9	F_GEAR	Engaged gear
ECU_10	F_BRK_SW	Brake switch
ECU_11	F_FFLOW	Fuel flow
ECU_12	F_FUEL_LEV	Fuel level
ECU_13	F_MIL_TELTAL	Malfunction Indicator lamp
ECU_14	F_FAILSAFE_COOL	Failsafe coolant tell tale
ECU_15	F_ETC_TELTAL	Electronic traction control tell tale
ECU_16	F_ABS_TELTAL	ABS Tell tale
ECU_17	F_TCS_ENG	Engine traction control system

Technical note: not all data channels outlined in the ECU template are validated for each manufacturer model or variant; some of the outlined channels are model and year specific and therefore may not be applicable.

4.4
Ford "Focus_2013" protocol

Channels received by AiM devices connected to "Ford" "Focus_2013" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	ECU_RPM	RPM
ECU_2	ECU_GEAR	Engaged gear
ECU_3	ECU_PPS	Pedal position sensor
ECU_4	ECU_BRAKE_SW	Brake switch
ECU_5	ECU_SIGN_STEER	Steering sign
ECU_6	ECU_STEER_ANG	Steering angle
ECU_7	ECU_TRQ_ACTUAL	Actual torque
ECU_8	ECU_TURBO_PRESS	Turbo pressure
ECU_9	ECU_ENG_OIL_TMP	Engine oil temperature
ECU_10	ECU_WH_SPD_FL	Front left wheel speed
ECU_11	ECU_WH_SPD_FR	Front right wheel speed
ECU_12	ECU_WH_SPD_RL	Rear left wheel speed
ECU_13	ECU_WH_SPD_RR	Rear right wheel speed
ECU_14	ECU_DRV_SLIP	Driven slip
ECU_15	ECU_BRAKE_TRQ	Brake torque
ECU_16	ECU_BARO_PRESS	Barometric pressure
ECU_17	ECU_OIL_PRES_SW	Oil pressure switch
ECU_18	ECU_AMB_TEMP	Ambient temperature
ECU_19	ECU_ENGINE_TEMP	Engine temperature
ECU_20	ECU_INTAKE_AIR_T	Intake air temperature
ECU_21	ECU_FUEL_LEV	Fuel level
ECU_22	ECU_BATTERY	Battery supply

Technical note: not all data channels outlined in the ECU template are validated for each manufacturer model or variant; some of the outlined channels are model and year specific and therefore may not be applicable.