

AiM Infotech

Vortex X10

Release 1.00



ECU



This tutorial explains how to connect AiM devices to Vortex X10 ECU.

1

Wiring connection

Vortex X10 features a data transmission buses based on CAN on the 7 pins male connector highlighted here below on the left.



Here below you see connection table.

Pin number	Pin function	AiM cable
1	CAN high	CAN+
6	CAN Low	CAN-



2

AiM Logger configuration

Before connecting AiM device to the ECU set it up as follows:

Run Race Studio 2 software and select:

- Device Configuration -> select the device you are using;
- select the configuration or press "New" to create a new one;
- select ECU manufacturer "Vortex" and ECU Model "X10";
- transmit the configuration to the device pressing "Transmit".

3

Available channels

Channels received by AiM loggers connected to "Vortex" "X10" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	VX_RPM	RPM
ECU_2	VX_TPS	Throttle position sensor
ECU_3	VX IGN_ANGLE	Ignition angle
ECU_4	VX_INJ_TIME	Injection time
ECU_5	VX_MAP_SEL_SW	Map selection switch
ECU_6	VX_LOW_TRIM_SW	Low trim switch
ECU_7	VX_MID_TRIM_SW	Middle trim switch
ECU_8	VX_HIGHTRIM_SW	High trim switch
ECU_9	VX_TPS_RATE	Throttle position rate
ECU_10	VX_MANIFOLD_PR	Manifold air pressure
ECU_11	VX_AN1_IN	Analog input 1
ECU_12	VX_AN2_IN	Analog input 2
ECU_13	VX_AN3_IN	Analog input 3
ECU_14	VX_AN4_IN	Analog input 4



ECU_15	VX_AN5_IN	Analog input 5
ECU_16	VX_AN6_IN	Analog input 6
ECU_17	VX_VIGN	Ignition voltage
ECU_18	VX_BAROM_PR	Barometric pressure
ECU_19	VX_IAT_F_TRIM	Intake air temperature on fuel trim
ECU_20	VX_ECT_F_TRIM	Engine coolant temperature on fuel trim
ECU_21	VX_BARO_F_TRIM	Barometric pressure on fuel trim
ECU_22	VX_ACC_F_TRIM	Acceleration on fuel trim
ECU_23	VX_IAT	Intake air temperature
ECU_24	VX_ECT	Engine coolant temperature
ECU_25	VX_FAULT_CODE	Fault code
ECU_26	VX_INJ_DUTY	Injection duty cycle
ECU_27	VX_INJ_END_A	Injection end angle
ECU_28	VX_FS_INJ_TRIM	First injection trim
ECU_29	VX_ENG_KILL	Engine killing
ECU_30	VX_FLOOD_CLEAR	Flood clearance
ECU_31	VX_DIG_IN1	Digital input 1
ECU_32	VX_DIG_IN2	Digital input 2
ECU_33	VX_DIG_IN3	Digital input 3
ECU_34	VX_DIG_IN4	Digital input 4
ECU_35	VX_DIG_OUT1	Digital output 1
ECU_36	VX_DIG_OUT2	Digital output 2
ECU_37	VX_DIG_OUT3	Digital output 3
ECU_38	VX_DIG_OUT4	Digital output 4