AiM Infotech

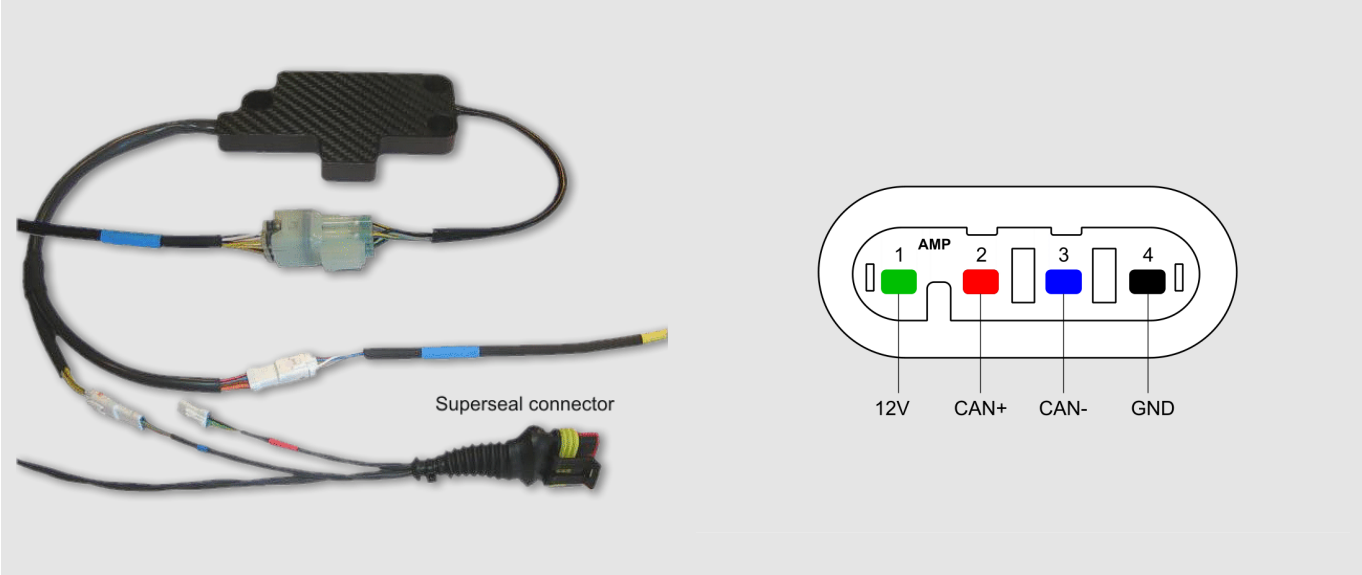
Nemesis TCS Kit

Release 1.00

This tutorial explains how to connect Nemesis TCS kit to AiM devices.

1 Wiring connection

Nemesis TCS kit communicates using the CAN protocol on the 4 ways Superseal connector that comes with the kit. Here below the Superseal connector on the left, its pinout on the right and the connection table.



AMP connector pin	Pin function	Nemesis cable colour	AiM cable
1	12V	Red	+Vb
2	CAN+	Green	CAN+
3	CAN-	Yellow	CAN-
4	Ground	Black	GND

2
AiM Logger configuration

Once the ECU connected to the logger, this last one is to be configured as connected to that ECU.

Run Race Studio 2 software and follow this path:

- Device Configuration –> Select the device you are using;
- select the configuration or press “New” to create a new one;
- select ECU manufacturer “Nemesis” and ECU Model “TCS”;
- transmit the configuration to the device pressing “Transmit”.

3
Available channels

Channels received by AiM devices connected to Nemesis TCS protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	TCS_RPM	RPM
ECU_2	TCS_WHEEL_F	Front wheel speed
ECU_3	TCS_WHEEL_R	Rear wheel speed
ECU_4	TCS_TPS	Throttle position sensor
ECU_5	TCS_BATTVOLT	Battery supply
ECU_6	TCS_TPS_VOLT	Throttle position sensor voltage
ECU_7	TCS_T_IGNCOIL1	Time of ignition coil cylinder 1
ECU_8	TCS_T_IGNCOIL2	Time of ignition coil cylinder 2
ECU_9	TCS_T_IGNCOIL3	Time of ignition coil cylinder 3
ECU_10	TCS_T_IGNCOIL4	Time of ignition coil cylinder 4
ECU_11	TCS_TC_MAP_LEV	Traction control on map switch
ECU_12	TCS_TC_SLIP_COR	Traction control slip correction
ECU_13	TCS_QUICK_SHFT	Quick shift
ECU_14	TCS_QUICK_RET	Quick shift retard in degrees
ECU_15	TCS_TL_TEETH_F	Lowest time period between front speed signal teeth in uSec
ECU_16	TCS_TH_TEETH_F	Highest time period between front speed signal teeth in uSec
ECU_17	TCS_TL_TEETH_R	Lowest time period between rear speed signal teeth in uSec
ECU_18	TCS_TH_TEETH_R	Highest time period between rear speed signal teeth in uSec
ECU_19	TCS_DIAG_ERR1	Diagnosis error 1
ECU_20	TCS_DIAG_ERR2	Diagnosis error 2
ECU_21	TCS_DIAG_ERR3	Diagnosis error 3
ECU_22	TCS_DIAG_ERR4	Diagnosis error 4
ECU_23	TCS_MIN_SPEED	Minimum speed
ECU_24	TCS_MIN_TPS	Throttle position sensor minimum value
ECU_25	TCS_WH_DETEC	Wheelie detection

ECU_26	TCS_WH_ACTIV	Wheelie active
ECU_27	TCS_QS_STATUS	Quick shift status
ECU_28	TCS_QS_REQUEST	Quick shift requests
ECU_29	TCS_QS_CUTTING	Quick shift cutting
ECU_30	TCS_TC_EN_POD	Traction control enabled by pod (personal output digital)
ECU_31	TCS_QS_EN_POD	Quick shift enable by pod (personal output digital)
ECU_32	TCS_PIT_LIM	Pit limitation by pod
ECU_33	TCS_TC_EN_DB	Traction control enabled by database
ECU_34	TCS_TC_ACT	Traction control active
ECU_35	TCS_QS_ACT	Quick shift active
ECU_36	TCS_SPEED_LIM	Actual pit lane speed limiter
ECU_37	TCS_TC_VOLT	Traction control voltage
ECU_38	TCS_TC_TEMP	Traction control temperature