

SETUP GUIDE



Bosch Motorsports MS 4.0 ECU to CD Dash

Supported Devices

Bosch Motorsports MS 4.0 ECU

CAN Bus Wiring

AEM CD has 2 separate CAN ports. For 3rd party devices, AEM recommends you use AEM CAN Bus 2, whose connections are contained in a 2 pin Deutsch DTM connector. On older harnesses it may be in an unterminated, twisted/shielded flying lead in the dash harness.

MS4.0 CAN Hi → AEM CD "CAN 2" Pin 1 (CAN 2+), Gray wire in twisted/shielded pair

MS4.0 CAN Lo → AEM CD "CAN 2" Pin 2 (CAN 2-), Black wire in twisted/shielded pair

ECU Software Setup

Please follow the Bosch Motorsports instructions for enabling the CAN data stream if necessary.

Supported Channels

AEM supports the following 110 channels transmitted by the Bosch MS 4.0 ECU:

AFR1	AFR1ControlState	AFR1ControlTrim
AFR1Temp	AFR2	AFR2ControlState
AFR2ControlTrim	AFR2Temp	AFRControl1_I_Component
AFRControl1_P_Component	AFRControl2_I_Component	AFRControl2_P_Component
AFRTarget	AirboxPress	BaroPress
CamSignalState	CamSyncPos	CoolantPress
CoolantTemp	ECU_Lap	ECU_LapTriggerPresent
ECUBatteryVoltage	EngineCrankcasePress	EngineModeSwitchStatus
EngineRotatingState	EngineRunningState	EngineSpeed
EngineSpeedLimitState	EngineSyncState	ExhaustTemp1
ExhaustTemp2	FuelAccelPumpState	FuelCut
FuelCutInStatus	FuelCutStatus	FuelInj1Pulsewidth
FuelInj2Pulsewidth	FuelInj3Pulsewidth	FuelInj4Pulsewidth
FuelInj5Pulsewidth	FuelInj6Pulsewidth	FuelInj7Pulsewidth
FuelInj8Pulsewidth	FuelInjBatteryOffset	FuelInjEndAngle

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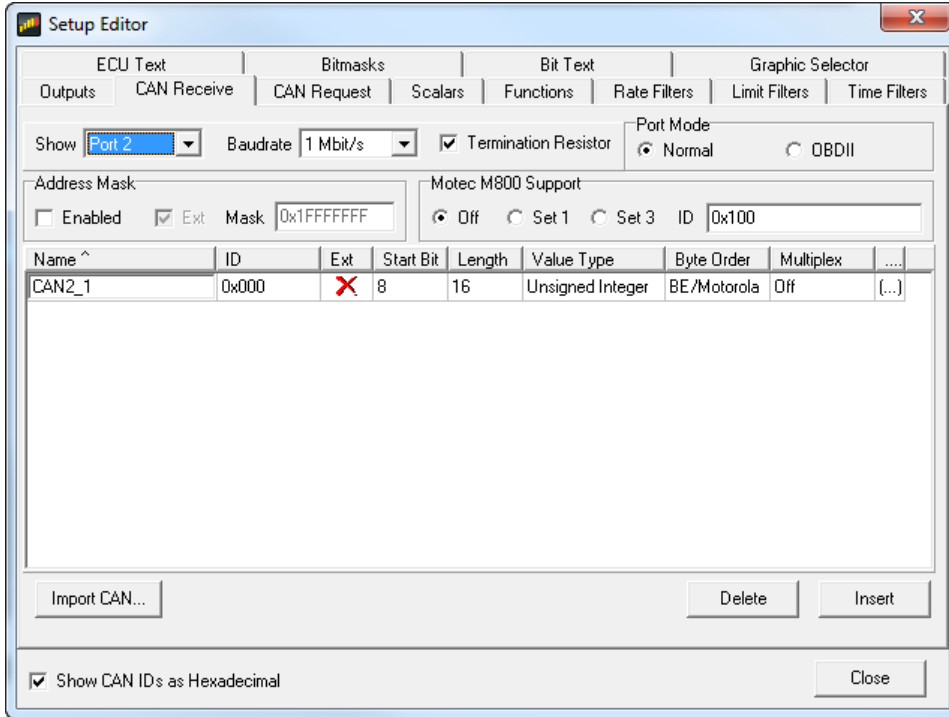
FuelInjMapPulsewidth	FuelInjPulsewidth	FuelInjStartPhase
FuelPress	FuelTankLevel	FuelTemp
FuelUsedCurrLap	GearboxRatioCalculated	Gearddu
GearPosCalculated	GearShiftCutState	GearShiftCutState
GearShiftSwitch	IdleControl	IgnitionCutState
Ignition dwellTime	IgnitionMapTiming	IgnitionTiming
IgnitionTimingCyl1	IgnitionTimingCyl2	IgnitionTimingCyl3
IgnitionTimingCyl4	IgnitionTimingCyl5	IgnitionTimingCyl6
IgnitionTimingCyl7	IgnitionTimingCyl8	IndicatorBatteryState
IndicatorLowOilPressState	IndicatorLowOilPressState	IndicatorMILState
IndicatorShiftLED1	IndicatorShiftLED2	IndicatorShiftLED3
IndicatorShiftLED4	IndicatorShiftLED5	IntakeManifoldAirTemp
KnockAdaptEnabledState	KnockEnabledState	LapDistance
LapNumber	LapTimeCurrent	LapTimeDelta
LapTimeFastest	OilPress	OilTemp

Layout Overview & CAN Setup

You can either start with a new dash layout by selecting "File" then "New" in DashDesign or you can select from a pre-designed layout that has screens already designed and inserted but has the CAN inputs left blank. These are chosen by selecting "File" then "Open" and selecting one of the setups titled xzyblank.aemcd7 with the xyz representing a description of the layouts contained in the file.

To import the CAN setup you select SETUP then DISPLAY from the main DashDisplay menu. Once the dialog box opens you select the "CAN Receive" tab.

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Change the settings to the following:

Show: "Port 2"

Baudrate: 1 Mbit/s

Termination Resistor: "ON"

Address Mask: "OFF"

M800 Support: "OFF"

Then click on "Import CAN" on the lower left and select the can setup file. The new items will appear in the Outputs tab. They can now be viewed on the display or logged. You can rename, filter, or manipulate any of these channels to make them more useful.