### **SETUP GUIDE**



#### **Supported Devices**

#### BigStuff3 Gen4 Pro Xtreme EFI to CD Dash

# **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.

BS3 GEN4 CAN Hi (Hdr1 Pin N1)  $\rightarrow$  AEM CD "CAN 2" Pin 1 (CAN 2+), Gray wire in twisted/shielded pair BS3 GEN4 CAN Lo (Hdr1 Pin N2)  $\rightarrow$  AEM CD "CAN 2" Pin 2 (CAN 2-), Black wire in twisted/shielded pair

Please follow the BigStuff3 instructions for adding a resistor on the ECU side of the bus (if necessary). The CD has a software selectable termination resistor available so if you are hooking the CD directly up to the BS3 Gen4 then you need to activate the termination resistor in the CD.

#### **ECU Software Setup**

Please follow the BigStuff3 instructions for enabling the CAN data stream if necessary.

### **Supported Channels**

The BigStuff3 Gen4 Pro Xtreme EFI transmits 32 unique channels to the CD.

CD Channel Name	BS3 Gen4 Name	Transmitted Speed			
EngineSpeed	Engine_Speed	100hz			
ThrottlePos	Throttle_Position	100hz			
IgnitionTiming	Spark_Advance	100hz			
FuelPress	Fuel_Pressure	100hz			
OilPress	Eng_Oil_Pressure	100hz			
EngineCrankcasePress	Pan_Vacuum	100hz			
CoolantTemp	Coolant_Temp	10hz			
IntakeManifoldAirTemp	Air_Temp	10hz			
OilTemp	Eng_Oil_Temp	10hz			
AFRLeft	Left_Bank_Afr_Actual	100hz			
AFRRight	Right_Bank_Afr_Actual	100hz			

This product is legal in California for racing vehicles only and should never be used on public highways. AEM Performance Electronics, 2205 W. 126th Street Unit A, Hawthorne, CA 90250, Phone: (310) 484-2322 Fax: (310) 484-0152

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CD Channel Name	BS3 Gen4 Name	Transmitted Speed			
AFRTargetLeft	Left_Bank_Afr_Desired	100hz			
AFRTargetRight	Right_Bank_Afr_Desired	100hz			
AFRControlTrimLeft	Left_Bank_O2_Corr	100hz			
AFRControlTrimRight	Right_Bank_O2_Corr	100hz			
TC_Command	TC_Command	10hz			
TracControlSlipMeasured	TCC_Slip	100hz			
VehicleSpeed	Vehicle_Speed	100hz			
VehicleLongitudinalG	Accelerometer	100hz			
GearPosCalculated	Gear	100hz			
GearboxLinePress	Trans_Line_Pressure	100hz			
GearboxTemp	Trans_Oil_Temp	10hz			
Boost_Index	Boost_Index	10hz			
BoostPress	Boost	100hz			
BoostControlOutput	Duty_Cycle	100hz			
TurboSpeed	Turbo_Speed_1	100hz			
TurboSpeed2	Turbo_Speed_2	100hz			
NitrousOutputStage	Nos_Stage	100hz			
NitrousBottlePress	NOS_Bottle_Pressure	100hz			
ECUBatteryVoltage	Battery_Voltage	100hz			
FSL_Command	FSL_Command	10hz			
FSL_Index	FSL_Index	100hz			

# 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.

### **SETUP GUIDE**



Mage Setup Editor								×
ECU Text	1	Bitmasł	s		Bit Text	Gr	aphic Sele	ector
Outputs CAN Receive CAN Request Scalars Functions Rate Filters Limit Filters Time Filters							Time Filters	
Show Port 2  Baudrate 1 Mbit/s  Fort Termination Resistor Port Mode OBDII								
Address Mask			- M	otec M800	Support			
Enabled VExt Mask Ox1FFFFFFF Off C Set 1 C Set 3 ID Ox100								
Name ^	ID	Ext	Start Bit	Length	Value Type	Byte Order	Multiple:	
CAN2_1	0x000	X	8	16	Unsigned Integer	BE/Motorola	Off	()
							1	
Import CAN						Delete		Insert
Show CAN IDs as He	adecimal							Close

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.