

Ethanol Content Analyzer ECA-2 CAN Bus

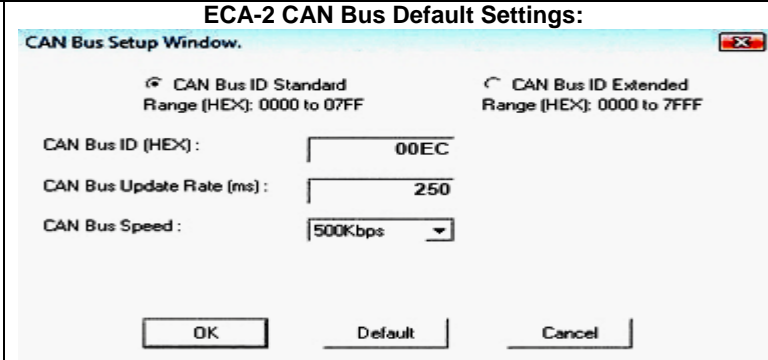
Installation

The Zeitronix Ethanol Content Analyzer (ECA-2 CAN Bus) should be mounted in the vehicle cabin. Before mounting the ECA-2 CAN Bus, plan the wiring route from the flex fuel sensor connector to the ECA-2 CAN Bus.

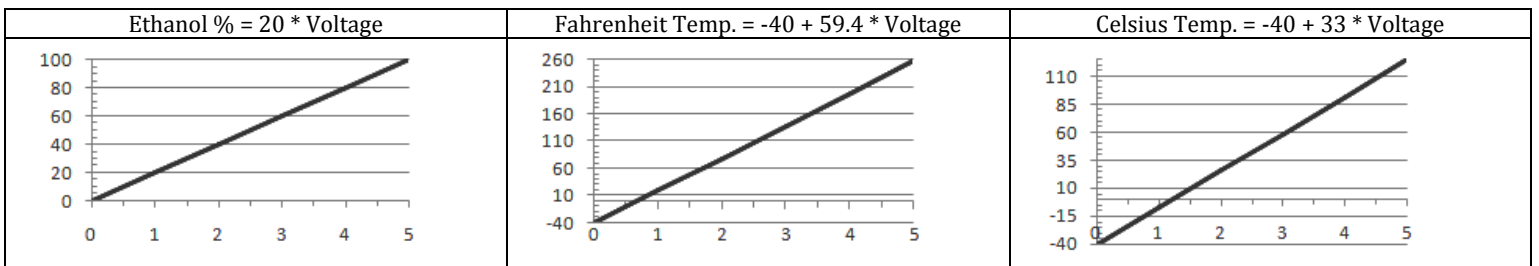
If retrofitting a vehicle with a flex fuel sensor, a professional sensor installation is required. Always check for fuel leaks!

ECA-2 CAN Bus Sig. Harness Wire Colors	Function
RED	+12 volt switched power connection (ex: ignition)
BLACK	Ground connection
GREEN	Flex Fuel Sensor Output
BLUE	Fuel Temperature analog output
WHITE/BLUE	Ethanol Percentage analog output
GREY	Fuel Temperature Units Display Toggle (for optional gauge)
WHITE/RED	CAN Bus + (High)
WHITE/BLACK	CAN Bus - (Low)

Flex Fuel Sensor Harness: ECA-2 CAN Bus comes with plug and play Flex Fuel Sensor Harness. Connect 4 pin end to the ECA CAN Bus SENSOR port, Connect the Flex Fuel Sensor 3 pin connector to the Flex Fuel Sensor.

Supported ECA-2 CAN Bus Specifications:	ECA-2 CAN Bus Default Settings:
<p>User selectable CAN Bus Speed: 1Mbps, 500 Kbps, 250 Kbps, 125 Kbps</p> <p>User selectable CAN Bus ID: Standard (11 bit) and Extended (29 bit)</p> <p>User selectable CAN Bus address: 0x0000 to 0x7FFF</p> <p>User selectable CAN Bus update rate: 1ms (1000Hz) to 250ms (4 Hz)</p> <p>120 ohm termination- None</p> <p>CAN DATA: Data 0 : E % = 8 bit Data 1 : Fuel Temperature (C) = 8 bit - 40 Data 7 : FF Sensor Status 0x00 Sensor OK 0x01 Sensor fault</p>	 <p style="text-align: center;">CAN Bus ID Standard (11 bit) CAN Bus ID (HEX) 0x00EC CAN Bus Update Rate 250 ms (4 Hz) CAN Bus Speed 500 Kbps Use Zeitronix ZDL Software to change settings.</p>

Analog Outputs, Both analog outputs are linear	Signal	Range
Ethanol Percentage (white/blue wire)	0-5 volts	0% to 100%
Fuel Temperature (blue wire)	0-5 volts	-40 to 125 C (-40 to 257F)



Ethanol Concentration and Fuel Temperature Gages

Zeitronix offers plug-in Ethanol Content and Fuel temperature gages. The Gauge plugs and powers directly from the ECA-2 CAN Bus GAUGE port.

Temperature Units (Fahrenheit/ Celsius)

Fuel temperature is displayed on the Gauge in Fahrenheit. To display fuel temperature in Celsius connect ECA-2 signal harness GRAY wire to ground.

Troubleshooting

The LED located between Signal and Gauge connectors turn solid after ECA is powered up. The LED remains solid if there is no signal from Flex Fuel Sensor. E Gauge displays E - - in this case. Once the Flex Fuel Sensor signal is present LED blinks in a fast pace and E Gauge displays Ethanol Content.

Use with gasoline and ethanol fuel mixtures. **Guarantee a minimum flow through the sensor to eliminate any air bubbles. Air bubbles inside of the sensor will cause incorrect readings.**

Additional information can be found online at: www.zeitronix.com/Products/ECA/ECA2CAN.shtml

Warning! The Zeitronix Ethanol Content Analyzer (ECA) is for automotive and off road use only. Never place the Zeitronix ECA in a location which obstructs your view. Do not expose to moisture or extreme heat. Do not modify or tamper with the Zeitronix ECA. Zeitronix Inc. is not responsible for any damages caused through use of the Zeitronix Ethanol Content Analyzer. **Assure no fuel leaks!**