

## Ethanol Content Analyzer ECA-2

### Installation

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

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

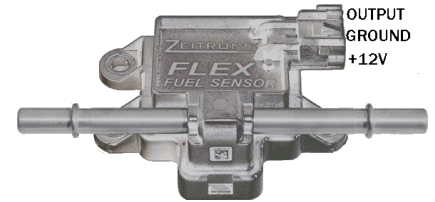
### Flex Fuel Sensor Harness

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

Only 2 wires of ECA-2 Sinal Harness need to be connected for the ECA-2 operation.

**RED** +12V  
**BLACK** Ground  
**GREEN** **OPTIONAL** Flex Fuel Sensor Output Signal  
 (ONLY IF ZEITRONIX FF HARNESS IS **NOT** USED.)

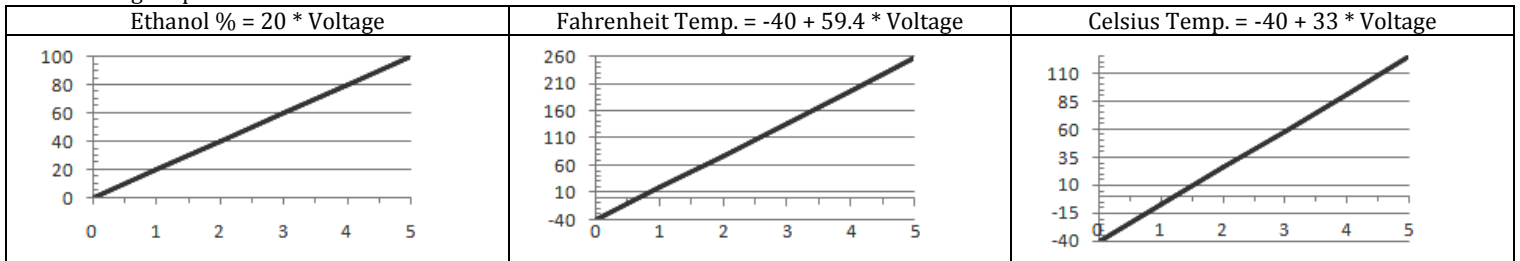
Flow Through Flex Fuel Sensor Pinout  
 Image for reference only



<i>ECA Sig. Harness Wire Colors</i>	<i>Function</i>
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)

<i>Analog Outputs</i>	<i>Signal</i>	<i>Range</i>
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)

Both analog outputs are linear



### Ethanol Concentration and Fuel Temperature Gagues

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

### Temperature Units (Fahrenheit/ Celsius)

Fuel temperature is displayed on the Gauge in Celsius. To display fuel temperature in Fahrenheit 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/ECA.htm](http://www.zeitronix.com/Products/ECA/ECA.htm)

**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!**