

## Ethanol Content Analyzer

### Installation

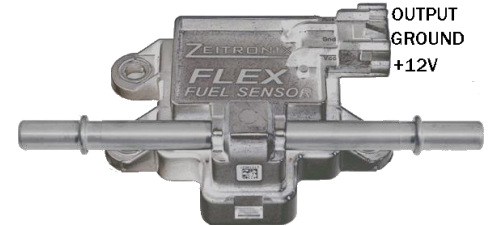
The Zeitronix Ethanol Content Analyzer (ECA) should be mounted in the vehicle cabin. Before mounting the ECA, plan the wiring route from the flex fuel sensor connector to the ECA display. Connections to the ECA gauge wires shall be made inside the vehicle cabin. Extend the ECA green signal wire as needed to connect to the output signal of the flex fuel sensor. Connect the ECA green wire to the sensor output pin shown on the picture. ECA Kit includes the ECA, Flex Fuel Sensor and ECA Harness to connect to the Flow Through Flex Fuel Sensor.

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

Only 3 wires need to be connected for the ECA gauge operation.

- ORANGE**            +12V
- BROWN**            Ground
- GREEN**             Sensor output

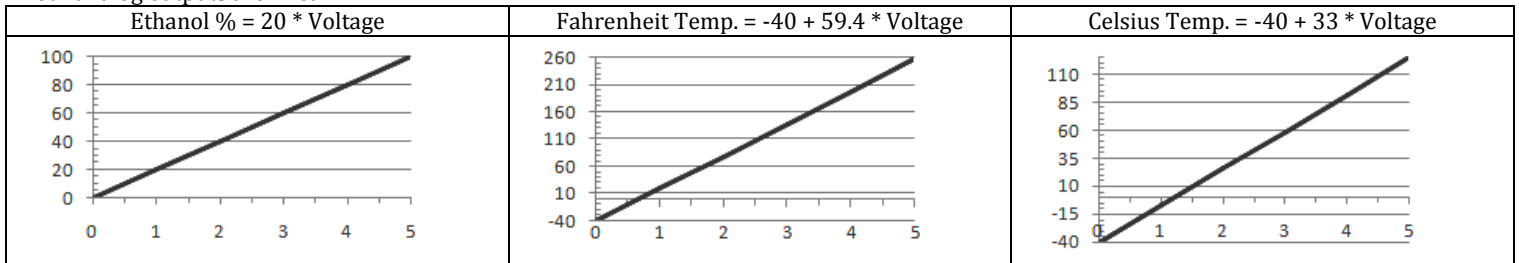
Flow Through Flex Fuel Sensor Pinout



ECA Wire Colors	Function
ORANGE	<b>+12 volt</b> switched power connection (ex: ignition)
BROWN	<b>Ground</b> connection
GREEN	<b>Fuel Sensor Output</b>
BLUE	Fuel Temperature analog output
WHITE/BLUE	Ethanol Percentage analog output
WHITE/GREEN	Ethanol Content / Fuel Temperature <b>Display Toggle</b>

Analog Outputs	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)

Both analog outputs are linear

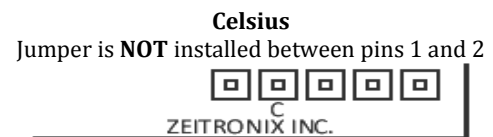


### Ethanol Concentration and Fuel Temperature Display

To switch the display between displaying percentage of ethanol content and fuel temperature, connect the WHITE/GREEN wire to ground. To switch back to showing ethanol content, disconnect the WHITE/GREEN wire from ground. An optional toggle switch can be used to ground WHITE/GREEN wire. Both analog outputs are present at all times and are independent of WHITE/GREEN wire connection.

### Temperature Units (Fahrenheit/ Celsius)

F and C are displayed as temperature unit indicator on the ECA gauge in temperature mode. The ECA is set from the factory to display temperature in Fahrenheit and comes with installed jumper. To access the 5 pin header and the jumper remove 2 screws and the end cap from the bottom of the ECA gauge.



### Troubleshooting

In the case of an error the Zeitronix ECA will read "ESeN" (Error Sensor). This can be caused by a disconnected sensor, incorrectly wired connection, poor wiring connection to the sensor, or a bad sensor.

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!**