



The following steps may be used to calibrate the aux display so that it displays fuel level in gallons, or any desired units.

Decide if you would like to display fuel with a resolution of 0.1 (decimal), or 1 (integer). For Model 2000 instruments, the auxiliary input is pre-set to 0.1 (decimal) or 1 (integer) resolution. Model 4000/6000/9000 can be user-configured using the I/D entry (integer/decimal) on the configuration set pages. Generally we recommend using a resolution of 1.

1. Start by setting AuxSF to 100, and AuxOff to 0, and the Aux Forward/Reverse to Forward (On the Configuration Set Pages). The Aux display should now read a value other than zero. If it still reads zero, check your wiring. It is suggested the following step be performed with the airplane in its flight attitude.

2. Write the Empty tank reading displayed on the EIS here _____
When draining fuel from the tank, the EIS auxiliary display may stop changing before the tank is empty. You may wish to note the amount of fuel remaining in the tank when the reading stops changing, as this fuel will not be sensed by the fuel level sensor, and in effect will be reserve fuel (that is, fuel remaining when the fuel level reading shows empty.)

3. Write the Full tank reading displayed on the EIS here _____
Note: As fuel is added to the tank, the EIS auxiliary display will change. Once the sending unit reaches its limit of travel, the reading will stop changing, even as more fuel is added. Note the amount of fuel in the tank when the reading stops changing, as this may be useful in step 6.

4. If the full tank reading is less than the empty tank reading, set the auxiliary Forward/Reverse selection to Reverse, and repeat steps 2 and 3.

5. Subtract the Empty Tank Reading from the Full Tank Reading. Enter the difference here. _____

6. Write down the reading you want to see when the tank is full. _____
Note that in many tanks, the sending unit will reach its maximum travel before the tank is full of fuel. If this is the case with your tank, we recommend using this as your full tank reading. For example, if you note that the auxiliary display stops changing after 12 gallons of fuel is added to a 15 gallon tank, we suggest you use 12 gallons as your full tank reading. When more than 12 gallons of fuel is in the tank, the EIS will display 12, but this typically provides more accurate readings below 12 gallons, where accuracy is most desirable.

7. Divide line 6 by line 5 (line 6/line 5) _____

8. Multiply line 7 times 100. Round this to the nearest whole number. This is the AuxSF you will enter _____

9. Multiply line 2 times line 7. If your auxiliary input being used to display fuel level includes a decimal point in the display, then multiply this result by 10. Write down the result, rounding it to the nearest whole number. _____

10. Multiply line 9 by 2. _____

11. Subtract 1 from line 10. This is the AuxOff _____ (This must be an odd number)

CAUTION: Be sure to connect the resistor as shown. Connecting power directly to the sensor will damage it.

Use of Float-type Variable Resistive Fuel Level Sender with EIS Auxiliary Input

Grand Rapids Technologies, Inc.