# FUEL GAUGE INTERFACE MODULE

## **INSTRUCTION MANUAL**



**Match Box Fuel Gauge Interface Module** 



## **IMPORTANT!**

Read the manual before attempting to install this unit. This will make for an easier installation and eliminate any errors in wire connections that can lead to catastrophic failure which is not covered by warranty.

This unit is not water tight and must be mounted in an area free of moisture, high heat and dirt. We suggest mounting it under the dash. It can be secured with Zip straps or double sided tape. Do not drill holes thru box or disassemble. This will VOID the warranty.

Thank you for purchasing this high quality US MADE product. If after reading this manual you have any tech questions please call 386-212-1611.

# **Fuel Gauge Interface Unit**

#### **Background:**

Fuel level gauges are designed to work with specific sending units that vary with different automobile manufacturers. Some increase resistance from Empty to Full while others decrease as the level goes up. For the person updating his vehicle with new gauges, this presents a problem in that the aftermarket gauges must match the sending unit located in the tank. This module will allow you to use your stock sender with any fuel gauge. You no longer have to remove the tank to add a separate sending unit or modify the sending unit that came with your gauges to fit the stock sending unit in the tank.

#### Flexible Setup:

#### Sender:

Seven types of standard sending units can be selected by a specific DIP switch configuration. Additionally a custom sending unit or an unknown sender can be designated by calibrating the full and empty positions.

#### Gauge:

The user will adjust a trimming potentiometer while Observing the gauge needle to set Full and Empty positions.

#### Low Level:

The module can send a ground signal (200 milliamps Max) to a relay (not supplied) that will turn on a light when 15% of the fuel is left in the tank.

#### Anti Slosh:

The Module has an anti slosh feature built in. This will keep the gauge needle steady even though the fuel in the tank is moving.

# **Connections**

#### **RED:**

+12 Volts switched on with ignition (I) terminal on most gauges.

#### YELLOW:

Fuel sender (unit located in tank). Prior to connecting the unit check the lead from the sender with a volt meter. There must not be any voltage. (IF THIS WIRE IS CONNECTED TO 12 VOLTS UNIT WILL BE DAMAGED AND WARRANTY IS VOID.)

#### **GREEN:**

Connected to the fuel gauge (**S**) terminal. (IF THIS WIRE IS CONNECTED TO 12 VOLTS UNIT WILL BE DAMAGED AND WARRANTY IS VOID.)

#### WHITE:

Low fuel light (Grounded when 15% fuel remains, 20 milliamps max current) Note: a relay must be used to operate remote low fuel light. If using a LED light a relay Is not needed.

### **BLACK:**

Chassis ground or (G) terminal on gauge.

## **Fuel Sender Select**

## Set switches before unit is powered up

Positions 1,2 and 3 Set the type of Sender Switch 8 is not used. Set it to the off position.



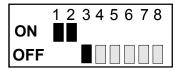
Type 0 0-90 ohm GM 65 to Present



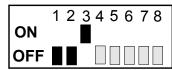
Type 1 240-33 Aftermarket



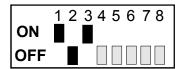
Type 2 0-30 GM pre 65



Type 3 158-16 Ford 87 Up



Type 4 73-10 Ford, Chrysler & VW



Type 5 10-180 VDO

	1	2	3	4	5	6	7	8
ON								
OFF								

Type 6 Future

	1	2	3	4	5	6	7	8
ON								
OFF								

Type 7
Custom- User sets Empty and Full Points
(see next section)

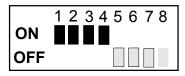


# **Custom Program Fuel Sender**

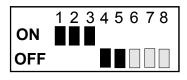
### Power unit up for this procedure

Use this procedure if you do not know which fuel sender you have or if you want to calibrate your sender to your fuel tank.

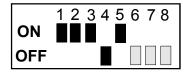
If calibrating fuel sender in the tank we have found adding 1 to 2 gallons of fuel to an empty tank then setting empty point of sender works best. Then fill tank and set full point.



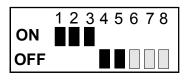
To set **EMPTY** point: Set the DIP switches **1,2 & 3** to ON Move sending unit arm to empty Set DIP switch **4** to ON.



When the LED begins to **BLINK**, set DIP switch **4** to OFF.



To set **FULL** point: Set the DIP switches **1,2 & 3** ON Move sending unit arm to full Set DIP switch **5** to ON.



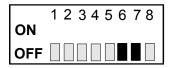
When the LED begins to **BLINK**, set DIP switch **5** to OFF.

Turn off unit for 10 seconds then reconnect. You have now set your fuel sender unit.

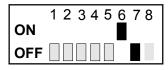
## **Fuel Gauge Calibration**

Power unit up for this procedure

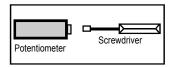
This procedure allows you to adjust exactly where the gauge needle points to show full and empty.



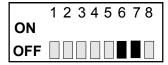
DIP switches 6 & 7 will be used to set fuel gauge Empty & Full points. All other DIP switches will remain in their previously set positions.



To set **Empty** point of the gauge set the DIP switch **6** to ON. LED will blink twice.



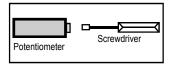
Adjust the potentiometer until the gauge needle aligns with Empty mark you choose on the gauge face.



After setting needle move switch 6 to OFF.
The LED will quickly blink 5 times to confirm setting.



To set **Full** point of the gauge set DIP switch 7 to ON. LED will blink twice.



Adjust the potentiometer until the gauge needle aligns with Full mark you choose on the gauge face.



After setting needle move switch 7 to OFF.
The LED will quickly blink 5 times to confirm setting.

SEE BACK COVER

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# You have successfully matched your fuel gauge to your fuel sending unit. Now go out and have fun.

# **NOTES**