### **USER GUIDE FOR FM101 FUEL TANK INTERFACE**

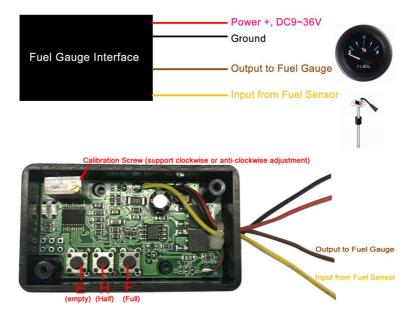
FM101 will convert input resistance signal to a target resistance signal, so that Fuel Gauge can work with different type/range of fuel sensors.

The Full, Half, and Empty position can be programmed.

The "in-between" positions between F,1/2, and E are calculated by the microprocessor and are linear.

The "power on" gauge start position is selected from either the sender position or the programed position.

The output is a npn pulse width modulated signal which may cause "buzzing" in undamped gauges.



#### 1. Instructions

1/Mount module in a clean dry cool position.

2/Connect wires as guide photo above

3/Using store mode, program and store Full, Half, Empty and "Power on" positions.

4/Using **power on mode**,program how you want the gauge to operate when car is started.

5/Operated in run mode and check.

### **IMPORTANT NOTICE**

When adjusting the screw, move gauge from Full to Empty to avoid hysteresis error.

Some gauges are very slow to move. Please allow time to stabilize.

The tank sender must have the same Ground as FM101, otherwise erratic readings will result.

# 2. Store mode

1/Power off .Wait 5 seconds. Press "F" switch and power on then release "F" switch.

2/Red LED only will turn on

3/Set fuel resistor to Full position. Adjust gauge to Full using the calibration screw on FM101.

Press "F" switch then release.

4/Set fuel resistor to 1/2 way. Adjust gauge to 1/2 way using the calibration screw.

Press "H" switch then release.

5/Set fuel resistor to Empty. Adjust the gauge to Empty using the calibration screw.

Press "E" switch then release.

6/Adjust the calibration screw to where you want the gauge to go to when the car is started.

(Usually this will be the position of the pointer when the car is off)

Press "E" and "F" simultaneously then release.

## 3. Power on mode

1/Power off. Wait 5 seconds.

2/Choose where you want the gauge to start from when the car is started(Usually the gauge "off position")

If you want the gauge to start at sender position.(suits bi-metal and cross coil gauges with damping)
Press "E" switch and power on,release "E" switch.

If you want the gauge to start at the preset position(set in store mode step /6).(suits gauges with no damping)
Press "H" switch and power on,Release "H" switch.

3/Green LED will turn on.

#### 4. Run mode

1/Power off, Wait 5 seconds, then power on.

2/Green LED will turn on.