

INSTRUCTIONS

High Output Power 12-24V Low Fuel Warning module

General

This module is designed to work with either resistive senders or voltage senders. It can be connected to the sender alone, or a sender that is already connected to a gauge.

Protected against over voltage up to 35V

Suitable for 12V or 24V negative earth installations only.

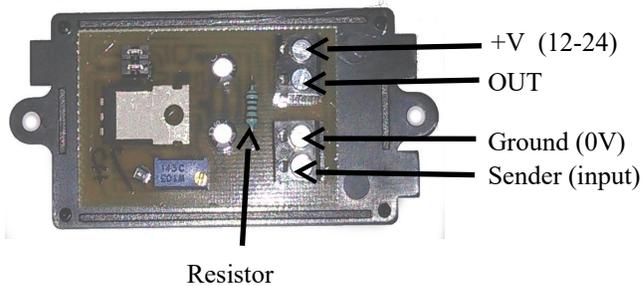
Installation

a) Mounting

The unit should be mounted in a dry location. Temperature -20 to +40 C.

b) Connections..

Connect as per the diagram below.



The Output is a “sink” output which grounds any attached load. The other connection to the load should be to +V.

The input may be connected direct to a resistive sender. In this case, current is supplied to the sender via the resistor.

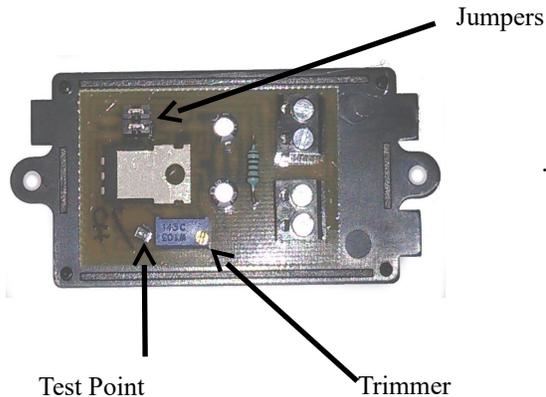
For Voltage senders or senders that already have a gauge connected, one of the leads of the resistor should be cut.

This module is fitted with an anti-slosh circuit.

Anti-slosh is incorporated to prevent the output oscillating on and off when the fuel level changes due to movement of the fuel tank.

The anti-slosh is achieved by responding slowly to input signal changes. This means that when setting the module up, changes in sender position / level will only very slowly be reflected in the output.

Calibration



The jumpers allow the module to activate when the sender voltage rises or when it falls.

For a low fuel sender that is high resistance (high voltage) when empty, the jumpers should be installed across the width of the module



For a sender that is low resistance (low voltage) when empty, the jumpers should be installed in line with the length of the module



The module compares the voltage at the input with a reference voltage set on the trimmer. The reference voltage can be measured at the test point.

The module switches the output low when the voltage from the sensor, as measured on the input pin reaches a voltage which is 3x the voltage on the test point.

In example, if the trimmer is adjusted so that the voltage measured on the test point is 2.2V, then the module will switch low when the input reaches 6.6V.

The test point is provided so that the switch point can be set for a known input voltage.

There is an easy way, rather than measuring and calculating, If you can arrange for the sender to be in the position it will be in when you wish switching to occur, just allow the module to settle for at least 3 minutes (to allow the anti-slosh to stabilise) then adjust the trimmer until the module just switches.

Specifications

- 12 - 35V
- -20 - +40 C.
- < 20mA quiescent current
- Output 15A sink (Max)