

## T/LL13x Liquid Level Sensor Installation Instructions

### Mechanical

The model T/LL130 series is usually vertically mounted but may be mounted at any angle above horizontal so that it covers the whole depth of the tank.

At ½" BSPT thread is used for mounting but an optional SAE flange mounting kit is available. Care must be taken to not over tighten mounting threads or any fastenings during installation.

**Table 1 – Output Type**

Model No	Ohms	Voltage	PWM	Manual Cal. option
T/LL130	✓	✗	✗	✗
T/LL131	✗	✓	✗	✗
T/LL132	✗	✗	✓	✗
T/LL133	✓	✗	✗	✓
T/LL134	✗	✓	✗	✓
T/LL135	✗	✗	✓	✓

### Calibration Instructions (Models 133, 134 & 135 only):

The units will be delivered with a factory calibration for diesel fuel. The full point should be recalibrated for the type of liquid required using the following procedure:

#### Calibration of the full point:

1. Start with the sender fitted to the tank and connected to the power supply.
2. The tank must be filled to the required full level with the liquid for which the sender is to be calibrated.
3. Depress the Cal. Button on the top of the sender and hold for 5 seconds to set the full point calibration. Check that the output reads full.
4. The calibration for the full point can be re-set for a liquid of a differing dielectric constantly by repeating the above procedure.

The empty point can also be calibrated. This may give a marginal improvement in the accuracy of the empty point after the sender has been immersed in the liquid for which calibration is required.

#### Calibration of the full point:

- Remove the sender from the tank, disconnect the power supply and shake off any excess liquid.
- Depress the button on the top of the T/LL133/4/5 and hold.
- Connect the sender to the power supply, while continuing to hold the button for a further 5 seconds. Release the button.
- The empty calibration is now set. Check that the output reads zero.

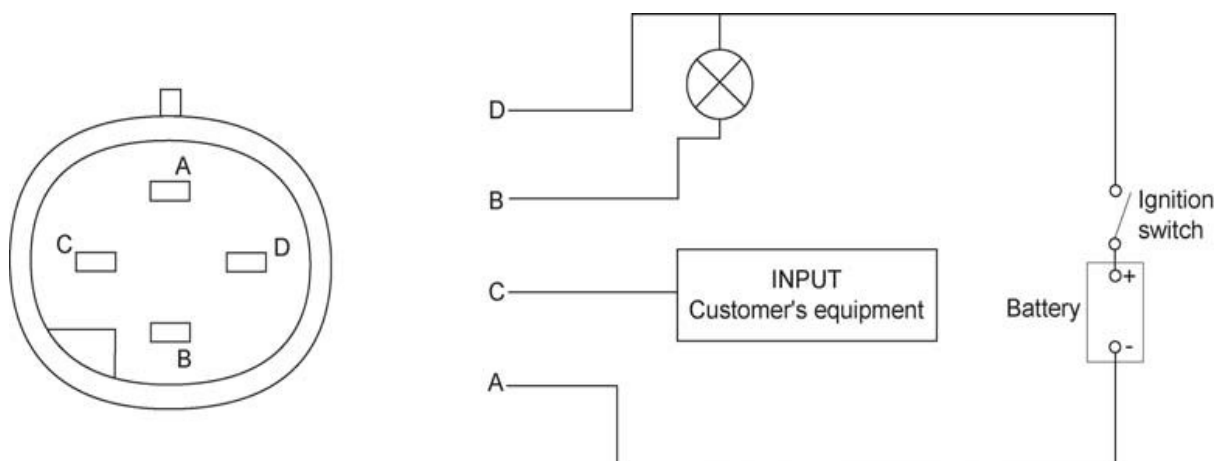
## ELECTRICAL

Terminal	Wire colour	Connection
Pin D	Red:	12 or 24V ignition feed
Pin A	Black:	GND power supply return
Pin C	Yellow:	Output (see table 1)
Pin B	Blue:	LLA low level alarm (factory set to a default value of 1/8 tank depth.

Note: colours above are suggestions only.

Connect sensor, ground and ignition terminals as shown on the wiring diagram below. In order to prevent damage to the sender observe correct connections.

Wiring diagram



Note: Pin B has the option to be a communications port rather than an alarm if factory configured at the time of ordering.

N.B. Warranty is void if the label is removed.