

Mid Service Centre Ltd.

Electronic Consultants and Manufacturers

77 Braemar Road, Sutton Coldfield, West Midlands, B73 6LZ.

Tel. 0121 354 5552

E-mail: tc@msc.tc

Directors

J.C.Cooper T.F.Cooper



Fluid Gauges Installation and Calibration instructions.

Thank you for purchasing a fluid level gauge from us. Your unit is suitable for a tank 35 - 150cm or 13-60 inches depth. It has been tested at a depth of 40cm.

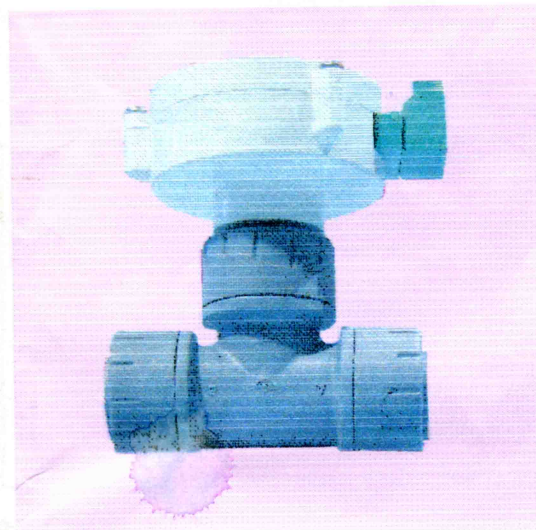
Installation.

Fresh Water gauge 'In Line Sensor' Version.

Fit the unit (see picture) between the tank and the pump, within one metre of the tank, if this is not possible please contact us for advice.

NOTE This version is only suitable where the amplifier can be mounted at approximately the same level as the bottom of the tank, we would suggest within 7.5 cm. The unit can be mounted either vertically or horizontally.

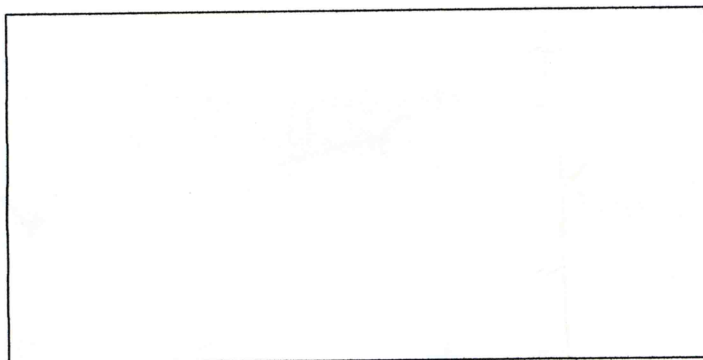
The plastic 'T' is suitable for fitting to 15mm plastic or copper pipe, but if copper is chosen be sure to use a pipe cutter to ensure a square burr free end. Make sure to check that the pipe is fully home in the fitting.



Mounting the Gauge and Electrical Connection.

The hole cut-out for the gauge is as per diagram. It will be easier if the calibration procedure is carried out before finally mounting the gauge as the gauge can then be connected and viewed easily while adjustments are being made.

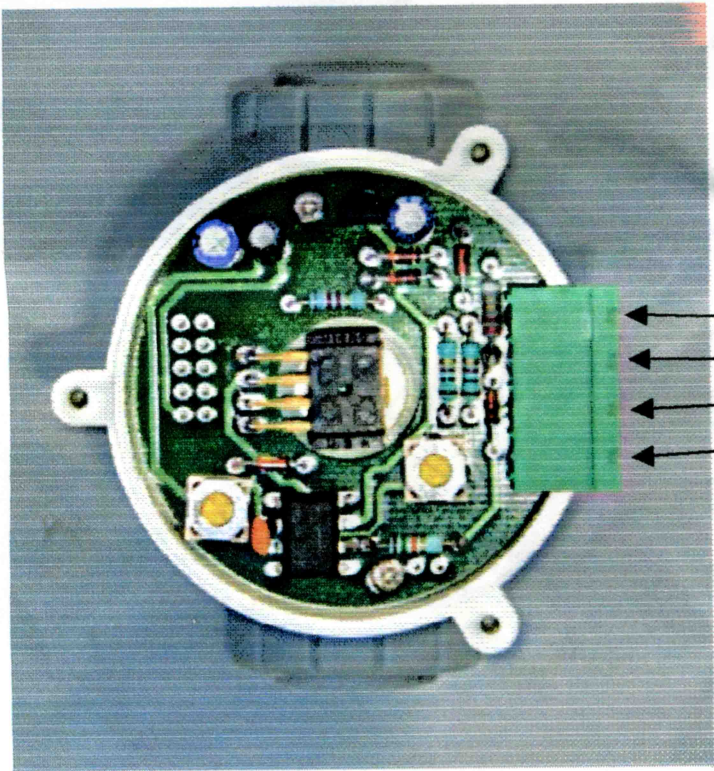
50mm



25mm

Electrical connection.

Connect the wires to the plug as shown in the picture using a supply in the range of 12-24volts. Power can often be sourced at the water pump which is often close at hand. Insert the plug into the unit ensuring that the two retaining clips on the plug fit over the OUTSIDE of the socket

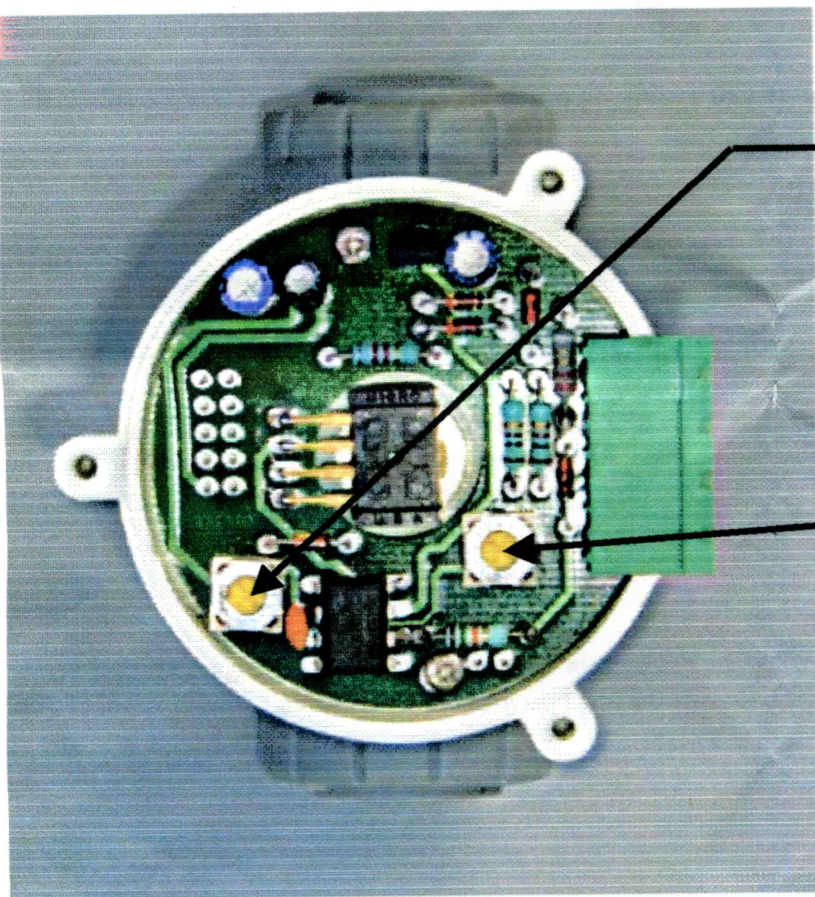


12-24 volts
Negative 0 volts
Meter +ve Brown
Meter -ve Blue

The unit will now be operational.

Calibration Procedure.

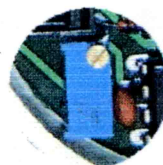
In most cases it will not be necessary to adjust the zero unless the amplifier is sited in an unusual position for example below the floor of the tank.



Adjust Full

Note.

Depending on the model this may be a multi-turn control as shown in the inset



Adjust Zero

Normal Installations.

Fill the tank then run approximately two gallons of water off using the tap. This is to ensure that no water is left in the filler pipe as this will cause a false 'full reading'. Now turn the 'Adjust full' control slowly until the gauge reads '10'.

Mount the gauge in its final position having first removed the cable support cable tie. Take care, as the tags on the gauge will be damaged if the cable is pulled hard, so try to support the cable reasonably close to the gauge after installation.

Use the two black screws provided to secure the gauge unit to the panel.

Installations using the "Adjust Zero" Control.

Add a few gallons of water to the tank until the gauge shows a reading.

Turn on the tap and run off water until the pump starts to suck air, turn off the tap. If the pump will not raise enough pressure to stop, then power must be removed from it but the amplifier must remain powered.

It is likely that the gauge will now still show a reading above the zero, so using the 'adjust zero' control, carefully turn this control (using a small screwdriver) until the gauge reads zero. Adjustment must be made slowly as the gauge needle takes time to 'settle'.

When satisfied fill the tank then run approximately two gallons of water off using the tap. This is to ensure that no water is left in the filler pipe as this will cause a false 'full reading'. Now turn the 'Adjust full' control slowly until the gauge reads '10'.

Mount the gauge in its final position having first removed the cable support cable tie. Take care as the tags on the gauge will be damaged if the cable is pulled hard, so try to support the cable reasonably close to the gauge after installation.

Use the two black screws provided to secure the gauge unit to the panel.

Finally

Fit the lid using the three screws provided. Your unit is now fully operational and I hope it continues to help you to plan your 'water stops' for many years.

Please note that with the inline unit the gauge will read zero when the tap runs, but will quickly return to the correct reading when the pump stops.

NOTE

If the breather pipe on the tank is sagged and can hold water, then a false reading on the meter will result. If the pipe is flexible, a piece of wood can be strapped to it to keep it straight.

