

O.L.E. (UK) Ltd

T4020 \ T5020 \ INSTRUCTION & INSTALLATION MANUAL



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Introduction

The Purpose of this document is to outline the installation and operational procedures of the T4020 \ T5020.

Safety Warnings

To avoid injury please read this manual carefully before installation. Failure to do so could result in injury or failure of the equipment, this will invalidate any warranties given.



CAUTION

The installation and assembly of this product may only be performed by a skilled electrician.



WARNING

This product contains 240V AC and 24V DC, Isolate power to the unit before removing the cover.

Contact Information



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Principle of Operation

Digital Tank Gauge. Accuracy +/- 0.25%.

This gauge is fitted in a weatherproof rated IP65 enclosure, for outdoor use. Fitted with a backlight that enables easy reading (Backlight turns off after 1 hour). Litres and % Bar are displayed.

M (Master) and up to 3 other trigger points can be displayed.

The gauge can be setup for almost any tank shape, such as Cuboid, Rectangular, Cylindrical, Cylindrical with dished ends, bespoke based on strapping table. (Level in meters and volume in cubic meters).

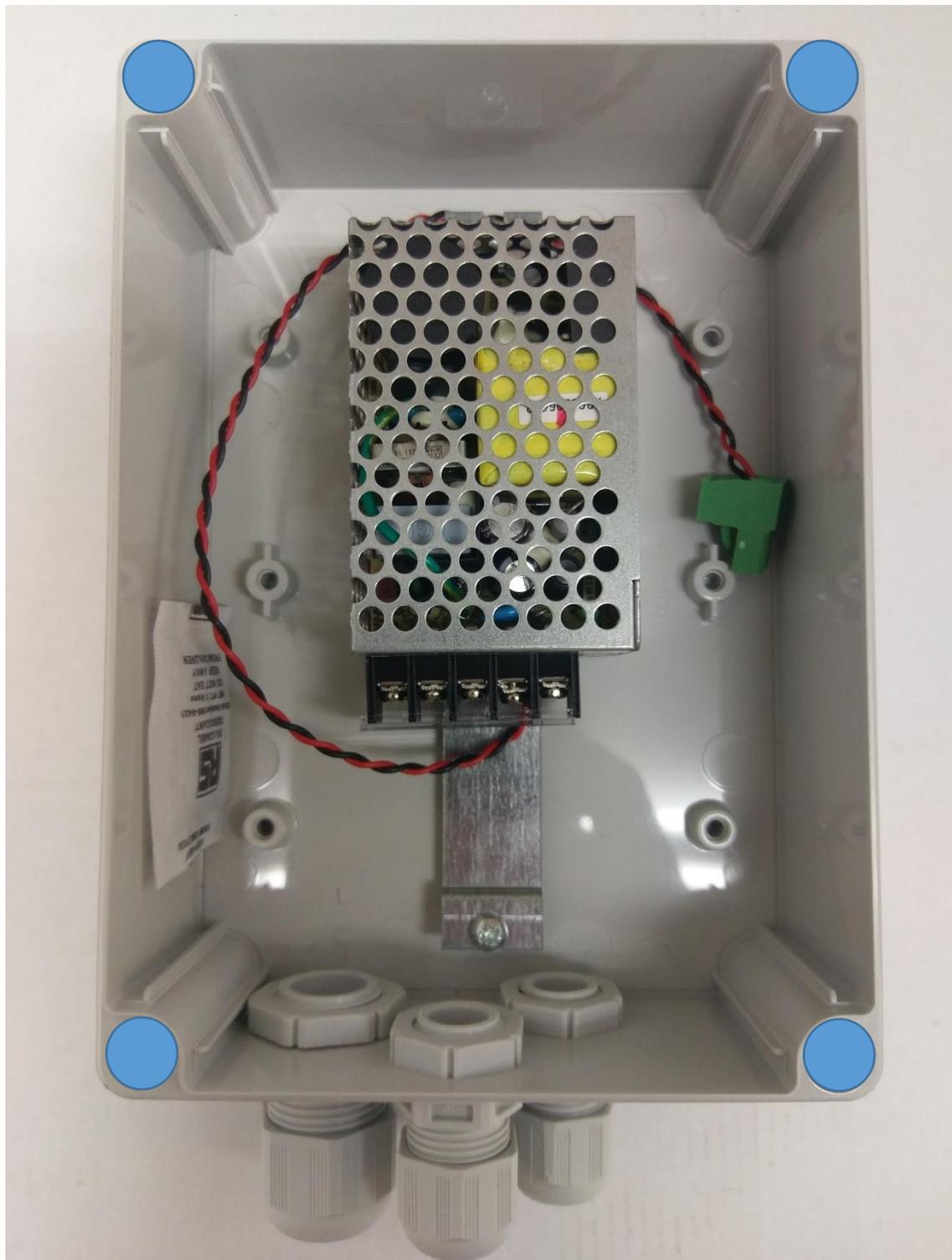
Can read temperature as an option, temperature probe required. "TP" probes read 0°C to 70°C.

Installation Instructions

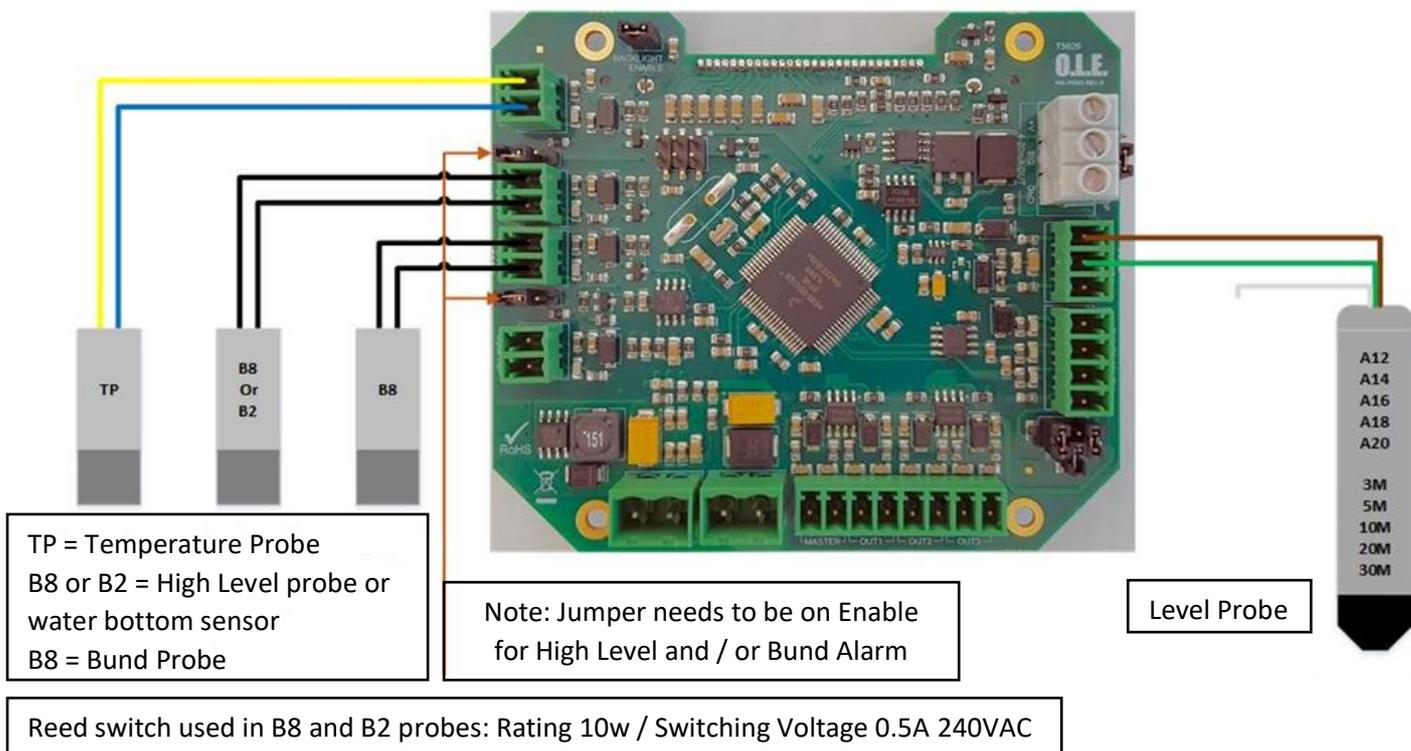
Mounting Holes

There are 4 mounting holes in the base of the unit (indicated with the Blue Circles). These are located behind the front panel screws.

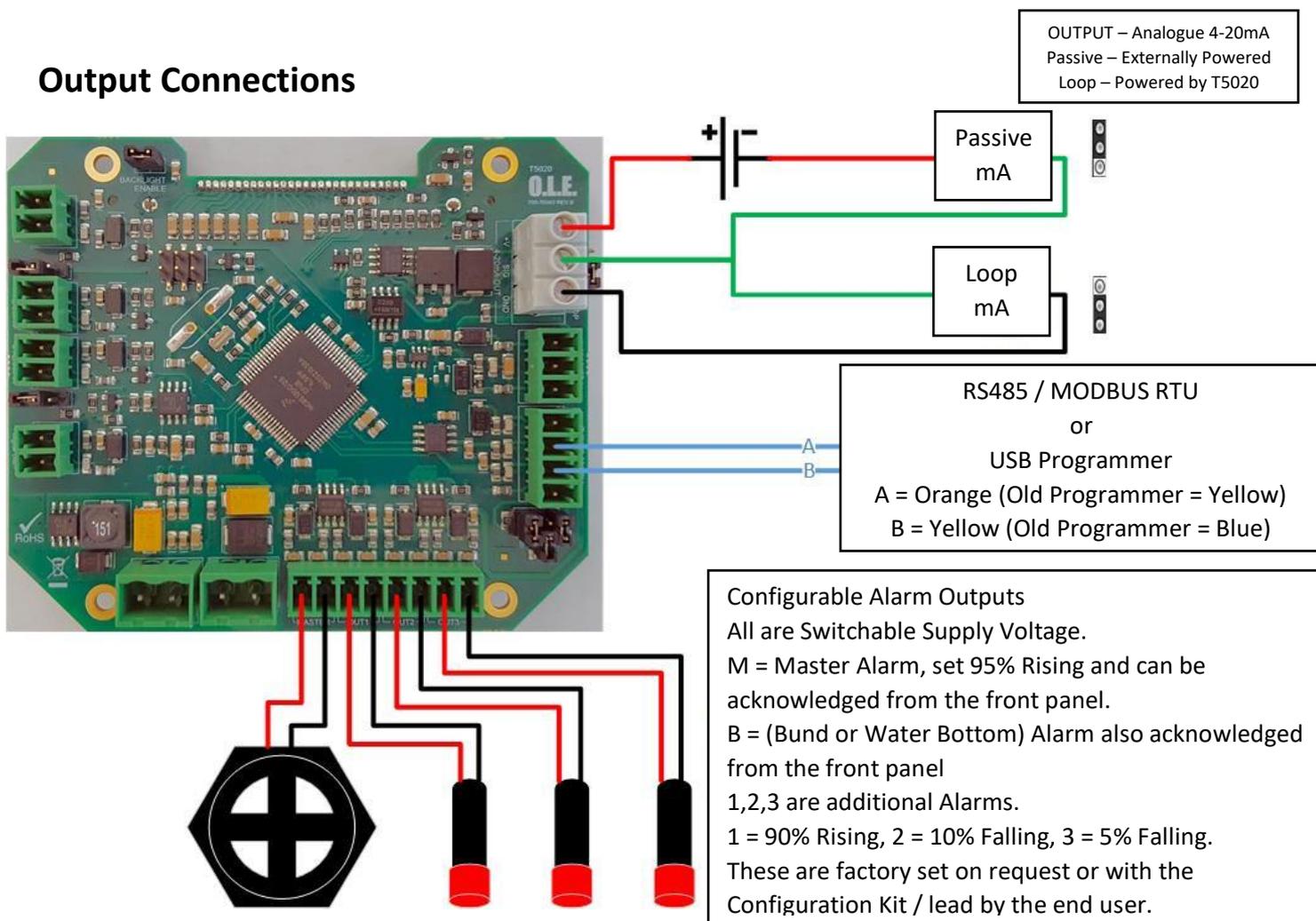
The distance between mounting holes is 110mm wide X 160mm high.



Input Connections



Output Connections

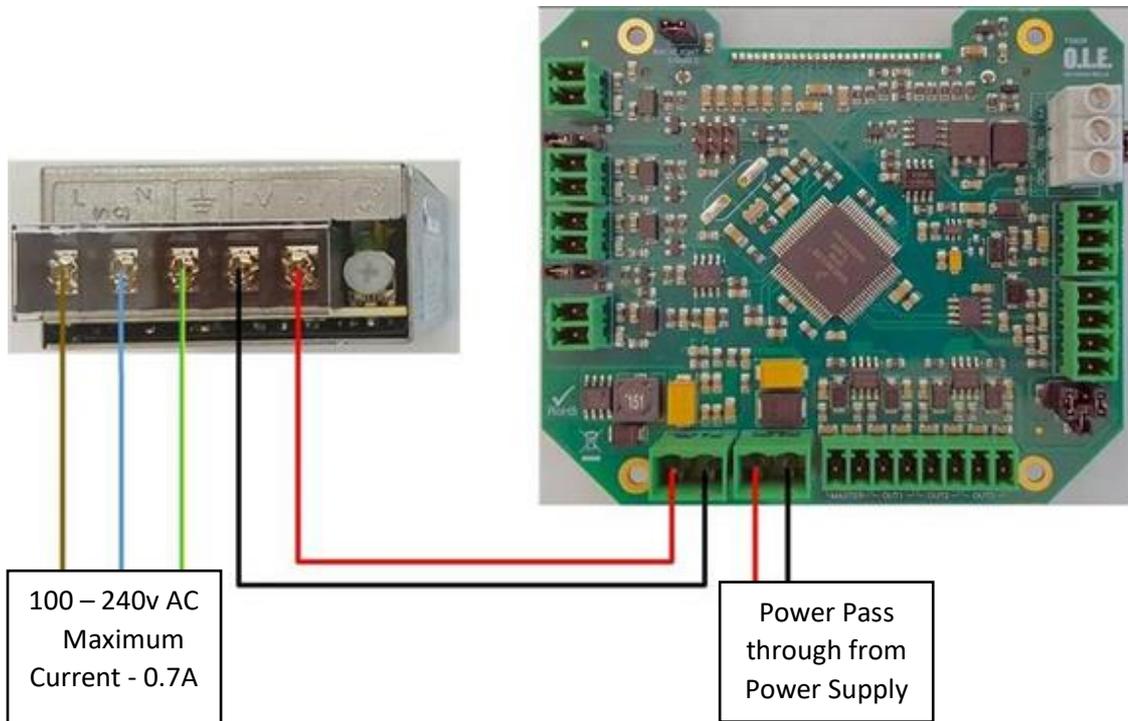


Power Input / Output Connections



WARNING

Before applying the power, **DOUBLE CHECK** all the connections to the inputs and outputs.



Tank Level Probes



Standard Probes



Legacy Probes

Standard Probes	Legacy Probes
A12 / 3m = 3m Sensor with 10m of cable	A / B29 = 1.0m Sensor with 4m of cable
A14 / 5m = 5m Sensor with 10m cable	A / B30 = 1.5m Sensor with 4m of cable
A16 / 10m = 10m Sensor with 10m cable	A / B23 = 3.0m Sensor with 6m of cable
A18 / 20m = 20m Sensor with 20m cable	A / B25 = 5.0m Sensor with 7m of cable
A20 / 30m = 30m sensor with 30m cable	A / B26 = 7.0m Sensor with 10m of cable
	A / B27 = 10.0m Sensor with 12m of cable

Standard Probes – Wire Colours		Legacy Probes – Wire Colours	
Brown	+V	Red	+V
Green	Signal	Black	Signal
White	Not Used	Blue	Temperature +
		Yellow	Temperature -
Legacy A Series Probes Do Not Have Temperature			

Gauge Configuration

The set-Up of the Tank Gauge system using Interface lead and the software on a PC / Laptop.

Latest version of the software is **V1.0.0.16**

Tank Gauge adjustments can be made with the **T4020 Configuration software**.

This needs to be loaded on to Service Laptop or an Office PC.

1st Issue that will nearly always catch you out. If the gauges are set in 'Modbus' mode, or if they are in Standard. To talk to the gauge with the configurator software, the gauge needs to be in Standard mode.

If it is not, disconnect the power lead (24vdc supply), and hold down the front middle alarm button (for 3 seconds) and reconnect power. (Front display will change to 'Standard'. (Cycle power again when finished.)

2nd Issue, the comms lead will not talk to the tank gauge. "USB Serial Com Port"

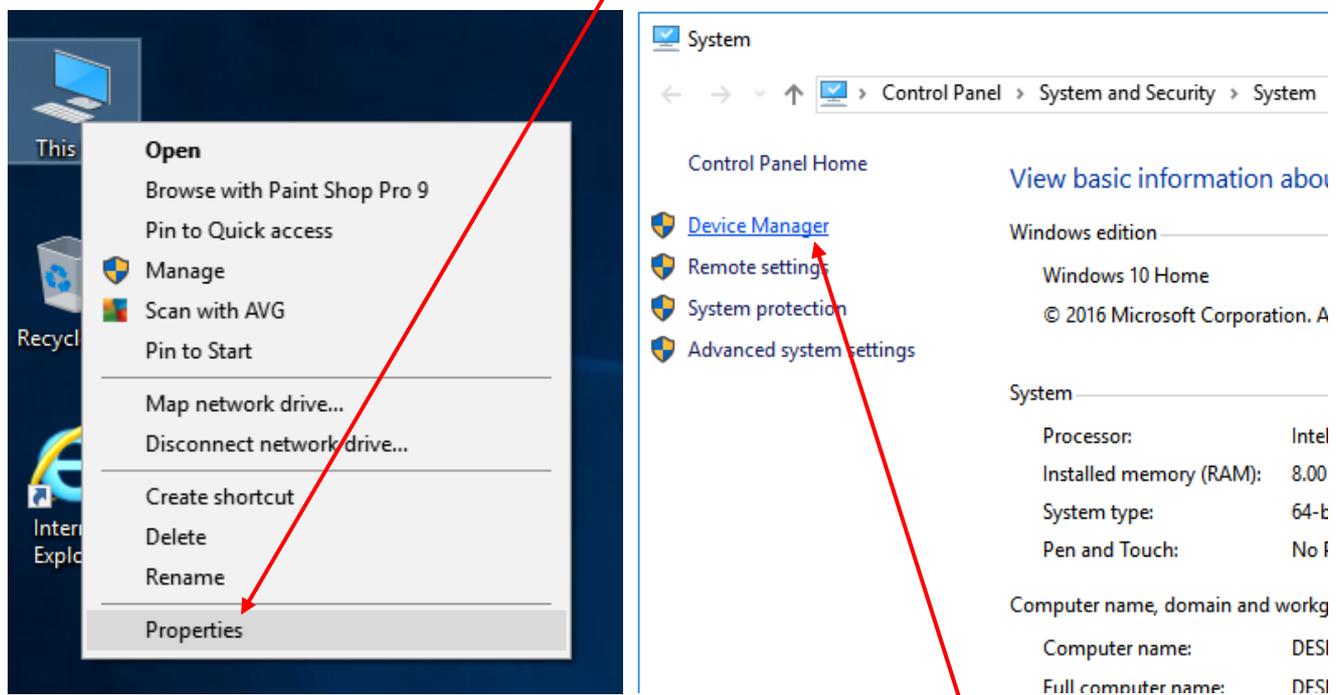
This is the port you require to set the configurator, this is achieved by following the instructions for **the Device Manager** below. This shows Windows 10, but if you have a different version of windows as long, as you can access the device manager and find the com port number there shouldn't be an issue.

IF YOU HAVE ANY ISSUES WITH SETTING UP / ACCESSING THE DEVICE MANAGER PLEASE REFER TO DOCUMENT **PD02/0003 – DEVICE MANAGER CONFIGURATION**.

This is available from the OLE website as a downloadable .pdf

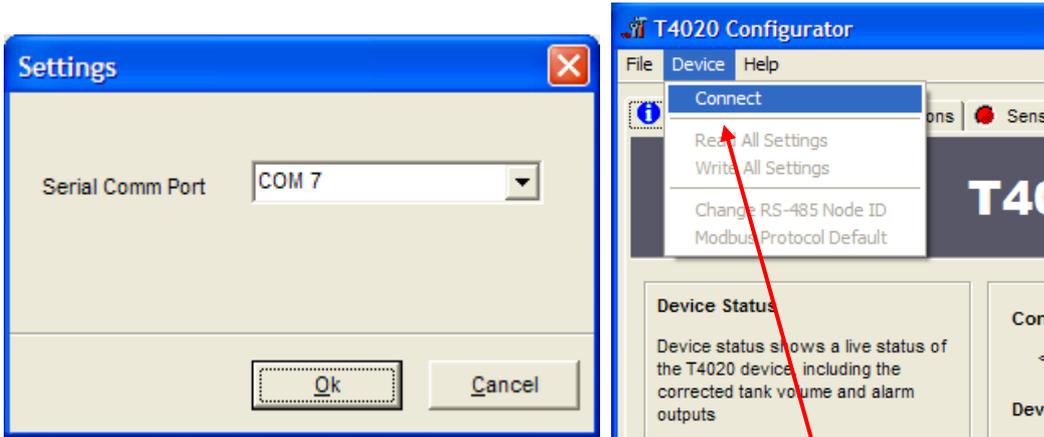
Windows Setup (Windows 10) / Device Manager.

Left click on the **This PC** icon. Scroll down and click on the **Properties** tab.

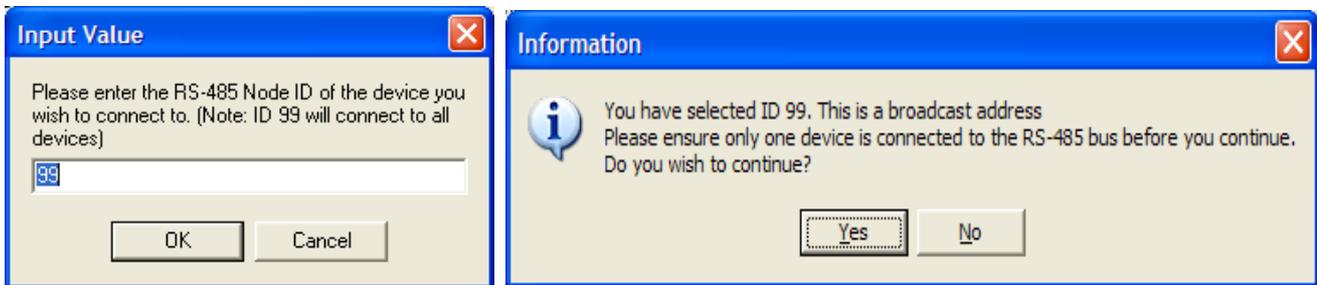


This will open the Control Panel / System and Security / System page. Click on the **Device Manager** Icon. This will bring up the device manager page.

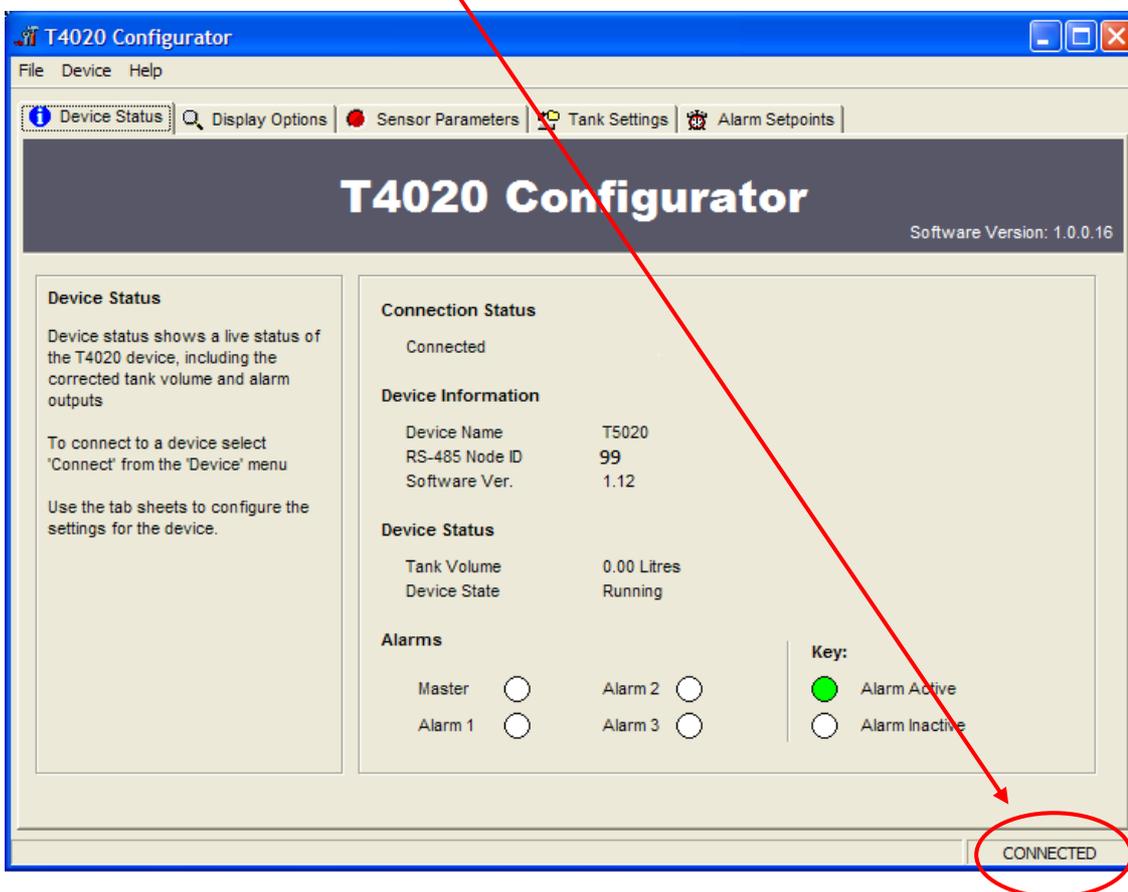
This will open the **Settings** screen (Shown Below). Select from the drop down menu the Com Port number (as shown in the device manager) and click OK.



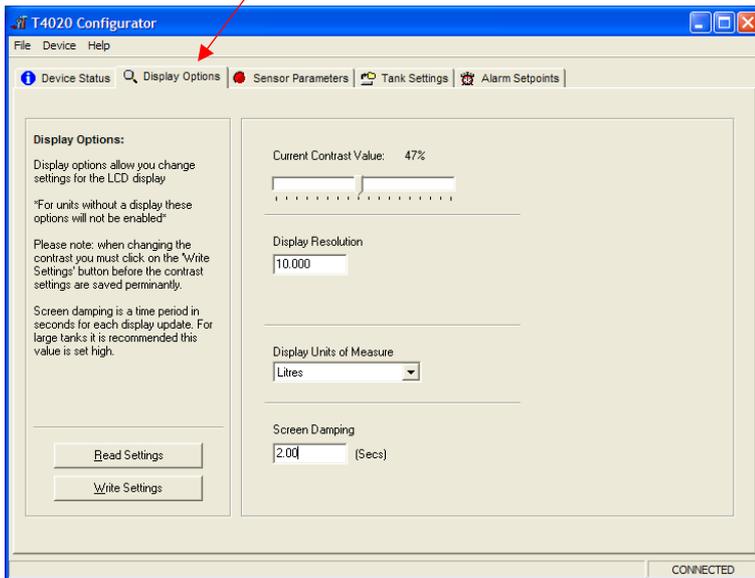
Next step, click the **Device** tab at the top of the screen and click **Connect**. A pop up screen, **Input Value** will show, click on **OK**. 99 is a global address which will work if only have one gauge connected.



Click on **Yes** on the **Information** screen. Now the software will connect and “talk” to the unit, as shown in the bottom left of the configuration screen. When the unit has connected, it will show **CONNECTED** in the bottom right of the Configuration screen.



Click on the **Display Options** tab.



Current Contrast Value, default is 47%. Set as required.

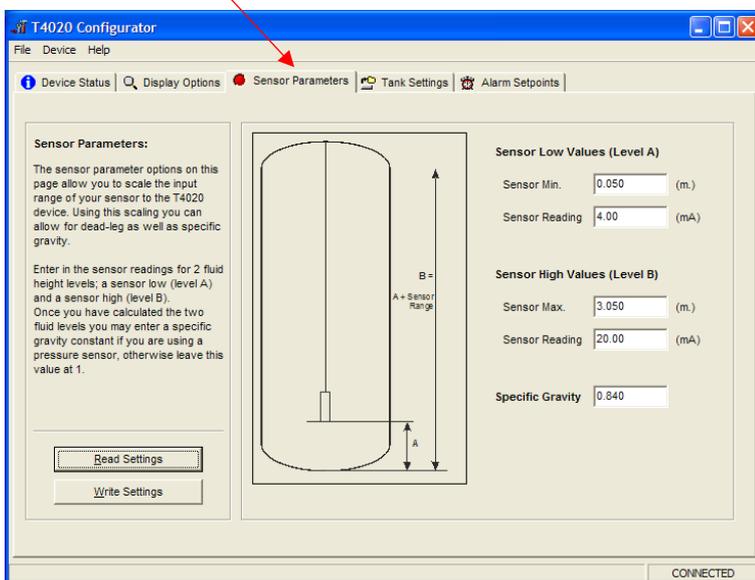
Number of Significant figures is 5. On the T5020, there is the option to choose **Resolution of Display**, e.g. 50 Litres or 10 Litres etc. Set as required. **10.00** for instance.

Display Units of Measure, set to **Litres** unless otherwise requested.

Screen Damping, makes the screen more stable, suggest 2 Seconds.

When this screen is complete, Click **Write Settings**.

Click on the **Sensor Parameters** tab. **Note: Set to Suit the Sensor, NOT THE TANK.**



Specific Gravity of liquids.	
Gasoil	= 0.84
Diesel (DERV)	= 0.835
Kerosene	= 0.80
Petrol	= 0.745
AdBlue	= 1.09
Rapeseed Oil	= 0.92
Lube Oil	= 0.89
Antifreeze	= 1.11

Sensor Min, set to **0.050m** (50mm) as standard.

Sensor (Min) Reading set to **4.00mA**

This would mean for example a 2.0m Sensor, would be set as a Sensor Min 0.050m to a Sensor Max 2.050m. and a 3m Sensor would be Sensor Min 0.05m and Sensor Max 3.050m etc.

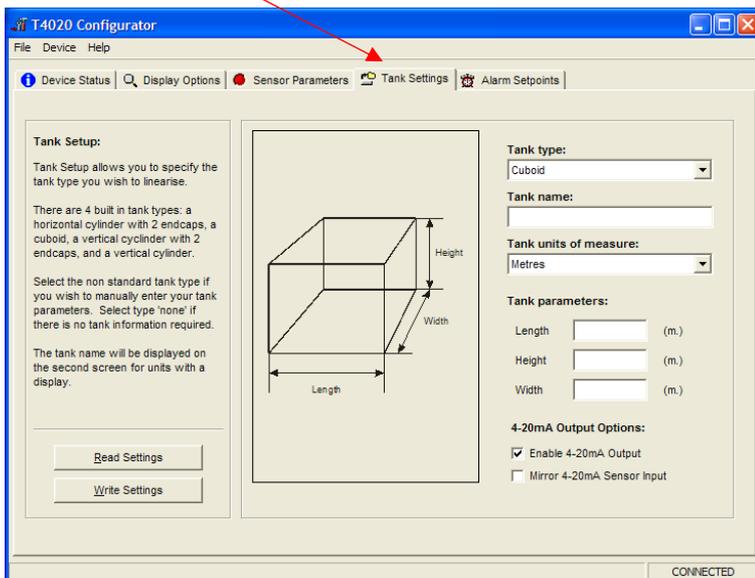
Sensor Max, set to Sensor 0.050m plus the Sensor length as shown in example above.

Sensor (Max) Reading set to **20.00mA**

Enter the **Specific Gravity** of contents.

When this screen is complete, Click **Write Settings**.

Click on the **Tank Settings** tab.



Note: that the tank can be taller than the sensor range due to specific gravity.

For example, the tank being 2.2m tall. If we say this is Diesel (DERV), then $2.2 \times 0.835 = 1.837$ affective range on the sensor. This means we can use a 2.0m sensor in a 2.2m tank. A 3.0m sensor will work fine as well

The next step is to set the tank shape up. Enter the tank type from the scroll down menu, a name for the tank and the measurements.

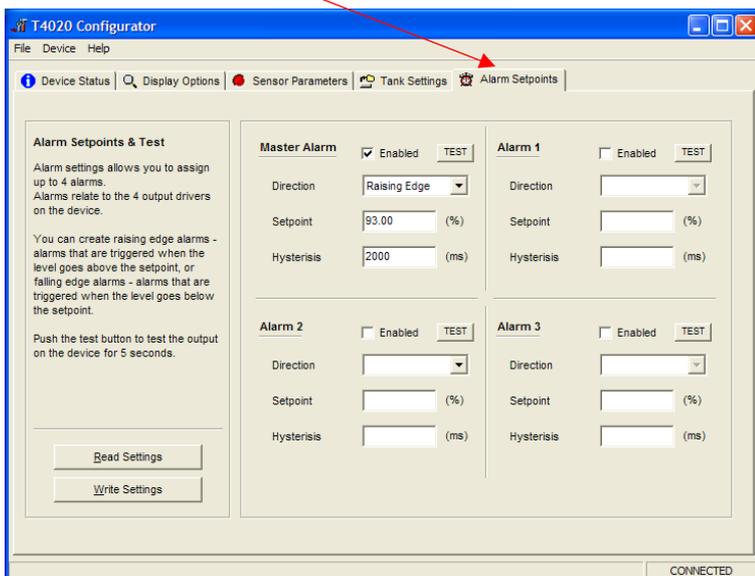
Ensure that the Enable 4-20mA Output is ticked.

Please make sure the Mirror Output box is NOT 'Checked' (ticked). If it is we need to discuss.

The Mirror input may be used when a second Gauge is set exactly the same as the first. Alternatively, the second Gauge can be set to have the Sensor Parameters the height of the primary tank and this will work over the full 4-20 milliamp range of the first gauge output. No sensor offset required.

When this screen is complete, Click **Write Settings**.

Click on the **Alarm Setpoints** tab.



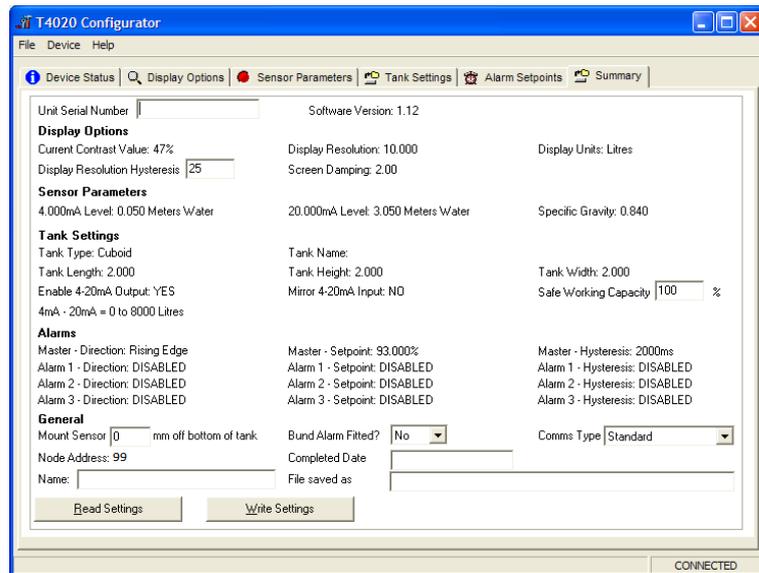
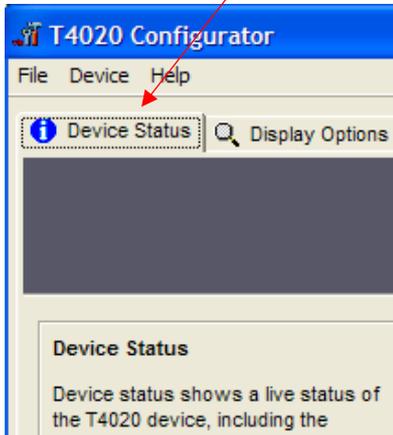
Set the Alarm settings as required (High is normally 95% Rising).

Set the "Direction" to "Rising" or "Falling". This will result in energising the Relays (R5 Option Board) if fitted in that 'form'.

Rising at 95% on the M alarm will output 24vdc when the level increases to 95%.

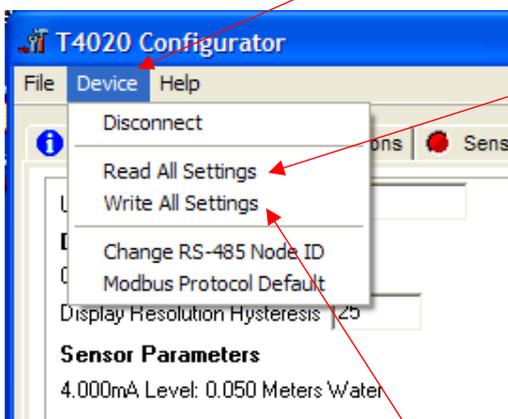
When this screen is complete, Click **Write Settings**.

Next step is to Access the T5020 additional settings and Summary Screen, press the **Ctrl**, and letter **H** keys simultaneously, and click on **Device Status** Tab.



This will bring up the summary screen of what has been programmed into the unit as shown above

The Summary page. Click on the **Device** tab at the top of the screen and click **Read All settings**. This will display all the settings that has been programmed. Next stage is to enter the final information on this screen.



Unit Serial Number: This is the serial number on the label of the front of the unit.

Safe Working Capacity: If the unit is a T5020, the Safe Working Capacity can be set to say 97%. In this case the Alarms are based on the Safe Working Capacity value, so 10,000 litre tank has SWC of 9,700 litres. An Alarm set at 95% will be 95% of 9,700 litres, not of 10,000.

Mount Sensor: 50 mm off the bottom of the tank.

Bund Alarm: If fitted, click **YES**, if not, Click **NO**.

Comms Type: Generally, set to **Standard**.

Name, Who, setup the unit, Date when setup and a **File Saved as** Name. XXXXXXXX.tls

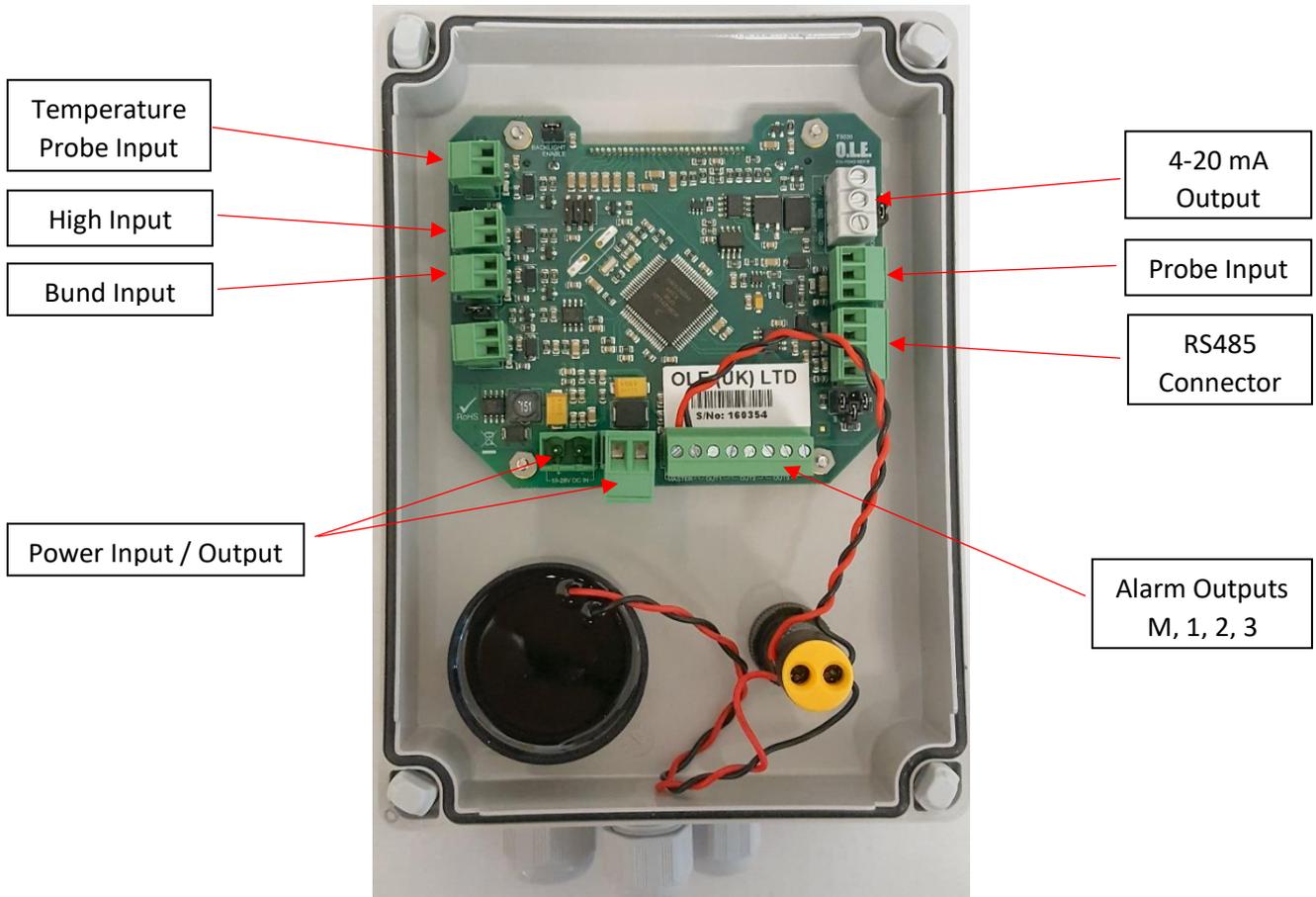
Click the **File** tab at the top of the screen and then **Save As**. When this screen is complete, click the **Device** tab at the top of the screen again and then **Write All Settings**.

ONLY READ AND WRITE SETTING FROM THE DEVICE TAB AT THE TOP OF THE PAGE.

If you have selected 'Non-Standard' as the tank type and put in a strapping table, you may have to "Write All Settings" Twice. Click on **Disconnect**. Remove the programming lead. This completes the calibration.

Result, you should have a fully calibrated working Gauge, with 4-20 mA proportional to Litres, and either a **Standard** or **Modbus** RS485 output.

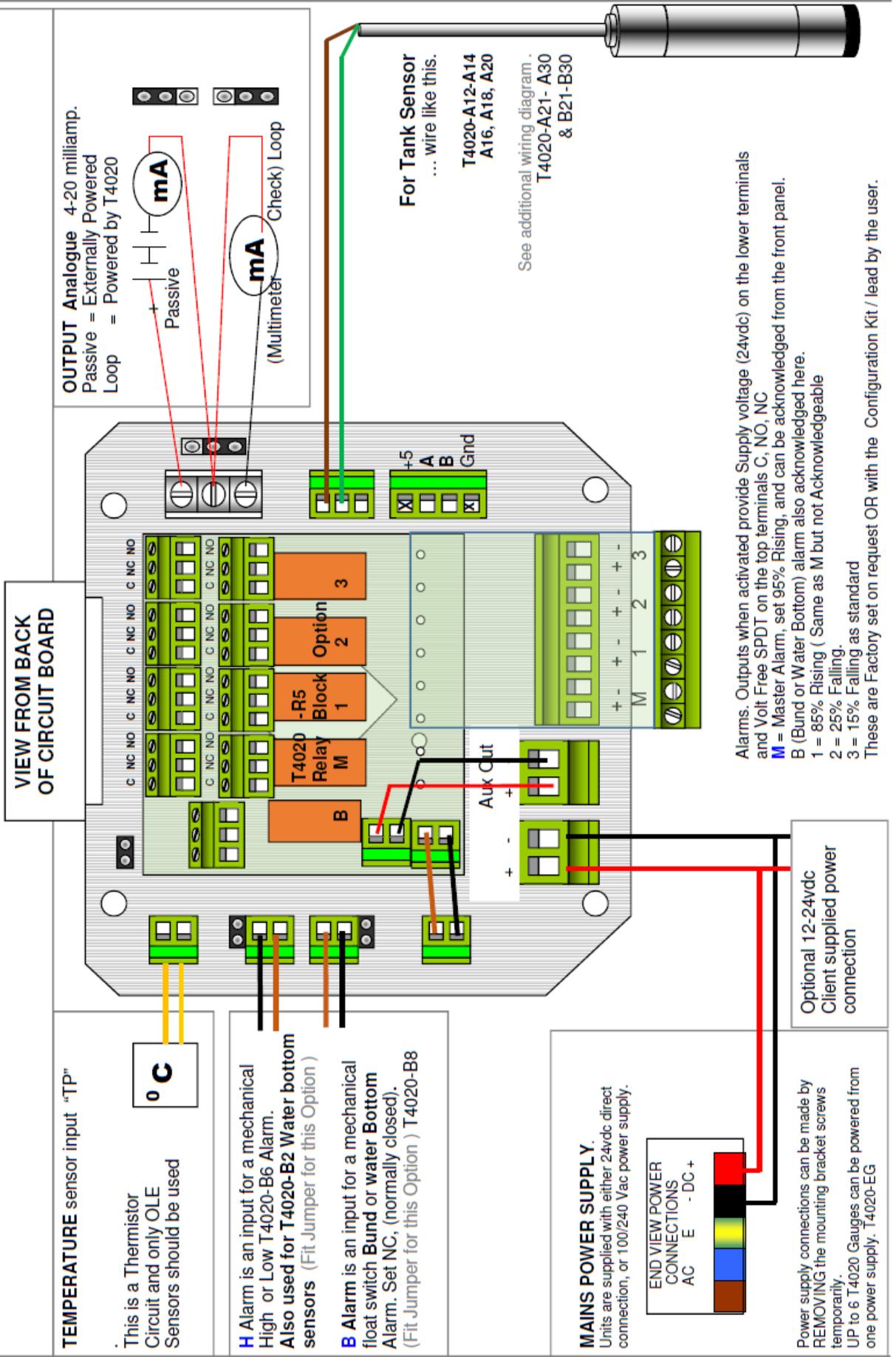
Operational Instructions



Appendix 1 (T5020 Wiring Diagram)

Drawing Number T5020-2016-STD-+R5

T5020 wiring Diagram. This shows all connections for Standard Tank Gauge set-up.



Appendix 2 (Modbus Register Table)

5. MODBUS registers

5.1 Holding registers

<i>Register</i>	<i>Name</i>	<i>Details</i>
40001	Master Alarm Setpoint	Provides the alarm setpoint in % * 100
40002	Master Alarm Direction	Provides the direction of the alarm (0 = none, 1 = rising, 2 = falling)
40003	Master Alarm Hysteresis	Provides the alarm hysteresis in milliseconds
40004	Alarm 1 Setpoint	Provides the alarm setpoint in % * 100
40005	Alarm 1 Direction	Provides the direction of the alarm (0 = none, 1 = rising, 2 = falling)
40006	Alarm 1 Hysteresis	Provides the alarm hysteresis in milliseconds
40007	Alarm 2 Setpoint	Provides the alarm setpoint in % * 100
40008	Alarm 2 Direction	Provides the direction of the alarm (0 = none, 1 = rising, 2 = falling)
40009	Alarm 2 Hysteresis	Provides the alarm hysteresis in milliseconds
40010	Alarm 3 Setpoint	Provides the alarm setpoint in % * 100
40011	Alarm 3 Direction	Provides the direction of the alarm (0 = none, 1 = rising, 2 = falling)
40012	Alarm 3 Hysteresis	Provides the alarm hysteresis in milliseconds
40013 & 40014	Tank Minimum Height	Provides the minimum tank height (* 1000) set point of the tank for the associated ADC value (next register).
40015	Tank Minimum Height ADC Value	Minimum raw tank ADC value.
40016 & 40017	Tank Maximum Height	Provides the Maximum tank height (* 1000) set point of the tank for the associated ADC value (next register).
40018	Tank Maximum Height ADC Value	Maximum raw tank ADC value.
40020	Volume UOM	Provides the unit of measure for the tank volume display (1 = cubic metres, 2 = litres, 3 = gallons, 4 = cubic inches, 5 = cubic feet)
40021	Display Damping	Provides the update rate of the display in milliseconds
40022	Tank Type	Provides the tank type (1 = horizontal cylindrical body with elliptical endcaps, 2 = cuboid, 3 = vertical cylindrical body with elliptical endcaps, 4 = vertical cylinder, 5 = look-up table)

40023	Tank UOM	Provides the unit of measure for the tank dimensions (0 = metres, 1 = inches, 2 = feet)
40024	Specific Gravity	Provides the specific gravity of the tank contents * 1000
40025 & 40026	Tank Length	Provides the tank length * 1000
40027 & 40028	Tank Height	Provides the tank height * 1000
40029 & 40030	Tank Width	Provides the tank width * 1000
40031 & 40032	Tank Radius	Provides the tank radius * 1000
40033 & 40034	Tank Extent	Provides the extent of the endcaps * 1000
40035	Test Mode Delay	Provides the period of time to hold the Alarm Test button down to activate the test.
40036	Reset Tank	Allows the tank calculations to be reset after tank parameters have changed. Reading this register will return 0; writing any value will reinitialise the tank calculations.
40039	(Analog) Master Alarm enabled	Analog equivalent of register 00001
40040	(Analog) Master Alarm manual override enable	Analog equivalent of register 00002
40041	(Analog) Master Alarm override value	Analog equivalent of register 00003
40042	(Analog) Alarm 1 enabled	Analog equivalent of register 00004
40043	(Analog) Alarm 1 override enable	Analog equivalent of register 00005
40044	(Analog) Alarm 1 override value	Analog equivalent of register 00006
40045	(Analog) Alarm 2 enabled	Analog equivalent of register 00007
40046	(Analog) Alarm 2 override enable	Analog equivalent of register 00008
40047	(Analog) Alarm 2 override value	Analog equivalent of register 00009
40048	(Analog) Alarm 3 enabled	Analog equivalent of register 00010
40049	(Analog) Alarm 3 override enable	Analog equivalent of register 00011
40050	(Analog) Alarm 3 override value	Analog equivalent of register 00012
40051	(Analog) 4-20mA output enable	Analog equivalent of register 00013
40052	(Analog) 4-20mA output mirror	Analog equivalent of register 00014
40054	Default Serial Protocol	0 = Standard, 1 = Modbus
40055	(Analog) Totalisation scaling factor	The number of pulses per litre (values 1 – 65000 are valid)
40056	(Analog) Totalisation display timeout	The number of seconds the totalisation display will remain on the screen after flow meter mode has been exited. (values 0 – 60 are valid)
40057	LOW Message Point	Provides the point in uA at which the LOW Message appears on the LCD

40058	HIGH Message Point	Provides the point in uA at which the HIGH Message appears on the LCD
40060	Tank Safe Capacity	Provides the safe capacity of the tank in %
40061 & 40062	Display Resolution	Provides the display resolution * 1000

5.2 Input registers

Register	Name	Details
30001 & 30002	Volume (m ³)	Provides the volume in cubic metres * 1,000,000
30003 & 30004	Volume (litres)	Provides the volume in litres * 10,000
30005 & 30006	Volume (gal)	Provides the volume in gallons * 10,000
30007 & 30008	Volume (in ³)	Provides the volume in cubic inches * 1
30009 & 30010	Volume (ft ³)	Provides the volume in cubic feet * 100,000
30011	Slave ID	Provides the Modbus slave ID
30012	(Analog) Master Alarm status	Analog equivalent of register 10001
30013	(Analog) Alarm 1 status	Analog equivalent of register 10002
30014	(Analog) Alarm 2 status	Analog equivalent of register 10003
30015	(Analog) Alarm 3 status	Analog equivalent of register 10004
30016	Temperature (Unsigned)	Provides the temperature in °C * 10 (temperature range 0 to 70 °C) [Value 32767 indicates invalid reading, e.g. sensor disconnected]
30017	Temperature (Signed)	Provides the temperature in °C * 10 (temperature range -10 to 70 °C) [Value 65565 indicates invalid reading, e.g. sensor disconnected]
30018 & 30019	Flow Meter Total	The flow meter total in litres. This register is reset to zero every time flow meter mode is entered.
30020 & 30021	Tank Minimum Height	Provides the minimum tank height
30022	Tank Minimum Height ADC Value	Provides the ADC reading at the minimum tank height
30023 & 30024	Tank Maximum Height	Provides the maximum tank height
30025	Tank Maximum Height ADC Value	Provides the ADC reading at the maximum tank height
30026	Not used	Not used
30027 & 30028	Tank Safe Capacity	Provides the calculated tank safe capacity in litres.

5.3 Discrete Inputs

<i>Register</i>	<i>Name</i>	<i>Details</i>
10001	Master Alarm status	Provides the status of the alarm (0 = not in alarm, 1 = in alarm)
10002	Alarm 1 status	Provides the status of the alarm (0 = not in alarm, 1 = in alarm)
10003	Alarm 2 status	Provides the status of the alarm (0 = not in alarm, 1 = in alarm)
10004	Alarm 3 status	Provides the status of the alarm (0 = not in alarm, 1 = in alarm)
10005	Bund Alarm status	Provides the status of the alarm (0 = not in alarm, 1 = in alarm)
10006	Totalisation Mode status	Provides the status of totalisation mode (0 = not in totalisation mode, 1 = in totalisation mode)
10007	High Level Alarm status	Provides the status of the alarm (0 = not in alarm, 1 = in alarm)
10008	Bund Alarm enabled state	Provides the enabled state of the Bund Alarm (0 = not enabled, 1 = enabled)
10009	High Level Alarm enabled state	Provides the enabled state of the High Level Alarm (0 = not enabled, 1 = enabled)

5.4 Coils

<i>Register</i>	<i>Name</i>	<i>Details</i>
00001	Master Alarm enabled	Enables or disables the alarm
00002	Master Alarm override enable	Allows the 24VDC output to be controlled manually using Modbus commands (0 = output controlled by alarm, 1 = output set by Manual Value)
00003	Master Alarm override value	Sets the output on or off (0 = off, 1 = on). Only used when Manual Override = 1
00004	Alarm 1 enabled	Enables or disables the alarm
00005	Alarm 1 override enable	Allows the 24VDC output to be controlled manually using Modbus commands (0 = output controlled by alarm, 1 = output set by Manual Value)
00006	Alarm 1 override value	Sets the output on or off (0 = off, 1 = on). Only used when Manual Override = 1
00007	Alarm 2 enabled	Enables or disables the alarm
00008	Alarm 2 override enable	Allows the 24VDC output to be controlled manually using Modbus commands (0 = output controlled by alarm, 1 = output set by Manual Value)
00009	Alarm 2 override value	Sets the output on or off (0 = off, 1 = on). Only used when Manual Override = 1
00010	Alarm 3 enabled	Enables or disables the alarm
00011	Alarm 3 override enable	Allows the 24VDC output to be controlled manually using Modbus commands (0 = output controlled by alarm, 1 = output set by Manual Value)
00012	Alarm 3 override value	Sets the output on or off (0 = off, 1 = on). Only used when Manual Override = 1
00013	4-20mA output enable	Enables or disables the 4-20mA output as a percentage of the tank volume
00014	4-20mA output mirror	Enables or disables the 4-20mA output as a mirror of the 4-20mA input signal
00016	Default protocol	Sets the protocol that the T4020 uses by default on power-up (0 = standard, 1 = Modbus)
00017	Master Alarm Mute	Deactivates or activates the alarm mute (0 = deactivate mute, 1 = activate mute)

Appendix 3 (Accessories)

B8 – Bund Probe / Level Switch

The Bund Probe has an integral N/C (Normally Closed) level switch.

The Sensor body is made from 304 Stainless Steel and the cap is 316 Stainless Steel. The float is NBR (Nitrile) which is good in Oil, Diesel, Petrol, most spirits and water based products (SG: 0.7 to 1.5).

The standard cable is Polyurethane sheathed and 6.0m in length and supplied with a 1" fitting.

Supplied as standard: N/C (Float Down – Contact Closed).

Supplied on request, reversed float N/O (Float Down – Contact Open, closed on float rise).

Simple 2 wire connection. See **INPUT CONNECTIONS** on **Page 4** to show where to connect.



B8 - Bund Probe

1" Fitting (Also available as a separate item)

B2 – Water Sensor

The float sinks in less than a Specific Gravity of 0.9 and lifts in water and opens the circuit.

The Sensor body is made from 304 Stainless Steel and the cap is 316 Stainless Steel.

The float is NBR (Nitrile)

Simple 2 wire connection. See **INPUT CONNECTIONS** on **Page 4** to show how where to connect.



B2 – Water Sensor

B2-T – Water and Temperature Sensor

This incorporates a B2 Water Sensor and a TP Temperature sensor with a temperature range of 0°C to 70°C in one body.

Simple 4 wire connection. See **INPUT CONNECTIONS** on **Page 4** to show where to connect.



B2-T – Water and Temperature Sensor

TP – Temperature Sensor

The temperature sensor is a thermistor housed in a 316 Stainless Steel body. The standard cable is Polyurethane sheathed and 10.0m in length and supplied with a 1” fitting.

It measures the temperature of the fluid in the tank from 0°C to 70°C.

Not suitable for ATEX applications. This probe requires a second tank connection point.

Simple 2 wire connection. See **INPUT CONNECTIONS** on **Page 4** to show where to connect.



TP – Temperature Sensor

R5 – Relay Module

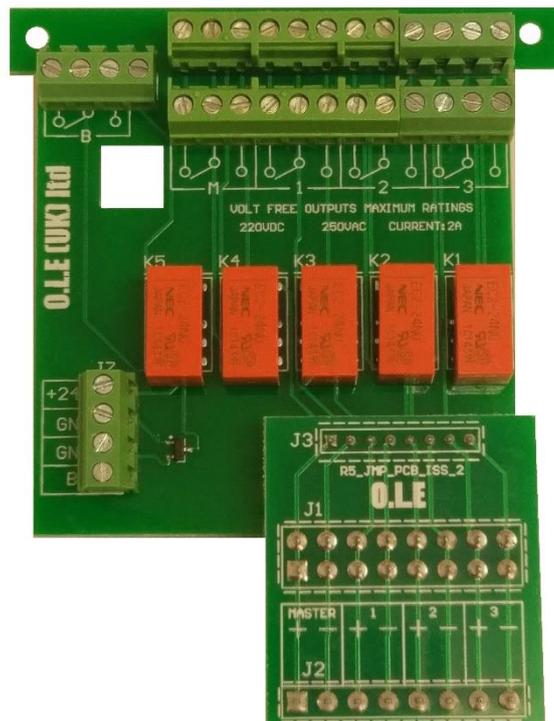
The R5 – Relay module is a “Plug In” board that connects to the “Output Connections” header on the main T5020 board. This allows **5 Volt Free** switchable outputs. This board is supplied separate to the gauges and is connected by the installer.

There are 2 sets of SPDT terminals for the 4 level settings and 1 x SPST terminals for the Bund / High / Water probe.

The switches are wires Com (C), Normally Open (N/O) and Normally Closed (N/C)

The contacts are rated at 2A at 240VAC

Level settings can be factory set or by the installer using the Configuration Software.



R5 - Relay Module

USB Programmer and Configuration Software

This kit allows the user to connect to the T5020 Gauge using a laptop or a desktop PC. The free configuration software enables the user to set the Tank Shape / Size, Specific Gravity of the product, RS485 NODE ID, Sensor Parameters, Alarm Trigger percentages and direction.

All possible settings are shown in the documentation included with the software.

Connectivity is USB 2.0. The “Dongle” connects to the Gauge via the Green 4-way connector block, RS485 / Modbus. This software will operate with Windows XP, 7 and later versions.

The software and documentation is also available to download from the website.

See **INPUT CONNECTIONS** on **Page 4** to show where to connect.



USB Programmer and Software.

F. A. Q's / Troubleshooting

- ***Siren will not sound when the test button is pressed.***
On T4020 / T5020 the test button must be pressed for 5 seconds before the siren will sound. Check the 8-way green connector is fitted correctly (see wiring diagram). When R5 relays are incorporated the siren, connection is on the front 8-way green connector.
- ***High level Alarm failed to sound***
If the M alarm symbol is Blacked out and there is a cross through it, the unit has Alarmed and has been acknowledged. Pressing the test button will sound the alarm and pressing again will stop it.
- ***Gauge reads LOW***
If the sensor is reversed wired = LOW
If the sensor is not connected = LOW
if the sensor output is less than 3.8mA = Low
- ***Gauge reads HIGH***
If the sensor wires are broken it will read LOW
Sensor has failed / shorted out
Water ingress into the sensor reference pipe
- ***Display does not read litres = Blank***
Water ingress into junction box shorting out gauge
Water ingress into reference port tube in sensor
Power has failed, check with a multi meter
- ***Gauge litres are drifting more tank ½ %***
Water ingress into sensor reference pipe
Sensor is ending its life. Check milliamps
Vent on tank has blockages
High winds in the area cause pressure fluctuation, increase damping on screen settings
- ***Sensor replaced and gauge reads wrong / lower or Higher than it should***
Work out the percentage the gauge reads incorrectly
Example - 15000L was put in and the gauge only registered 12000L.
 $12000/15000 = 0.8$ If they have put in a 3.0m sensor in place of a 2.5m sensor,
 $2.5/3.0 = 0.833$ so may need to change the sensor parameters in the gauge setup
- ***Garbled Screen Display***
The display is broken up and does not show all pixels. Try power down the unit and then back up. Usually caused by power spikes on generators.
Can be caused by incorrect RS-485 connection / disconnection (Modbus RTU)
- ***New gauge setup does not read correct litres***
Gauge has been configured by client and the litres does not match the dip value or calculated value in the tank. This is usually because the sensor parameters have been set wrongly, and the "B" values have been set as the tank height rather than the **SENSOR SPAN + "A" OFFSET**. So, a 3.0m sensor should be set A 0.05 if set 50mm off the bottom of the tanks and the "B" value would be 3.05. This is 3.0m sensor plus the 50mm offset.

- **Relay settings not showing on the display.**
When using relays the active alarms will display on the front screen, unless there is a Bund Alarm fitted in which case the M Master symbol will show and the B Bund symbol. The relays are still active just not shown on the front display.
- **Relay R4 and R5**
The R4 has 4 level trigger points, M,1,2,3.
The R5 has 4 level trigger points and one volt free out for the B (Bund) as well. The M (Master) alarm can be acknowledged from the front panel and this action resets this output.
- **Testing Alarm**
The test feature is a press and hold for 5 seconds to activate. Press again to mute.
- **Unable to connect the gauge to PC / Laptop**
The Laptop connection is with a USB to RS-485 cable. You need to know which "Port" the cable is associated with. This needs to be set in the Program Settings. Please see the section in the manual that advises how to do this. (See pages 6 to 8).
Please do not call OLE if communication is the issue as we are not IT experts.
- **Gauge reads HIGH or LOW**
The sensor parameters must be set based on the sensor range and **NOT** the tank height.
- **Alarm trigger point errors**
These can be reset by connection to a laptop and running the OLD configuration software
- **Displayed Litres is LOW**
Damage to the input circuitry can make the gauge read low by 5% and 10%. Check the board for a burning smell. The board is usually beyond economical repair and suggest purchasing a new board, Part No. T4020-0002B.
- **Bund Alarm Connection**
Bund alarm is connected but does not operate. Check the black jumper is on the 2 pins next to the green 2-way connector. (See page 4). Power down and then back up and the B symbol will show on the display.
- **H Alarm**
H (HIGH or Water) alarm is connected but does not operate. Check the black jumper is on the 2 pins next to the green 2-way connector. (See page 4). Power down and then back up and the B symbol will show on the display.