

# USER MANUAL

Wired Smart TLC 2101

Wireless Smart TLC 2101WL



## 1. OVERVIEW

Thank you for purchasing the Wired/ Wireless Ultrasonic Liquid Sensor with Display.

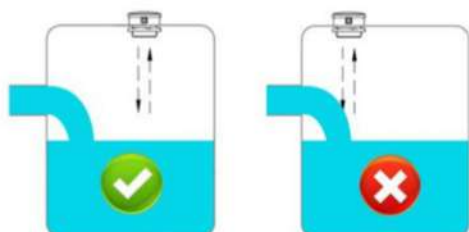
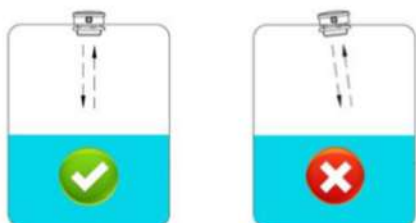
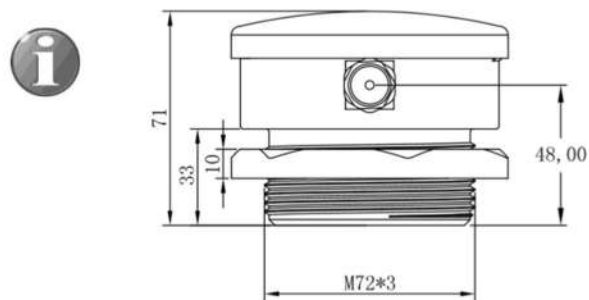
The ultrasonic level sensor measures the level without contact with the liquid. The sensor sends an ultrasonic signal, which is reflected back from the liquid surface. The fill level can thus be determined. The sensor can be used for oil and water tanks.

- ◆ Radio ultrasonic sensor for monitoring the filling level of a tank / live transmission
- ◆ Can be used for various liquids, since the ultrasonic sensor does not result in direct liquid contact
- ◆ Detect Range: 10cm to 250cm can measure high tanks
- ◆ Wireless range: 100m (without obstacles/without interference)
- ◆ High and Low liquid alarm function
- ◆ Ideal for retrofitting water/oil tanks
- ◆ With surface thermometer and room thermometer

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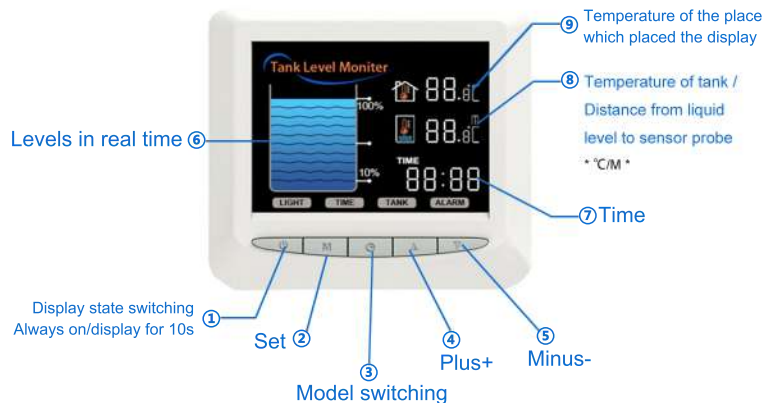
## 2. MOUNT THE SENSOR ON THE TANK

The sensor should be in the middle of the tank and not on a liquid inlet. This can falsify the measurement result. Please refer to the following pictures for the best installation positions. The hole should be 72mm.



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## 3. DISPLAY PROGRAM



- 1.** Press and hold button ② (Menu) for 3 seconds. This takes you to the programming mode. If there is no operation for 10 seconds, the controller automatically exits the programming mode
- 2.** Press button ② (menu) to access the 3 setting options 1. Time / 2. Tank / 3. Alarm.
- 3.** Set time: As shown in the picture. When the "TIME" letter appears at the bottom of the monitor screen, the device enters the time setting: press the button to increase and decrease the time to calibrate, click the button ③ to switch the hour/minute setting

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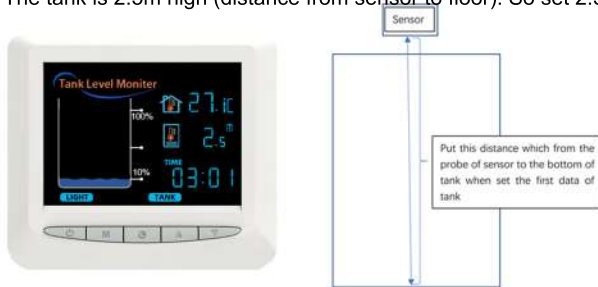


4. Key ② (Menu) to go to the next step.

5. Adjust tank height:

5.1. 1st value: As shown in the picture. When the "TANK" letter appears at the bottom of the display screen and the water level icon under the water tank flashes, the device enters the low water level setting of the water tank: 2.5M in the display is the distance setting from the ultrasonic sensor to the bottom of the water tank. Set the actual distance from the sensor to the low level of the water tank by pressing the button +-;

Example: The tank is 2.5m high (distance from sensor to floor). So set 2.5m



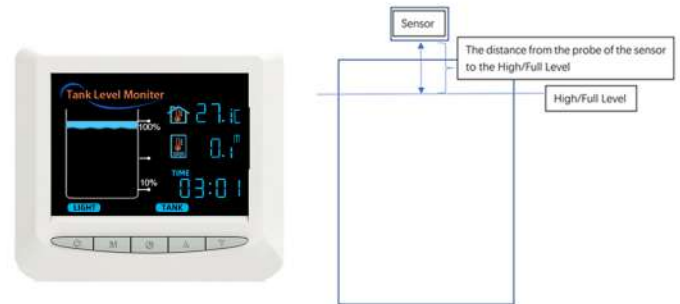
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Click the button ③ to switch the mode

5.2. 2nd value: As shown in the picture. When the "TANK" letter appears at the bottom of the display screen and the water level icon on the water tank flashes, the device enters the high-water level setting of the water tank:

0.1M in the display is to set the distance from the ultrasonic sensor to the high-water level of the water tank. Set the actual distance from the sensor to the high level of the water tank by pressing the button +-;

Example: 0.2m distance between the sensor and the max. filling quantity/full level. So set 0.2m



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6. Key ② (Menu) to go to the next step.

7. Set alarm: As shown in the picture. When the "ALARM" letter appears at the bottom of the display screen, the device enters the alarm level setting: press + - to set the alarm level in percentage of the water tank level. Each grid is 10%.



8. To complete the programming process and save the settings, press button ② (menu) for 3 seconds Or no operation for 10 seconds to exit.

Note: Alarm Beeping can be mute by press ③ Model Switching

#### 4. TECHNICAL SPECIFICATIONS:

- Model: Wired Smart TLC 2101 / Wireless Smart TLC 2101WL
- Sensor dimensions/weight: 71mm x 95mm / 143g
- Display dimensions: 85 x 95mm x 43mm
- Transfer Range without obstacles: 100m

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- Power adapter: DC9V/1A
- Consumption: 100mA
- Ultrasound frequency: 40kHz
- Working temperatures: 0° to 70°C
- Liquid measurement radius: 10 – 250cm
- Degree of protection: IP66

**ATTENTION!**

#### 2. SAFETY INSTRUCTIONS



In particular, the product must not be used in the following cases and for the following purposes: Potentially explosive environment - When operating in potentially explosive areas, sparking can lead to deflagration, fire or explosions

- ◆ Use as a safety device - The product does not replace the function of a limit indicator on the heating oil tank
- ◆ Use with aggressive liquids
- ◆ Use as overflow protection
- ◆ Use for billing purposes (the product is not calibrated)
- ◆ In connection with products that directly or indirectly serve human, health or life-saving purposes, or the operation of which may pose a risk to people, animals or property

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