ViewSonic Manual

Battery Operated
Ultrasonic Level Indication (Models)

ViewSonic Level Sensor with Leak Detection Switch + Remote Display (Model VS1000-L)

ViewSonic Level Sensor with Remote Display (Model VS1000)

ViewSonic Level Senor c/w Leak Detection Switch (Model VS500-L)

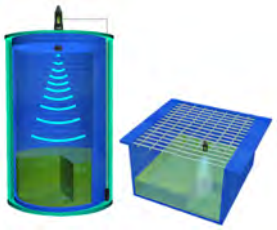
ViewSonic Level Sensor (Model VS500)

Read the user's manual carefully before starting to use the unit or software.
Producer reserves the right to implement changes without prior notice.

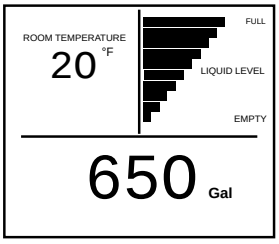
ViewSonic Manual-Display

1. INTRODUCTION

The ViewSonic Sensor is a battery operated liquid ultrasonic level sensor that is capable of providing the user with instant level indication at a glance. The ViewSonic Transmitter uses ultrasonic (sound wave) technology to measure the distance from the sensor face to the surface of the liquid in chemical tank or sump, then back to sensor face this is referred to as (time of flight) As the liquid product inside the tank decreases the distance that the senor measures increases accordingly. The current level measurement can be viewed directly on the LCD screen located on the sensor or via the remote display. No wiring is required as the level data is wirelessly transmitted to the remote display.

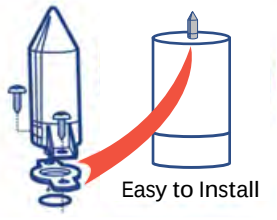


Gal/ Litres and %



After completion of programming the display calculates and displays the amount of liquid remaining in your tank in gallons, inches or as a percentage of the tank capacity. In addition

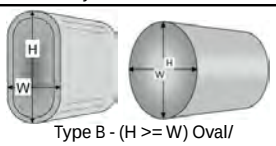
Mounting



The ViewSonic sensor can be mounted directly on the top of the tank, drum, tote and is suitable for use with any plastic or metal tank up to 10" (3m) in height, including double walled tanks.

Installation Guide-Programming

ViewSonic Battery Operated Ultrasonic Level Sensor + Display + Leak Detection Switch

Your tank/Drum/Sump Dimension Chart	Tank Type	Height (H) ins.	Width (W) ins.	Brimful Capacity (Gls.)	Nominal Capacity (Gls.) (95% of Brimful)
 Type A - Rectangular/ cylindrical vertical			N/A		
 Type B - (H >= W) Oval/ cylindrical horizontal					
 Type C - (W > H) Lo profile					

STEP 1 - DETERMINE THE SHAPE OF YOUR TANK/DRUM/

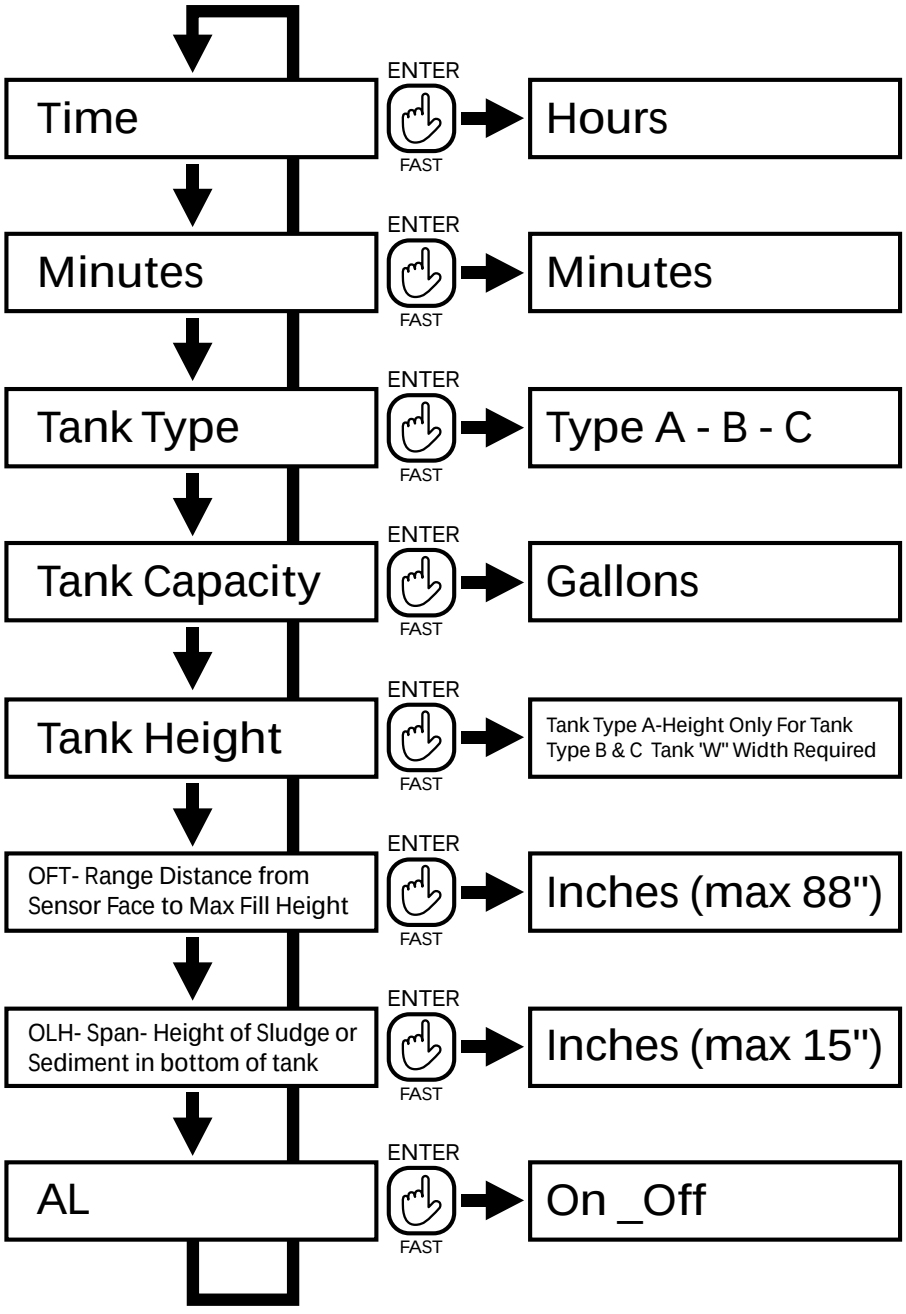
Select the tank type that most closely matches the vessel you are using from the above chart

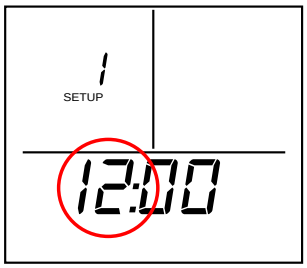
- Determine the dimensions of your tank either from the manufacturer or by physically measuring the tank /drum /sump/tote
- For Double Walled Tanks Only the Internal Dimensions and Type (Chart) are required
- The tank height, will be measured from the top of the tank, i.e. where the ViewSonic Level sensor will be mounted, to the bottom of the tank
  (Note: Ensure the ViewSonic sensor is installed onto internal tank if using a double walled tank.)

STEP 2 – Programming DISPLAY

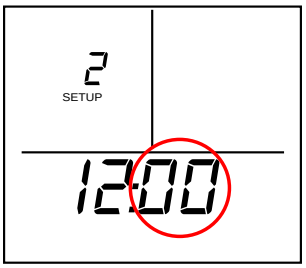
When first turning on the ViewSonic Dispay it will display the SETUP mode -In the top left corner. Setup1. During the Programing Phase you will be guided through the Setup via flashing screens. The 'Programming' is very intuitive and it is very easy to configure the display to your specific application.

Note: that if you enter incorrect information simply continue to press ENTER until you are back to the correct step where you can enter the correct value and press ENTER to store.

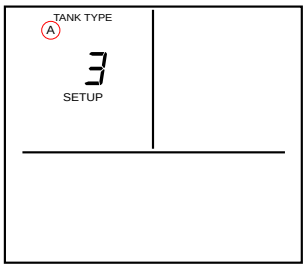




SETUP 1 – Setting the time (hrs) Adjust the hour displayed using △/▽. Press **ENTER** to save.

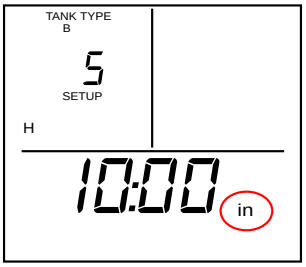


SETUP 2 – Setting the time (mins) Adjust minutes displayed using △/▽. Press **ENTER** to save.

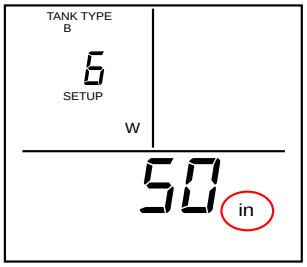


SETUP 3 – Programming the tank type Select tank type A, B, or C, using △/▽. to match your tank then Press **ENTER** to save.

SETUP 4 – Programming the tank/drum/sump capacity (ltr./ Gal.) Enter the number in litres/ gallons then Press **ENTER** to save



SETUP 5 – Programming tank/ drum/sump height (ins.) Press **ENTER** to save. Note that if Tank Type 'A' was selected, SETUP 6 will be skipped.

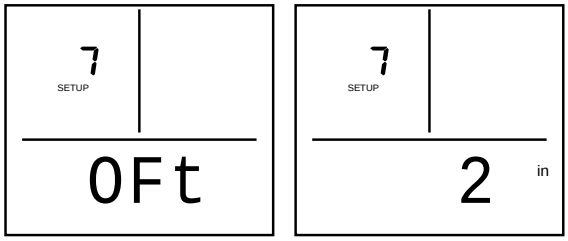


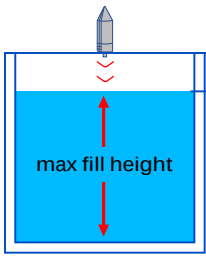
SETUP 6 (Type B & C tanks only) Programming the in (inches) Press ENTER to save.

N.B. If you unable to measure your tank /sump / drum please confirm that you have selected the correct type...A-B or C

Setup 7

Programming Offset -OFT you are able to program the distance freom the Sensor face to the maximum level of the liquid. This is measured in 'inches' and can be set from 0-19" Span



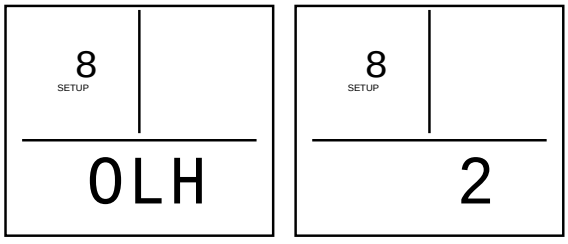


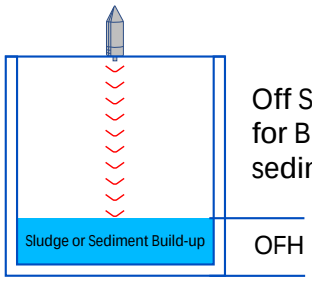
OFT Distance from Sensor Face to max fill Height

Setup 8

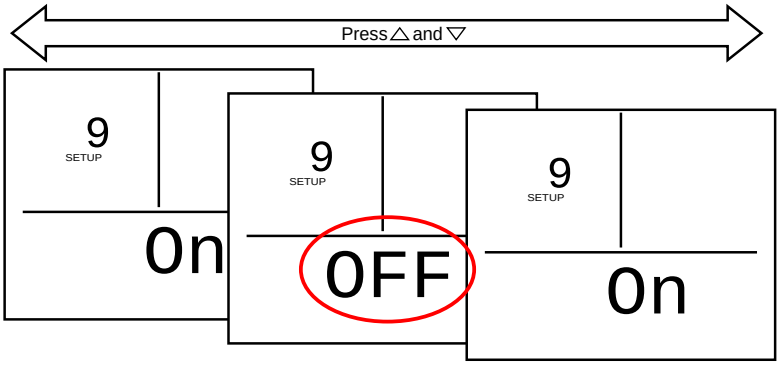
Programming Range -OFH

The Viewsonic Display can be programmed to account for sediment or sludge build-up located at the bottom of the tank. Input value





Off Set to account for Buildup sludge or sediment inside tank.



Setup 9 – Programming the-Leak Detection Visual + Audible Alarm

Alarm on : When a leak is sensed the ViewSonic Display will sound an audible beep and the LCD Display will flash on the sensor as well as on the display. The LED red light on the sensor will also light up and flash. The Audible sound can be turned off by pressing Enter

Alarm off : Turn alarm notification off .

Select **AL ON/OFF** using △ / ▽. When the display shows your preferred setting press **ENTER** to save.

SETUP is now complete. Press **SETUP** to exit and progress to STEP 3.
On exiting Programming mode the monitor temporarily displays 'CALC'.

Note: If at any stage during the Programming stage you wish to exit SETUP mode , simply press and hold the SETUP button for at least 3 seconds to begin again.

STEP 3 - Pairing Sensor to the Display

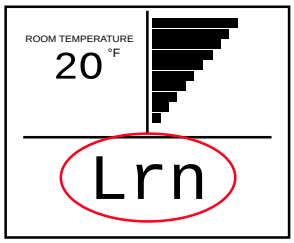


Image 1 : 'Lrn' mode

Image 2 : Alignment Pin

The Display must be in Pairing Mode (Lrn) mode which can be entered in one of two ways:

A) Pressing **SETUP** ***after completing STEP 2 above***

B) Disconnecting and reconnecting the power The Pairing mode will display shows 'Lrn' in the main screen area **(Image 1)**. Pairing mode will last for approx **2 minutes** during which time you must 'match/pair' the sensor to the display.

Image 3 : Correct positioning

Image 4 : Alignment

The sensor LCD display should be facing in the same direction as the LCD on the display as shown in image #4 base of the display.

Step 1 Position Sensor with Display-Hold for approx 5-10 Second

Step 2 If after 10 seconds syncing does not occur on the display (see Image 4) Remove Sensor from Display for approx 5 seconds.

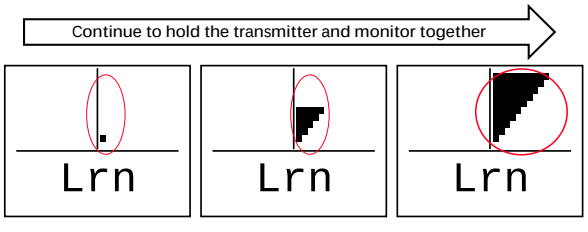


Image 4 : Syncing

Step 3 Reposition Sensor with the Display (Image 3) Hold in place. Once the units are connected the LCD bars on **both the display and the sensor** with climb in sync while bars climb in sync, and audible beep is emitted

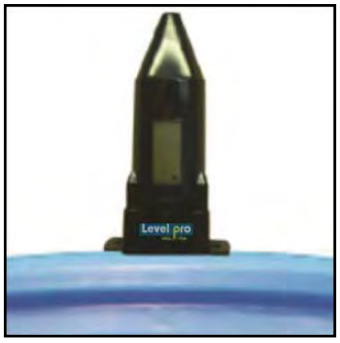
This will indicate that the pairing is complete

After the pairing' is complete the sensor will send level data continuously to the display for approximately ten (10 minutes).Every time the display receives data from the sensor a audible clicking noise will sound and the red LED light will flash on the ViewSonic Sensor

The pairing procedure can be confirmed by slowing lowering and raising the ViewSonic level sensor over a flat surface and observing that the display reflects the changes. The 'Quick-Click' mode will stop after 10 minutes. Note: Keep the Sensor Perpendicular to the surface being measured

STEP 4 Mount the sensor to your tank/ drum/sump

STEP 5 - INSTALLING the ViewSonic Senor



Tanks with pre-drilled hole

- A 2" or 1 1/2" MNPT Bulkhead fitting is provide for threading directly onto the tank.
- Ensure the transmitter is vertical to the liquid on top of the tank.
- Ensure the LCD Bar Graph is display liquid level

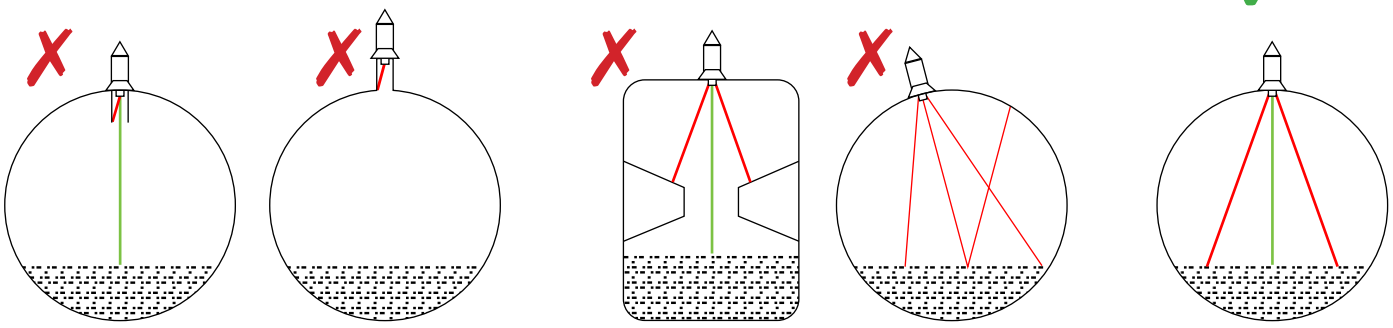
Note: if after 10 minutes the sensor is not mounted , the display may show the error symbol or display an incorrect reading. It may take 1-2 before the correct level data is shown on the display screen.

Installation Tips

Do not insert a down tube or stillwell or any other object.

Aviod obstacles such as ladders or mixers inside the tank/sump or drum

The transmitter must be mounted vertical



Your ViewSonic display and Level Sensor is now complete.

Contact Details

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sales@iconprocon.com