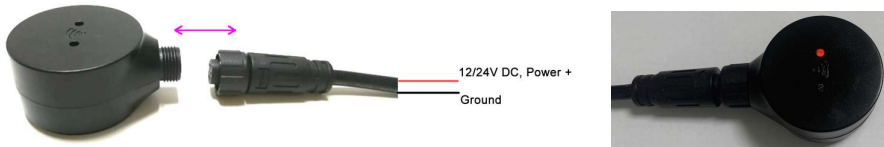


Cawe nGauge4x4

Ultrasonic Tank Level Sensor - Quick Guide

Indoor Test

- Indoor Test Items needed
 - 1) Mineral Water Bottle (flat cap)
 - 2) Sensor Kit
 - 3) Android or iOS Phone
 - 4) 12/24V Power Bank/Jump Starter/Power Supply
- Indoor Test Steps
 - 1) Power on Ultrasonic Sensor, RED LED flashes,
 - 2) Search & install “nGauge4x4” from IOS APP Store or Google Play
 - 3) Scan the QR, and monitor the level in real time on the nGauge4x4 App



- 4) Paste 0.5~1mm thickness silicone gel or couplant on top of the probe



- 5) Make sure water bottle has more than 3cm height water inside, and put on the probe



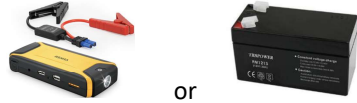
- 6) Real time data displayed on nGauge 4x4.

Outdoor On-Site Installation Quick Guide

- Outdoor Installation Items needed



- 1) Make sure fuel tank has at least 1/2 fuel inside
- 2) Make sure there is flat zone on the bottom of tank to fix probe
- 3) Sensor Kit
- 4) Android or iOS Phone
- 5) 12/24V Power Bank/Jump Starter or Portable Battery



or

- 6) Slot Type Screw Driver



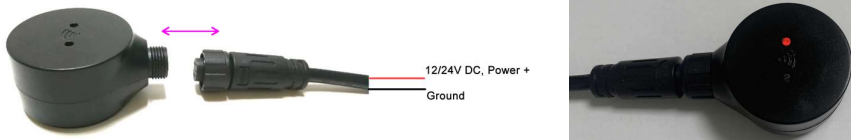
- 7) AB Epoxy Glue :

AB Epoxy Glue for Metal & Plastic with 3~5 minutes Curing Time



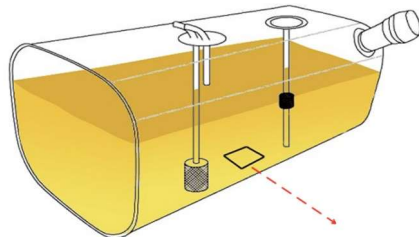
1. Power on Sensor & Connect to nGauge4x4 App

- 1) Power On Sensor, RED LED flashes, and connect the Sensor to the nGauge4x4 App

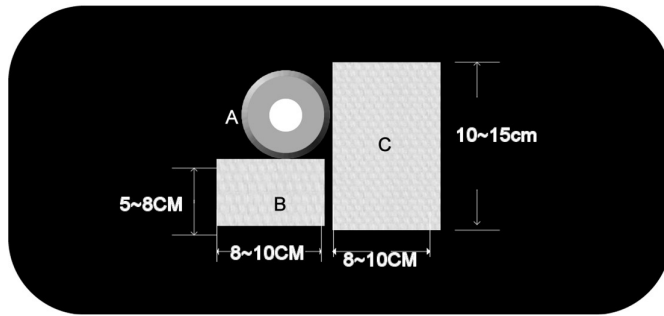


2. Clean the target zone around the middle of tank bottom

Top View from Tank Bottom



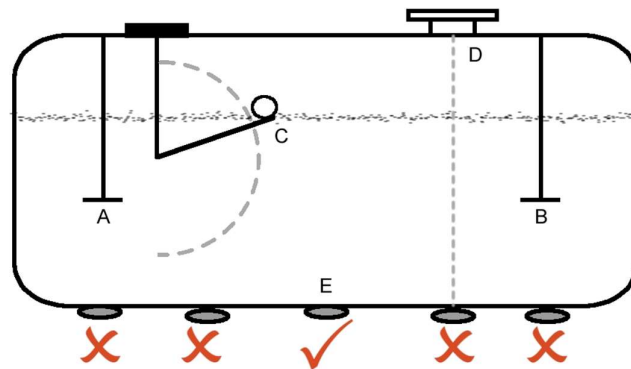
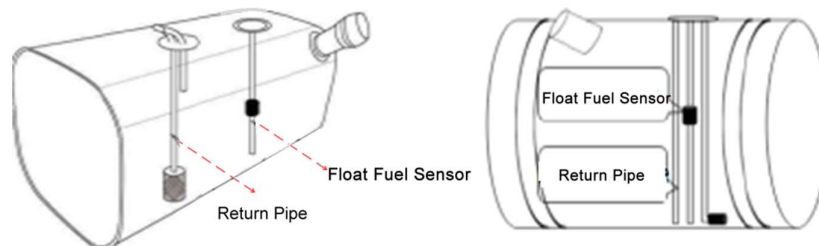
Top View from Tank Bottom



- A. Tank original drain plug (do not touch or clean)
- B. Target Zone to Clean
- C. Target Zone to Clean

How to Clean?

- 1) Clean all dust, black paint, rust, oil, asphalt, etc. to see original metal material
- 2) After step 1), must use Sand Paper to polish for 2~3 minutes to make the zone as flat and smooth as possible.
- 3) Please make sure get rid of the original tank float sensor and return pipe



- A,B: Original Tank Compartment
- C: Original Tank Fuel Tube Float Range (Circle)
- D: Refueling Port
- E: Best Position for installation

3. Find Best Installation Position

- After clean zone B & C, use **Silicone Gel/Car grease/Couplant** on top of the probe.



- Then hold the probe to the tank bottom and move slowly in **zone B & C**
 - **Make remark with mark pen or sticker to remember this position**
- IMPORTANT: There must be NO air between probe and tank when finding best signal position**

Standard for best installation position

- A. Probe Show stable **GREEN** Light (if flash red, you need hold and recheck other position)
- B. Mobile APP meets the following status:



- Real Time & Smooth Value are stable & close to real height
- Signal Strength more than 30 or stable (maximum 99)
- Valid Signal Quantity is stable, more than 30 (maximum 40)
- Tilt Angle is less than 11 Degrees (best 1~5 degrees)

After finding best signal position, you **MUST Clean All Gel** from Probe & Tank Surface, and then use Glue in step 4.

4. Fix the probe to the bottom of tank for Metal/Steel Tank

- 1) Prepare AB Epoxy Glue (Suggested Araldite with 3~5 minutes Curing Time)



- 2) Inject the AB Epoxy Glue on the probe, and **Mix AB glue for 20~30 seconds to make sure glue color has changed.**



- 3) Hold the probe with hand or Manual Jack/Lift for **10~15 minutes, LED must show Stable GREEN**



- 4) Verify the installation
After step 3), remove your hand or Manual Jack/Lift, and use Mobile APP to check again to be sure the same as to complete the installation
- 5) Fasten the probe with Stainless steel Strap across the 3M sticker on back



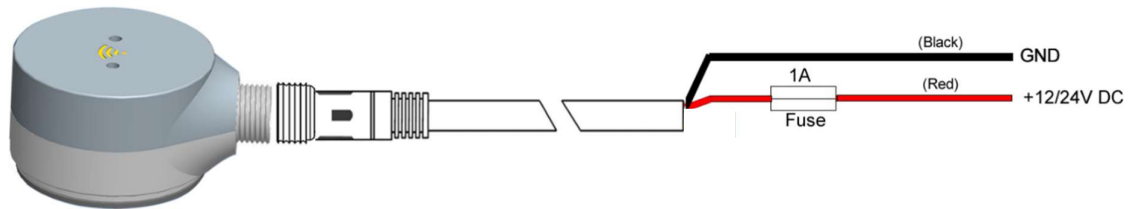
5. Wiring Diagram

Power Input: 9~36V DC

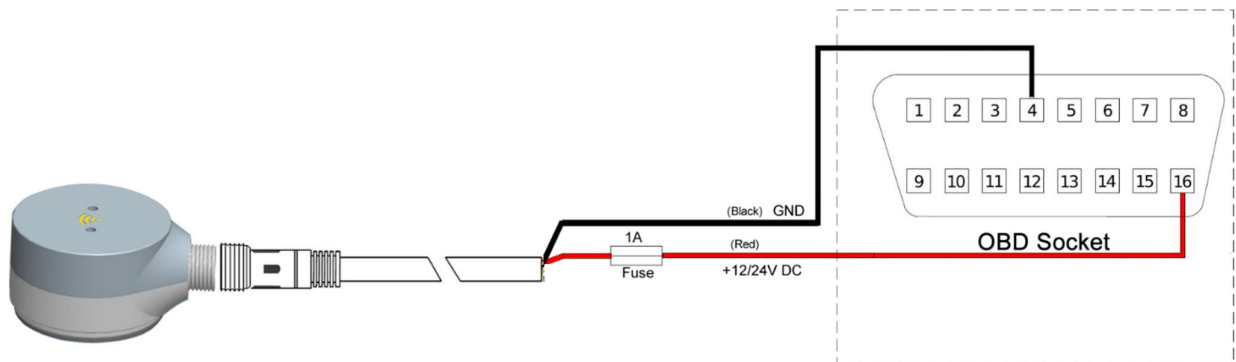


It is Mandatory to use an external Automotive 1 A Fuse

- **Recommended**



- **Optional for LCV Vehicles**



- Heavy Duty Vehicle or Some Old Truck/Bus, Construction Vehicle, Generator:
Power Stabilizer will be applied.