

Richen Power

LIQUID LEVEL SENSOR

Read This First



LIQUID LEVEL SENSOR

English

This manual can be downloaded from the following website:

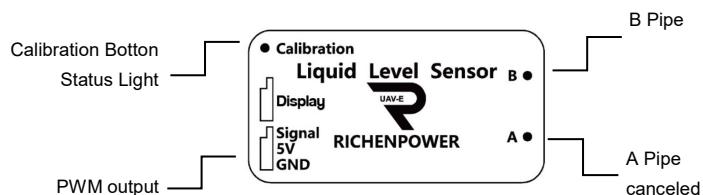
<https://www.richenpower.com/download>

Specification	
	LIQUID LEVEL SENSOR
Weight	31 g (0.03 oz)
Power Supply	DC 5 V \pm 0.3
Demension (L x W x H)	60 x 35 x 25 mm/ 2.4 x 1.4 x 1.0 in
Range	30 cm water or other liquid comparable
Output	5V 50 Hz PWM 0%—1100us 100%—1900us
Liquid Type	Water, oil, gasoline, diesel, jet fuel, agricultural chemicals and etc. Check the corrosion of liquid on pipes before use
Service Temperature	-20 ~ 40 °C

Checking the bundled items

- Sensor (1)
- Pipes (1)
- Signal wire (1)
- Manual (this)

Port Discription and Connection



PWM output port:

Signal: 5V, 50Hz Minimum liquid level 0%—1100us

Maximum liquid level 100%—1900us

5V: power supply +

GND:power supply -

Installation

- a. Liquid may damage sensor chip. It is necessary to avoid contact between liquid and sensor through B pipe. We recommend to install sensor above the liquid container. B pipe comes into the container through the top of container.
- b. B pipe comes into container from top. Lie pipe end on the bottom of liquid container.

Calibration

- a. Calibrate by first time use.
- b. The green status light is on when power supplied.
- c. Calibrate 0% empty level: when the liquid level at the desired low positon, press calibration button 5 seconds, status light begin to blink. 0% liquid level is calibrated.
- d. Calibrate 100% full level: Fill the container with liquid. Press calibration button 5 seconds, status light stops blinking. 100% liquid level is calibrated.
- e. Calibrate again when container is changed or the sensor does not work properly.

APM key parameters (Adrupilot)

<https://ardupilot.org/copter/docs/common-fuel-sensors.html>

BATT2_MONITOR =12 for PWM fuel level sensors

BATT2_CURR_PIN = 55 (AUX 6)

BATT2_AMP_PERVLT =1 A/V

BRD_PWM_COUNT =4 (set AUX 5 and AUX6 as input)

MissionPlanner right click mouse on HUD -> items -> select Battery2_remaining:

QGC automatical displays on up right corner as Power2 %.