

# LEVEL GAGE (LG-1)

## 1. GENERAL

The Level Gage monitors liquid level in tanks and sounds an alarm if the level is out of range. There are four control points: high alarm, low alarm, (yellow warning light) and high-high alarm and low-low alarm. (red warning light and buzzer)

## 2. PHYSICAL SETUP








- The default units of measurement from our factory is in inches. This can be changed with the parameter PU-H. (discussed later)
- The immersion level probe is simply dropped into the tank and should rest on the bottom. (doesn't matter if its horizontal)
- Mount the digital display using the Stainless mounting tabs provided.

## 3. CHANGING SETTINGS




- Settings can be changed through two submenus. The first submenu allows changes to the alarm points, the second allows changes to everything else.





### FIRST SUBMENU

- The first submenu is accessed by holding the  button for 3 seconds.
- The first item of the menu "AH" will appear, (Alarm High) and you can adjust the value of the "High Alarm" point with the   buttons.
- To access other alarm points, use the  button. (A-L, A-HH, A-LL, dL dH, dHH, and dLL. where L =Low, H=high, d=deviation)
- Adjust the alarm point (in inches) with the   buttons.
- To return to the home screen, hold the  button for two seconds.

### SECOND SUBMENU

- The second submenu is entered from the first menu by pressing  so "PASS" (password) shows. Enter  then set password "0555" and then  again to enter the second submenu.

- Advance through the parameters using the  button.
- The only parameter you will need to change from the second submenu is probably the range of the bar chart (OU-H) You want to set this so the bar chart reads 100% when your tank is full. The units are inches so set the OU-H value to “110” for a tank with 110 inch depth. When done with the setting, exit to the home screen by holding  for 2 seconds.

PARAMETER	DESCRIPTION	RANGE	SETTING
Sn	Signal type	0-22	4-20mA = 15
Id	Communication address	0-31	0
bAUd	communication rate	0,1,2,3 (9600)	3
InPL	Input signal - low	only used if Sn=16,17	0
InPH	Input signal - high	only used if Sn=16,17	100
PLL	alarm type (hi/low)	1 (hi) ,2 (low)	2
PL	alarm type (hi/low)	0=off, 1 (hi) ,2 (low)	2
PH	alarm type (hi/low)	0=off, 1 (hi) ,2 (low)	1
PHH	alarm type (hi/low)	0=off, 1 (hi) ,2 (low)	1
OU-H	bar chart range	0-9999	~110
OU-L	tank depth (low)		0
OU-A	alarm	4-20mA=2	2
y1			1.000
FILT	noise filtering	0.1-0.950	0.1
PbIA	zero correct	-100 to 100	0
PU-H	measurement units		120
PUL	Alarm range low point		0
dOt	decimal places	0,1,2,3	0
SUH			

- If the S.G. of your chemical is other than 1.0, then some adjustment of the parameter PU-H will be necessary. There is no convenient parameter for correcting for S.G. directly so you will have to experiment to find the right number. (the default of 120 is for water) To adjust PU-H, enter the second submenu as above.

#### 4. EXTERNAL CONNECTIONS

- The submersible sensor connects to terminal 13, 7
- There is a 4-20mA output available on terminals 9,10
- The relays can be utilized. Maximum carry current is only 3A.

