



SL Plus Tank Level Monitor System Calibration Instructions

Note:

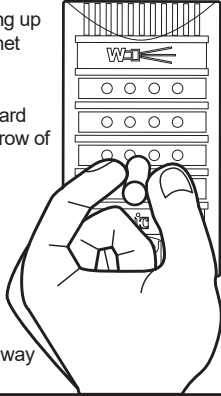
This calibration procedure must be performed to ensure that the indicated fluid levels on the display accurately match the actual levels in the tank. The tank can be full or empty to begin calibration, but must be filled before beginning Step 3. To ensure proper calibration, do not have water in the fill tower and perform calibration with the apparatus on a level surface.

Step 1: Initiate Calibration

Within 1 min. of powering up the unit, place the magnet over the master display pointing the end of the magnet (as shown) toward the space between the row of Red and Amber LEDs.

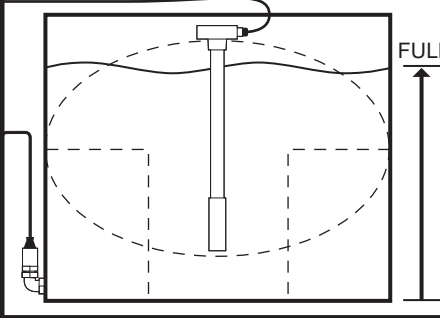
The different color level LEDs will flash in succession and then flash on/off together - at the same time.

Hold the magnet in this way throughout the process.



Step 2: Calibrating The Probe

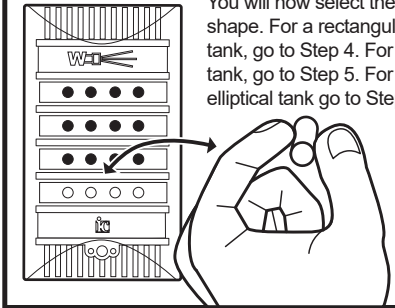
With all the display LEDs flashing, fill the tank, if not already full.



Step 3: Tank Selection Mode

Place the magnet over the display between Red and Amber levels. The lights will flash in sequence upward beginning the tank selection mode.

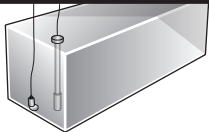
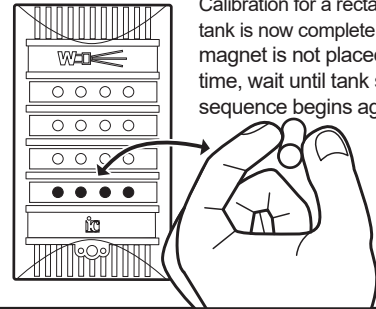
You will now select the tank shape. For a rectangular tank, go to Step 4. For a T tank, go to Step 5. For an elliptical tank go to Step 6.



Step 4: Rectangular Tank

When the Red LEDs begin to flash, place the magnet back onto the master display before the lights flash for the fifth time. Remove the magnet.

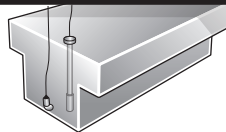
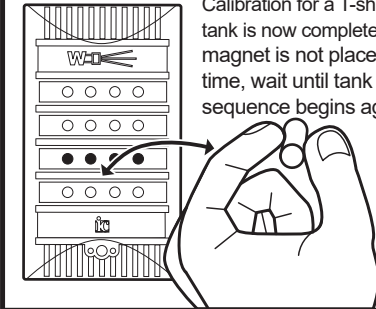
Calibration for a rectangular tank is now complete. If the magnet is not placed in time, wait until tank shape sequence begins again.



Step 5: T-Shaped Tank

When the Amber LEDs begin to flash, place the magnet back onto the master display before the lights flash for the fifth time. Remove the magnet.

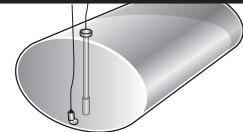
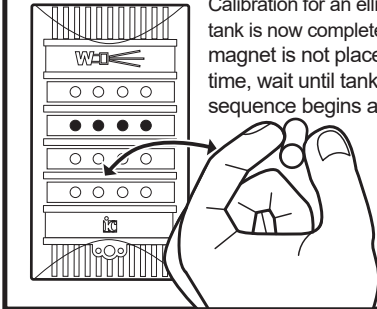
Calibration for a T-shaped tank is now complete. If the magnet is not placed in time, wait until tank shape sequence begins again.



Step 6: Elliptical Tank

When the Blue LEDs begin to flash, place the magnet back onto the master display before the lights flash for the fifth time. Remove the magnet.

Calibration for an elliptical tank is now complete. If the magnet is not placed in time, wait until tank shape sequence begins again.



Note:

If the magnet is not placed in front of the display to select a tank shape, the tank selection sequence will continue and the Green LEDs will flash 5 times.

After the Green LEDs flash 5 times, the tank shape selection sequence will begin again. (Step 4) The tank shape selection sequence will repeat 3 times. If no tank shape selection is made in this time, the display will default to a rectangular tank.

If the display was calibrated incorrectly, remove power from the display and repeat the process. Recalibration will not occur without cycling power.

Technical Information:

Master Display to Remote Display Pin-Out :

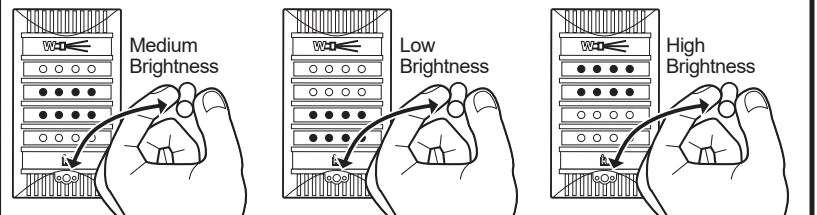
- 1 - White Wire : Supply Voltage to Remote Display (+12VDC or +24VDC)
- 2 - Bare Wire : Drain/Shield
- 3 - Green Wire : Ground
- 4 - Blue Wire : Reset
- 5 - Red Wire : Clock
- 6 - Black Wire : Data

Master Display to Transducer Pin-Out :

- 1 - White Wire : Signal Voltage from Transducer (+0.25VDC - +4.75VDC) (0° of water - 70° of water)
- 2 - Bare Wire : Drain/Shield
- 3 - Green Wire : Unused
- 4 - Blue Wire : Unused
- 5 - Red Wire : Supply Voltage to Transducer +5.0VDC
- 6 - Black Wire : Ground

Changing Brightness

The display has 3 brightness levels. The factory default is set to Medium. When the unit is powered-up, the two middle rows of LEDs (Blue and Amber) will quickly flash twice, indicating this Medium setting. To change the setting to low, hold a magnet over the opening below the logo area of the display. The bottom two rows of LEDs (Amber and Red) will light. When the magnet is removed, the LEDs will be set to Low brightness. If the magnet is reapplied to the sensor, the top two rows of LEDs (Green and Blue) will illuminate. When the magnet is removed, the LEDs will be set to High brightness. Placing and removing the magnet will cycle through all 3 settings



Error Codes

Rapid Blinking Green Level

Signal Voltage is too high:
Possible short between signal voltage and Supply Voltage

Rapid Blinking Red Level

Signal voltage is too low:
Possible short between signal voltage and Ground, or it is unplugged.

System is voltage specific to 12VDC or 24VDC



SL Plus Level Monitor Manual Tank Calibration (Alternative)

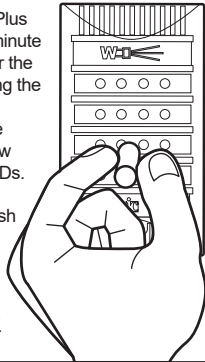
Note:

If none of the 3 automatic calibration modes described on the previous page is acceptable, use this special manual calibration mode to set each of the water or foam levels independently. Once again, make sure calibration is done with apparatus on a level surface.

Alt. Step 1

Power up the the SL Plus system and within 1 minute place the magnet over the master display, pointing the end of the magnet (as shown) toward the space between the row of Red and Amber LEDs.

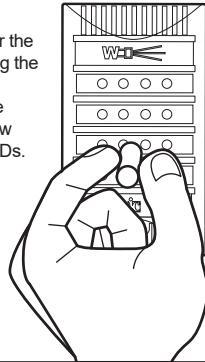
All of the LEDs will flash rapidly. This flashing is a reminder to **EMPTY THE TANK COMPLETELY.**



Alt. Step 2

With an empty tank, place the magnet over the master display pointing the end of the magnet (as shown) toward the space between the row of Red and Amber LEDs.

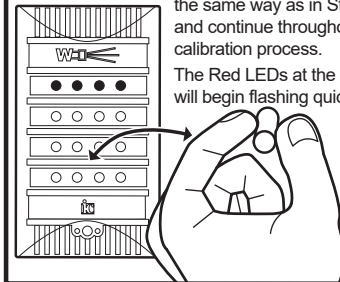
The different colored LEDs will flash in succession, starting with the Red LEDs at the bottom level.



Alt. Step 3

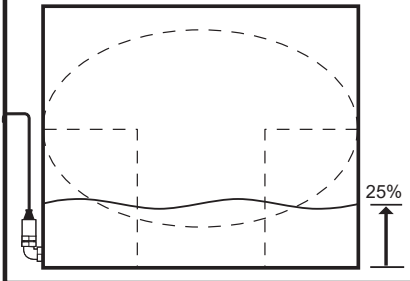
Wait until the Green LED level at the top is flashing and hold the magnet over the display to activate manual tank fill calibration mode. Hold the magnet the same way as in Step 1, and continue throughout the calibration process.

The Red LEDs at the bottom will begin flashing quickly.



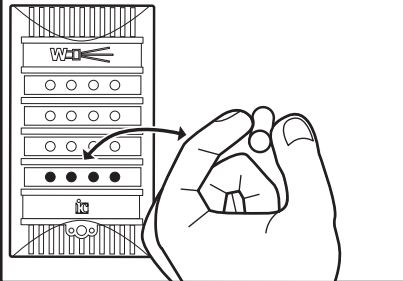
Alt. Step 4

With Red LEDs flashing, fill the tank to the desired 25% level. Check level visually or by measuring depth.



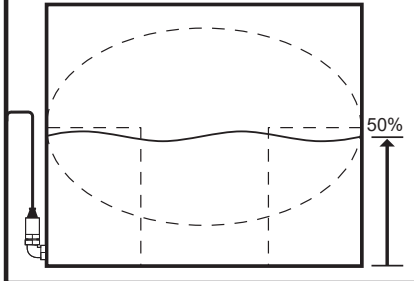
Alt. Step 5

When satisfied with 1/4 level, place the magnet over the display. The Red LEDs will stop flashing as the Amber LEDs begin to flash. 1/4 level is calibrated.



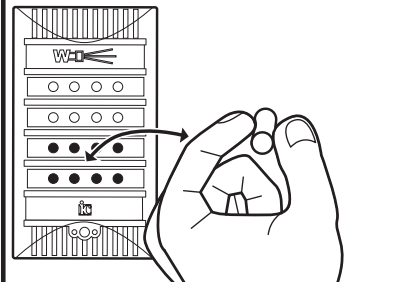
Alt. Step 6

With Amber LEDs flashing, fill the tank to the desired 50% level. Check level visually or by measuring depth.



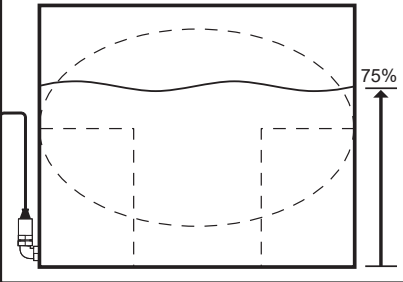
Alt. Step 7

When satisfied with 1/2 level, place the magnet over the display. The Amber LEDs will stop flashing as the Blue LEDs begin to flash. 1/2 level is calibrated.



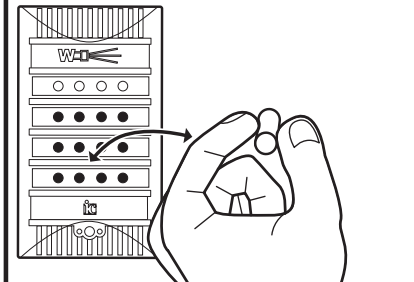
Alt. Step 8

Fill the tank to the desired 75% level. Check level visually or by measuring depth.



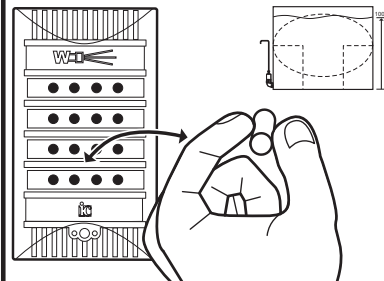
Alt. Step 9

When satisfied with 3/4 level, place the magnet over the display. The Blue LEDs will stop flashing as the Green LEDs begin to flash. 3/4 level is calibrated.



Alt. Step 10

Fill the tank to the desired FULL level. With tank full, place the magnet over the display to complete the alternate calibration process.



Technical Information:

Master Display to Transducer Pin-Out :

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- 3 – Green Wire : Unused
- 4 – Blue Wire : Unused
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- 6 – Black Wire : Ground

Master Display to Remote Display Pin-Out :

- 1 – White Wire : Supply Voltage to Remote Display (+12VDC or +24VDC)
- 2 – Bare Wire : Drain/Shield
- 3 – Green Wire : Ground
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Error Codes

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