

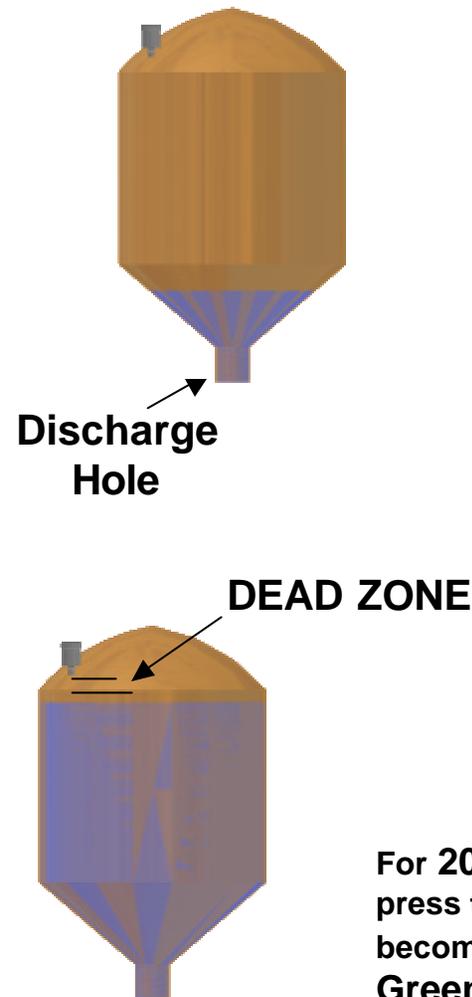
# Calibration of the Ultrasonic and Microwave Level Devices

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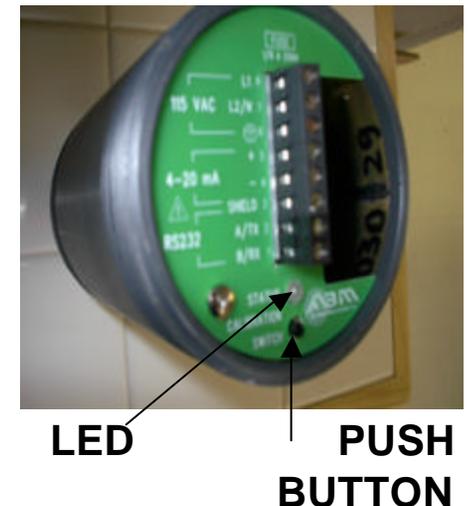


# Inside Tank Calibration using Push Button

- ✘ For radar this type of calibration is not recommended.
- ✘ A level device has to be installed according to a manual.
- ✘ For Empty Tank Calibration (4mA calibration) a tank has to be at the minimum level, preferably at a level that is vertically aligned with sensor.
- ✘ For Full Tank Calibration (20mA calibration) a material in tank has to be below level device's DEAD ZONE (Minimum Range).
- ✘ The level device has to be powered and green light on.
- ✘ For calibration the LED has two colors; yellow corresponds to 20mA and the color red corresponds to 4mA.



For 4mA Empty Tank Calibration press the button and hold it until the LED becomes Red (it changes from Green to Yellow then Red)

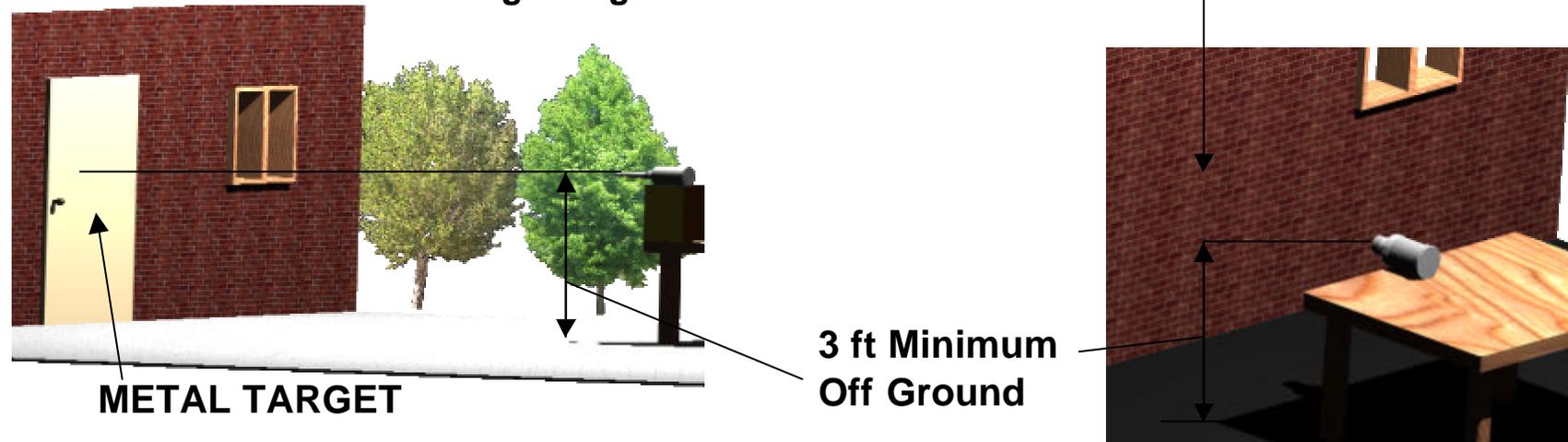


For 20mA Full Tank Calibration press the button until the LED becomes Yellow (it changes from Green to Yellow)

# Outside Tank Calibration

Only for devices without communication ports (RS232, RS485)

- ✎ For Ultrasonic calibration method use a flat target with a hard surface
- ✎ For Radar use a conductive (metallic) surface. Use 3 ft x 3 ft or larger target



- For calibration of an Empty Tank (4 mA calibration), position the level device at a distance to a target equal to your empty tank level.
- For Full Tank Calibration(20mA Calibration) place the level device at a distance equal to a full tank
- In case of the radar do the positioning for a full tank when the radar is off. Make sure the antenna is perpendicular to the metal target. After that turn the unit on and wait a few seconds until the GREEN light is ON.
- The push button operation is explained in the Inside Tank Calibration



# Programmable Calibration

- ✎ For the programmable calibration there is no need for empty, full tank target positioning.
- ✎ Use ABM's communication program. Wire the communication port according to the manual.
- ✎ Power on the level device and position it at any target (for Radar a flat metal target is recommended). The LED on the level device has to be Green.
- ✎ Execute the ABM Gateway PC program, when doing it the first time make sure to choose your serial port.
- ✎ Then click on Start Data link. When communication works click on Show Calibration Data where you will be able to read your Empty Tank (4mA Calibration) and Full Tank Calibration (20mA calibration) distances.
- ✎ If you want to change these values please go to tools and click on Empty Tank Distance Calibration(4mA calibration), after that you get a message: Empty Tank Distance Calibration(4mA calibration)? , answer OK.
- ✎ The next display will ask you for values in Feet and Inches (Don't leave a blank box)
- ✎ When the Empty Tank Distance values are correct , click on OK.
- ✎ Similar procedure is for Full Tank Distance Calibration(20mA Calibration).
- ✎ After the calibration is done please verify your values by clicking ShowCalibData.