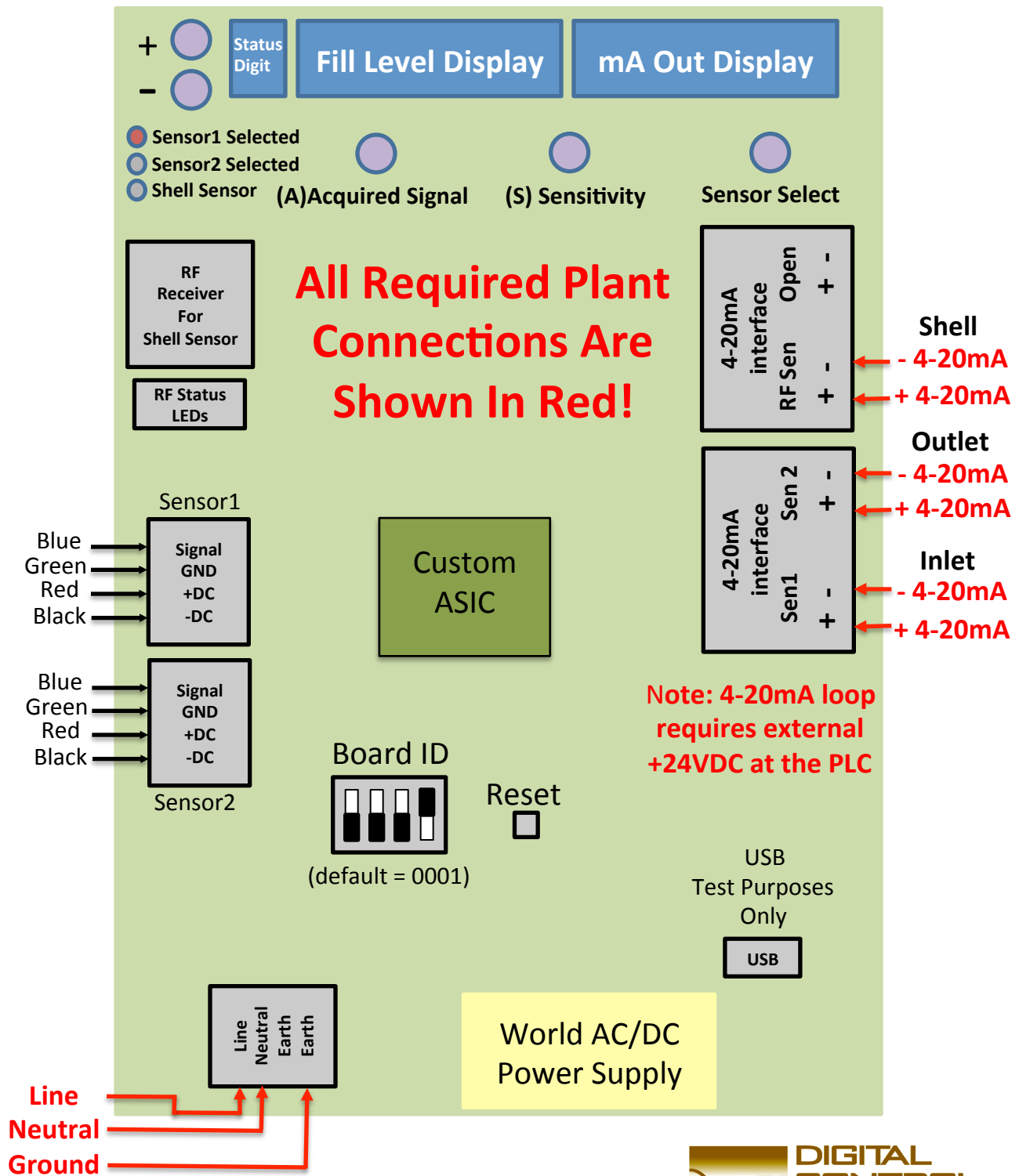


# MineralScan Lite – Wiring Diagram



# MineralScan Lite – Quick Calibration

## Vibration Sensor Calibration

The calibration procedure requires running the mill in normal operation and waiting for the mill circuit to become stable. Select a sensor for calibration by pressing the **Sensor Select** button. Next, estimate the amount of material in the mill as a percent (ex. 80% full), acquire a waveform and save the results. Here are the steps in this process:

1. *Load Current Mill Fill Level in MS Lite* - **press/hold A** and use the **+, -** buttons to set your current estimated fill level percent for the mill. **Release A** to store this value.
2. *Acquire a Mill Vibration Waveform* - **press A** and **S** simultaneously and then **release**. Wait 15 seconds and then observe **A** flashing, indicating a waveform has been acquired.

Special note: *If you are **not satisfied** with the acquired signal or think your mill fill level estimate is off, repeat steps 1 & 2. Otherwise, continue on to Step 3.*

3. *Save the Acquired Waveform* – **press + and -** simultaneously and **release** to save the acquired vibration waveform to MS Lite memory. You should now see **d** for dump to memory on the status digit. **Repeat steps 1-3 for all remaining sensors.**

## Changing the Output Fill Level Sensitivity

After the sensors have been calibrated, you should observe the sensor trends to determine if the output Sensitivity (**S**) needs to be increased or decreased for a given 4-20 mA output. **S = 7 (default)**. Increasing **S** increases sensitivity and decreasing **S** decreases sensitivity.

1. To change the sensitivity for a given sensor output, use **Sensor Select** to select the sensor.
2. To make the output fill level signal **more sensitive**, increase **S** by pressing **S** and **+** or to make the output fill level signal **less sensitive**, decrease **S** by pressing **S** and **-**.
3. **Save the new sensitivity** by pressing the **+, -** buttons simultaneously and then release.

## Calibration Button Definitions/Functions:

**Sensor Select** => selects a particular sensor for display or calibration

**A** => press/hold to display or change the fill level set point for a selected sensor

**S** => press/hold to display or change the sensitivity set point for a selected sensor

**+** => while pressing **A** or **S**, this is used to increase the fill level set point or sensitivity

**-** => while pressing **A** or **S**, this is used to decrease the fill level set point or sensitivity

**A** and **S** => press both to acquire a vibration waveform for a given fill level percent

**+** and **-** => press both to save an acquired waveform or sensitivity to MS Lite memory

