

HEATEC TEC-NOTE

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Setting Datel display for pressure transmitters on Heatec asphalt tanks

NOTICE: This document applies to Datel displays used with pressure transmitters installed December 15, 2006 and thereafter. Sensors of transmitters installed at Heatec are at a height of 11 inches above the bottom of the tank. Sensors of transmitters retrofitted in the field are usually installed in the drain outlet, which is only 2.5 inches above the bottom of the tank.

This document provides information for setting Datel Displays DMS-20 PC-4/20S (**Figure 1**) used to indicate *asphalt* levels in Heatec *asphalt* tanks. The settings apply to **vertical** tanks up to 600 inches tall equipped with a Siemens pressure transmitter that has been setup according to Tec-Note 10-06-180 .

Displays purchased from Heatec are normally set at our factory and require no further setup. However, personnel at the hot mix plant can use these instructions to reset a display if necessary.

You will need a signal simulator, such as a Fluke 787 Processmeter, to provide outputs from 4 to 20 mA. You will also need a small screwdriver, such as a jewelers No. 0. Reset the display as follows (**See Figure 2**):

1. Disconnect existing wires from the two terminals on the back of the display.
2. Set DIP switch 2 to ON. Set all others to OFF.



Figure 1. Datel display.

3. Connect positive wire from simulator to positive terminal on display. Connect negative wire from the simulator to negative terminal on display.
4. Set the output of the simulator to 4.0 mA. Adjust potentiometer R3 on the back of the display to make the display indicate 000.
5. Reset the output of the simulator to 20.0 mA. Adjust potentiometer R7 on the back of the display to make the display indicate 589 for sensors at 11-inch height or 597 for sensors at 2.5 inch height.
6. Reset the output of the simulator to 4.0 mA. Readjust R3 to make the display indicate 011 for sensors at 11 inch height or 3 for sensors at 2.5 inch height.
7. Reset the simulator to 20.0 mA and make sure the display now indicates 600. If not repeat the process.
8. Disconnect the wires from the simulator and reconnect the original wires.

The display should now indicate asphalt levels in inches above the bottom of the tank, starting at the height of the sensor above the bottom of the tank.

Refer to Heatec Tec-Note 10-06-180 for information on levels and the Siemens pressure transmitter.

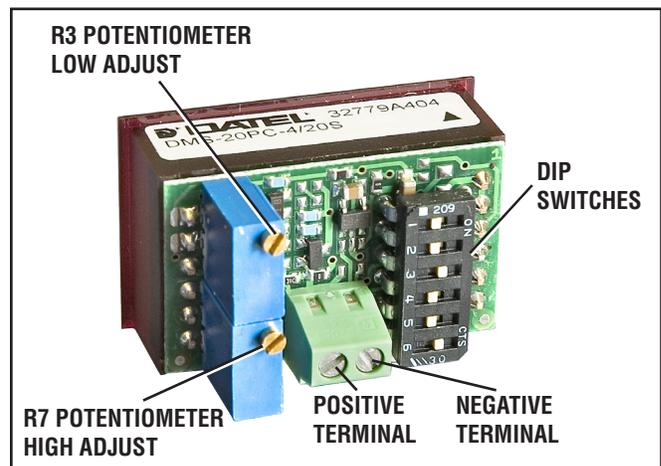


Figure 2. Controls on back of Datel display