Changing the 4-20mA alarm state on an iMag4700/AG3000 from “high” to “low”

When the 4-20mA option board was designed for the iMag4700/AG3000, an alarm state was written into the firmware. There are 2 normal alarm states available for 4-20mA circuits, high, and low. When a meter leaves the factory, the alarm state is set to high, and the high alarm used is 22.8 mA. So, when the meter is in an alarm state the 4-20mA loop will be running at 22.8 mA. The only alarm state that will be seen on a normally operating meter will be empty pipe.

Having the meter alarm in certain conditions is hard coded into the firmware, but whether the alarm is a high state (22.8 mA) or a low state (3.2 mA) is simply a jumper setting.

Although we feel that most people would be better served by a meter alarming to the high state, we do recognize that in some applications the low alarm state would be preferable. This can be easily changed in the field.

To change the alarm state, open the head of the meter and take the three T15 torx head screws out of the display, and turn the display over. The top board should be the 4-20 mA option board and in one corner are 3 jumpers.

The “AD” jumper will be in the HI position

Move it to the LO position

Do not permanently remove the jumper from the meter. The meter will not operate correctly if the jumper is missing.

The meter should now alarm to 3.2 mA.