



## **Tech Note 20170515—Updated 20200319**

**RE: Trimble Field IQ Rate & Section Control Module Firmware Version**

**ISSUE:** After updating the software / firmware on the Trimble FmX or TMX-2050, the system will not run, or if it runs, it will not control.

**PROBLEM:** Field IQ Rate & Section Control Module Firmware versions 4.09 or 4.11 will not work with the SureFire system. Version 4.13 may work. The best version appears to be 3.20.

**FIX: Go back to Field IQ Rate & Section Control Module Firmware version 3.20.** In many instances, this version is already on the display and the system just needs to be set to use this version.

*Versions 4.09 and 4.11 were Trimble Test versions. Version 4.13 should be used if you are using the Pressure Limiting feature, which will very seldom be used on a SureFire fertilizer application system.*

### ***Other changes to Trimble version 10 software:***

The **Drive Calibration** beginning with Version 10 uses **Proportional Gain instead of Integral Gain**.

The numbers to enter for Proportional Gain will be similar to the numbers normally used for Integral Gain. Adjust as needed in the field. The **Auto-Tuning** feature may give satisfactory valve calibration settings.

When using **AutoTuning**, be sure to check the **Upper PWM Limit** and **Integrator Upper Limit**. These should be set to 100 for most SureFire operations. AutoTuning may put lower limits in here that will prevent the pump from reaching the desired rates.

Update 04/23/2018 We have talked to people using 4.13 this spring. That version appears to work OK. The newest software versions for both the 2050 and FmX uses PROP gain instead of INT Gain.

**ISSUE:** *When system starts, it runs full speed and cannot be controlled.*

**POSSIBLE CAUSE:** *The Field-IQ module must be connected to a final pump harness that has green and yellow wires going to the PWM connector. SureFire final pump harnesses 207-3461Y2 and 207-3462Y2 will not work. The Y1 version of these harnesses will work, or 207-4189Y1 or 4190Y1 will work.*