AEMC INSTRUMENTS DATA LOGGERS

## **EQUIPMENT SOFTWARE/FIRMWARE UPDATE**

The **Data Logger** allows firmware updating in the field, through a USB flash drive. The current firmware version is available on www.aemc.com. The procedure for updating firmware is as follows.



Before performing the update, download any data in the data loggers' memory and, if desired, also the the data logger's configuration. Saving it to a file. Both the configuration and the logged data in flash memory will be lost in the upgrade process.

- 1. Turn off and unplug all *Data Logger* connections attached to it.
- 2. Copy the flogger.flb file, which is the binary firmware file of the Data Logger into USB flash drive root folder.
- 3. Insert the USB flash drive into the USB host of the Data Logger (that must remain off).
- 4. Plug in the power cord, apply power then turn the *Data Logger* ON again. The status and USB LEDs should flash together, indicating that the boot loader is running.
- 5. The status LED should still be flashing in the same pattern. The USB LED should flash quickly while the *flogger.flb* file copy is being performed. Once the copy has been completed, the USB LED should stay lit, indicating that the USB flash drive can be removed.
- If there is an error while copying (writing) the firmware to the *Data Logger*, it will be indicated by the status LED. It will stop flashing periodically and begin repeatedly showing a pattern of blinking associated with the error that occurred.

Blinks	Description
1	An error occurred in reading flogger.flb file.
2	Error in initializing the <i>Data Logger</i> USB host (when inserting the USB flash drive)
3	Error in erasing the <i>Data Logger</i> program memory.
4	Error in writing to the <i>Data Logger</i> program memory.
5	The written firmware is larger than the program memory available in the <i>Data Logger</i> . The writing only partially occured.
6	Error in closing flogger.flb file.
7	Invalid flogger.flb file.

7. Remove the USB flash drive from the USB host portion on the Data Logger.

The *Data Logger* should reset itself automatically and may be returned to normal use with the updated firmware. It is recommended that you delete the firmware file (*flogger.flb*) from the USB flash drive to prevent undesired updates in the future.