EPM2000 User's Guide Addendum

(Version 4.32 or higher firmware *only*)

Purpose of This Addendum

This addendum describes the FIFO Full Condition and Communications Buffer Overrun for the EPM2000.

FIFO Full Condition

Under various measurement conditions, the pulse data communication buffer—or FIFO—may become full. This causes pulse measurement data to be lost.

The EPM2000 has several means of alerting users to this type of situation:

1. Replacing the measurement value on the display with the word *FULL*.

2. Emitting an audible beep (if the beeper is enabled).

3. Alerting the host to the full condition (if host communications are enabled) by either:

    -   Placing the word *FULL* in the output data stream (if the host output format is ASCII or ASCII+)

        or

    -   Placing a hex 10 value in the output data stream (if the host output format is binary). The hex 10 value is the only remaining binary status value that can hold a special meaning—it represents missing or invalid data.

When the firmware detects a full condition, the FIFO clears and the system resynchronizes. Any pulse data stored at the time the FIFO clears, is deleted.

Communications Buffer Overrun

Under certain conditions of heavy processing load and with host communications enabled, the EPM2000 may generate measurement data at a rate faster than the communication port allows. If the host output format is ASCII or ASCII+, the word *OVERRUN* appears in the output data stream. If the host output format is binary, a hex 10 value appears in the output data stream. Buffer overrun is most likely to occur when RS-232 communications is enabled at slower baud rates (9600 baud, for example).

Important: *Please update your manual with this added information.*

Customer Service Dept.
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