

FIELD SERVICE BULLETIN**FSB #:** 098-50620-020**DATE:** July 9, 2009**System:** XLi Time and Frequency System**Issue:** Incorrect Date When Operating in GPS Mode

Product Code:	Description
1510-602	XLi Time and Frequency System with GPS Option 86-8013
1510-652	XLi Time and Frequency System with GPS Option 86-8013

CLEI Code: N/A**Technical Support:** +1-408-428-7907 (1) (1) or USA toll free 1-888-367-7966 (1) (1)**Customer Relations:** +1-408-428-7907 (2) (1) or USA toll free 1-888-367-7966 (2) (1)**NOTE:** Find a copy of this FSB in the Support section:<http://www.symmetricon.com/support/online-support/ttm-product-support/field-service-bulletins/>.**General Behavior:**

Some XLi Time and Frequency Systems with GPS Option module 86-8013 generate an incorrect date (year, month, day, day of year) on and after June 23, 2009 when operating in GPS mode. The error is related to improper calculation of the GPS week rollover epoch and results in the XLi clock jumping back in time to November 1989. Although other product functions, not related to year and day of year, have continued to operate normally (i.e. hour, minute, second, 1 PPS, frequency, etc) future performance cannot be predicted.

XLi units utilizing GPS Option module 87-8028-2 do not exhibit this issue.

Cause: Root cause analysis is in progress.**Immediate Solution:**

None. There are no known countermeasures at this time to allow units experiencing this error to operate in GPS mode and produce a correct date. Following are some alternative XLi use modes that users may consider to work around this issue until a long term solution is available:

1. Manually set the month/day/year and operate in Flywheel mode
 - a. Confirm the XLi is locked to GPS
 - b. Set GPS to Standby using function command F119
 - c. Set the date using function command F3

Note: After the above steps the XLi is no longer locked to GPS. Its clock will maintain time based on the performance of the internal reference oscillator. For higher quality operation use the Aux reference input if a high quality reference is available (i.e. cesium).

2. Configure time code as a primary reference (if available)

- a. Apply a time code signal to J1
- b. Place GPS receiver to standby (F119)
- c. Configure time code a primary reference using function command F110
- d. Manually set year with function command F3

Long Term Solution: To-be-determined. Symmetricom engineering is currently working on a solution. Projected completion date is August 1st, 2009. An update to this FSB will be posted when the solution is available.

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