

HIOKI Model 9334 Logger Communicator Defect Details

1. Erroneous waveform data conversion, waveform display and printing

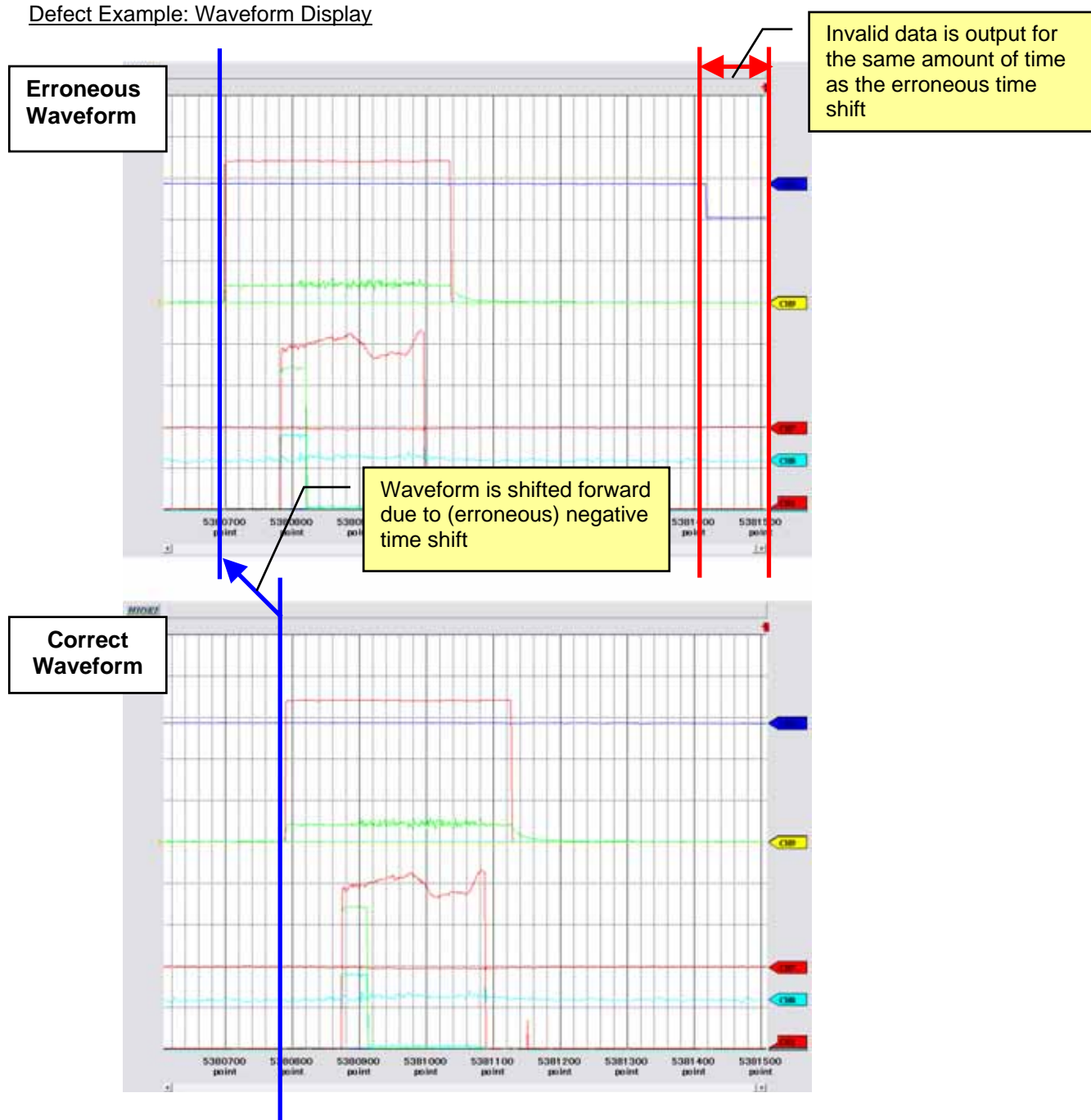
Affected Versions:

- 1.01 to 1.23 (released between January 31, 2001, and December 21, 2006)

Details:

- When a waveform file from the 8420 Memory HiLogger series is converted to CSV format, displayed as a waveform or printed with waveform details, part of the waveform data is lost when the data is converted, displayed or printed. Also, because some of the data is lost, the last data is erroneous.
- The malfunction occurs when waveform files are recorded under the following conditions:
 - When the Auto-Save – Binary (real-time) – Loop settings are enabled for measuring, and a waveform file is recorded that exceeds the capacity of the storage media.

Defect Example: Waveform Display



2. Erroneous numerical calculations (Integral and Area values) with the Hioki 9334

Affected Versions:

- 1.01 to 1.21 (released between January 31, 2001, and January 26, 2006)

Details:

- Numerical calculations of Integral and Area values on a channel (analog or pulse) to which a scaling offset is applied are incorrect.
- When scaling is applied, the correct result should be obtained from the sum of the multiple scaled values. However, because the measured values are erroneously summed before scaling is applied, calculation results are incorrect.

Defect Example:

- To obtain the sum by scaling (conversion factor a and offset b) of three measured values (v1, v2, v3):
(Incorrect – before fix)

The three measurement values are summed first before scaling is applied

$$S = a (v1 + v2 + v3) + b$$

(Correct – after fix)

Each measurement value is scaled before being summed

$$S = (a \cdot v1 + b) + (a \cdot v2 + b) + (a \cdot v3 + b)$$

$$= a (v1 + v2 + v3) + b + b + b$$