Important Announcement – GPS Systems

As you may have heard some older GPS systems may stop working after 6th April 2019. This is commonly known as GPS Week Number Rollover (WNRO).

The GPS system is world renowned for its ability to provide accurate and reliable positioning and timing information worldwide. The GPS satellites transmit to users the date and time accurate to nanoseconds. However, back in 1980, when the GPS system first began to keep track of time, the date and time was represented by a counter that could only count forward to a maximum of 1024 weeks, or about 19.7 years. After 1024 weeks had elapsed, this counter "rolled over" to zero, and GPS time started counting forward again. This first rollover occurred in August of 1999. The second rollover will occur on April 6, 2019.

Is My Device Affected?

Looking through our records we can with a high degree of certainty confirm that GPS systems which were supplied prior to 2006 will stop working and will be affected by the WNRO issue. Unfortunately, these GPS systems can't be patched and therefore you should contact support@geosig.com to request a quotation for a replacement unit. Please provide the serial number of the recorder(s) the GPS System(s) is/are connected to or/and the serial number of the GPS System(s) so that we can provide a drop-in replacement.

For GPS Systems supplied after 2006, we believe that they are not affected by WNRO issue and should function normally without any issues. As a matter of course, we recommend that all GPS Systems should be checked after 6th April 2019 to ensure that the time is accurate and the GPS Systems haven't been affected by the WNRO.

What is the Effect of a GPS Week Number Rollover Issue?

For GPS devices that are affected, after the rollover occurs, an incorrect date and time will be displayed. This incorrect time will also be used to timestamp data logs and other functions that rely upon the correct date and time. However, the positioning accuracy will not be affected. The device will continue to deliver the same positioning performance as before the rollover.

Please feel free to contact us on support@geosig.com for further clarification or advice.

GeoSIG Service Team