



Support Bulletin

Integrated Technologies
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GPS WEEK NUMBER ROLLOVER - APRIL 2019

A GPS Week Number Rollover (WNRO) will occur at the end of the GPS day on **April 6, 2019**. The GPS message structure broadcast by the satellites defines the week as a 10-bit value so that when the rollover occurs, the GPS messages will indicate that the week has changed from **1023** to week **0**.

Any GNSS receiver that does not account for this rollover will report an erroneous date.

Trimble MB-Two, ABX-Two and Ashtech Legacy Receivers

Note: WNRO information for Trimble BD/BX products can be found in a separate bulletin [here](#).

Preparing Your Receiver

Trimble has performed testing using a GNSS simulator to verify that the receiver firmware version correctly handles the week rollover in different scenarios including autonomous, SBAS, DGPS, RTK and RTX with various input and output messages and file formats.

To prepare for the week number rollover, the correct firmware must be installed on your receiver (see next page).

This is an urgent required action and receivers will not function correctly without the correct firmware.

All receivers with the firmware listed will continue to operate normally before, during and following the rollover.

If your receiver does not have the appropriate FW, you may experience receiver output messages, stored files and WEB UI showing incorrect date in the past, incorrect GPS week number, degraded satellite tracking and positioning availability.



Trimble is advising all users to verify the receiver firmware version and upgrade to the recommended version per the following table:

Firmware by Receiver Type

Products	Supported Firmware Versions		Upgrade Notes
	Minimum	Latest	
Current Products			
MB-Two	3.67	3.67	Possible Upgrade Methods (refer to MB-Two Reference Manual for detail) 1. Using web interface "Configuration" tab, see page 109 2. Using MB Loader Utility via Serial, See page 490 3. Using Ashcom Utility v3.0.79 with USB memory stick, see page 490
ABX-Two	3.67	3.67	
End of Life Products			
MB-One	2.06	2.06	Possible Upgrade Methods (refer to MB-One Reference Manual for detail) 1. Using web interface "Identity" tab, see page 79 2. Using MB Loader Utility via Serial, see page 408 3. Using Ashcom Utility v3.0.79 with USB memory stick, see page 408
Ashtech MB100	HM27	HM27	Upgrade with GNSS Program Loader Utility V2.06 via Serial. See Application Note-PLV2.06-GNSS Program Loader.pdf for detail
Ashtech MB800	KM27	KM27	
Ashtech MB500	G126	G126	
Ashtech ABX100	HM27	HM27	
Ashtech ABX800	KM27	KM27	
Ashtech ABX802	KM27	KM27	
Ashtech HDS800	2.06.S850Kn27	2.06.S850Kn27	Upgrade by loading firmware onto a memory stick See HDS800 Reference Manual, page 673
Ashtech ADU800	HM27 and KM27	HM27 and KM27	ADU800 consists of 2x MB100 and 1x MB800 which need to be upgraded separately, each with the appropriate MB FW versions. Upgrade with GNSS Program Loader Utility V2.06 via Serial. See Application Note-PLV2.06-GNSS Program Loader.pdf for detail
Ashtech GG24	All Versions Supported	GM14	Existing GM14 is WNRO safe
Ashtech GG12W	All Versions Supported	FC05	Existing FC05 & older versions are WNRO safe
Ashtech DG14	All Versions Supported	DD13	Existing FW DD13 will behave the same as before after WNRO ▶ Date and time are incorrect today



Firmware Access and Upgrade Procedure

For firmware, utility tools and manual access go to <https://www.trimble.com/precision-GNSS/GPS-Rollover.aspx>. Select the product of interest to access.

This is a live document and will be updated as information becomes available. For further information, please contact GNSSsupport@trimble.com.

