

ENGINEERING CHANGE NOTIFICATION FORM

ECN: 80200560	REV: 1	ISSUE DATE: 11/17/2017				
TYPE OF CHANGE: Firmware Modification						
DETAILED DESCRIPTION OF CHANGE: Firmware release 1.33 for M12M Replacement Receiver for bug fixes and functionality improvements in Galileo support and 1PPS output configuration.						
REASON FOR CHANGE: Bug fixes and functionality improvements.						
PRODUCTS AFFECTED: <table border="1" data-bbox="131 688 1458 762"> <thead> <tr> <th>Firmware Version</th> <th>Model</th> </tr> </thead> <tbody> <tr> <td>Firmware 1.1 and previous</td> <td>M12M Replacement Receiver</td> </tr> </tbody> </table>			Firmware Version	Model	Firmware 1.1 and previous	M12M Replacement Receiver
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Notes:						
AVAILABILITY: <table border="1" data-bbox="131 821 1458 888"> <thead> <tr> <th>MILESTONE</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>ECN release for firmware release files</td> <td>11/17/2017</td> </tr> </tbody> </table>			MILESTONE	DATE	ECN release for firmware release files	11/17/2017
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<p>Release 1.33 for the M12M Replacement Receiver provides the following improvements:</p> <p>Issue 1:</p> <p>uBlox receivers modified the GPS version command so it could no longer be read by the M12M Replacement Receiver. Units already in the field would not be affected. Units already in the field are not affected since this v1.33 is applied at the factory to units requiring the update.</p> <p>Resolution:</p> <p>Firmware 1.33 modifies the GPS message handling to support the modified GPS version command.</p> <p>Issue 2:</p> <p>uBlox receivers added support for Galileo but the GPS:SYST:SEL command in previous firmware versions did not support Galileo.</p> <p>Resolution:</p> <p>GPS:SYST:SEL command modified to support Galileo. Galileo is enabled with the GPS:SYST:SEL GAL command. The complete syntax of this command is:</p> <p style="padding-left: 40px;">GPS:SYSTem:SElect <GPS SBAS QZSS GAL BD ^ GLO></p> <p>Issue 3:</p> <p>Previous firmware releases did not support 1PPS control provided in the Motorola Binary and SCPI control languages.</p> <p>Resolution:</p> <p>The @@Gc command now controls the 1PPS output with the following modes:</p> <p style="padding-left: 40px;">0: 1PPS disabled 1: 1PPS on continuously</p>						

2 and 3: 1PPS only when tracking at least 1 sat in fixed position mode and 4 satellites in mobile mode.

PPS control can also be made through the SCPI interface using the SYNC:OUT:1PPS:RESET <ON|OFF> command. The ON option sets the @@Gc mode to 1 and OFF sets the @@Gc mode to 2.

REFERENCE DOCUMENTS/ATTACHMENTS:

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