

# MTi 100-series Firmware



## Changelog

Author: Product Manager  
Last updated: April 1, 2019  
Document: MT0226P

Symbol	Meaning
+	Added
^	Changed
!	Note
#	Fixed
-	Removed

### Reference documents

- MT Software Suite changelog

## Version 1.11.2

**Applies to: 5<sup>th</sup> generation MTi**

**Release date: March 20, 2019**

**Compatible MT Software Suite version: 2019.1.2**

**Release type: Beta**

### Improvements & features

Improvement	MKVFW-80	^	Update to World Magnetic Model 2015v2
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### Bug Fixes

## Version 1.10.0

**Applies to: 5<sup>th</sup> generation MTi**

**Release date: February 14, 2019**

**Compatible MT Software Suite version: 2019.0.1**

**Release type: Stable**

### Bug Fixes

Bug	<a href="#">MKVFW-20</a>	#	
Bug	<a href="#">MKVFW-25</a>	#	
Bug	<a href="#">MKVFW-32</a>	#	Fixed several rarely occurring minor bugs
Bug	<a href="#">MKVFW-36</a>	#	
Bug	<a href="#">MKVFW-63</a>	#	

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### Version 1.8.2

**Applies to: 4<sup>th</sup> generation MTi**

**Release date: February 14, 2018**

**Compatible MT Software Suite version: 4.8.0**

**Release type: Beta**

- # [MKIVFW-48] A settings problem locks up the EMTS client.
- ^ [MKIVFW-98] MAG clip flags are not sticky.
- # [MKIVFW-124] *ReqAlignmentRotation* does not return parameter.
- ^ [MKIVFW-132] Status word bit for selftest is 0 with SCR data.
- + [MKIVFW-144] Add *ReqHardwareVersion* message to MTi Product Family.
- # [MKIVFW-112] Remember ICC DDT value over *gotoConfig/gotoMeasurement*.

### Version 1.7.4

**Release date: October 10, 2017**

**Compatible MT Software Suite version: 4.8.2**

**Release type: Beta**

- + [MKIVFW-121] Added possibility to configure USB buffering behavior in order to reduce communication latency.
- # [MKIVFW-133] Fixed update process of Firmware Update for 5<sup>th</sup> generation MTi.

### Version 1.7.2

**Release date: July 5, 2017**

**Compatible MT Software Suite version: 4.8**

**Release type: Stable**

- [MKIVFW-105, MTSDK-4002] 5<sup>th</sup> generation MTi's no longer support legacy mode.
- + [MKIVFW-100, MTSDK-3998] Calibrated Acceleration and Rate of Turn measurements available at 1 kHz.
- # [MKIVFW-109] Solved situation where MTi would crash when outputting all NMEA strings at 400 Hz.

### Version 1.6.3

**Release date: March 31, 2017**

**Compatible MT Software Suite version: 4.7.2**

**Release type: Beta**

- + [MTSDK-3958, MTSDK-3685, MKIVFW-103] Added 5<sup>th</sup> generation MTi support, see [BASE.xsens.com](http://BASE.xsens.com).

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## Version 1.5.1

**Release date: December 21, 2016**

**Compatible MT Software Suite version: 4.7**

**Release type: Stable**

+ [MTIONE-135, MKIVFW-81] Added ICC to Firmware. ICC is a beta feature for MTi-G-700/710.

+ [MTIONE-136, MTSKD-3872, MTSKD-3854, MTSKD-3855] Representative Motion mode, both in firmware and MT Manager.

+ [MTSDK-3856, MTIONE-137] Possibility to store ICC data to non-volatile memory.

^ [MTSDK-3698, MTSKD-3787, MTSKD-3807] Gyro Bias Estimation using the No Rotation Update uses a stillness detection mechanism which is more robust to slow rotations and facilitates faster convergence times - this improves the functionality of NRU and AHS features.

^ [MKIVFW-78, MTSKD-3859] Improved and simplified Gyro Bias estimation status bits.

# [MKIVFW-85] PHTRO (NMEA-output) has a bug fixed when roll is higher than  $\pm 90^\circ$ .

## Version 1.4.18

**Release date: October 10, 2016**

**Compatible MT Software Suite version: 4.6.5**

**Release type: Beta**

^ [MTSDK-3698, MTSKD-3787, MTSKD-3807] Gyro Bias Estimation improved with faster convergence times.

^ [MKIVFW-38, MTSKD-3809] BusId can now be selected for RS485 bus communication. Note: feature may disappear in favor of more versatile addressing features.

## Version 1.4.16

**Release date: August 10, 2016**

**Compatible MT Software Suite version: 4.6.3**

**Release type: Beta**

^ [MTSDK-3698] When AHS is enabled, cZRU is enabled to be used in conjunction with AHS.

## Version 1.4.12

**Release date: July 12, 2016**

**Compatible MT Software Suite version: 4.6**

**Release type: Stable**

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+ [MTSDK-3661] Added AHS for all MTi's and MTi-Gs. AHS off by default, also for VRU\_general. AHS can be switched on with a boolean in SetOptions.

^ [MTSDK-3656] MTi with 15g accelerometers output up to 18g now.

# [MKIVFW-40] MTi-OEM can be scanned on 2<sup>nd</sup> UART again.

# [MTSDK-3764] Fixed timing bug with magnetometer, resulting in heading errors in mag-aided filter profiles.

## Version 1.4.10

**Release date: May 20, 2016**

**Compatible MT Software Suite version: 4.5.6**

**Release type: Beta**

^ [MTSDK-1813] High gyro bias is now successfully estimated.

^ [MTSDK-3672, MTSDK-3672, MTSDK-3528] Stillness detector improvements result in higher performance for gyro bias estimation functionality.

## Version 1.4.6

**Release date: April 11, 2016**

**Compatible MT Software Suite version: 4.5.4**

**Release type: Beta**

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## Version 1.4.5

**Release date: January 18, 2016**

**Compatible MT Software Suite version: 4.5**

**Release type: Stable**

# [MKIVFW-25] A timing difference of 500us has been corrected for in the MTi MkIV.

^ [MTSDK-3407] Legacy mode deprecated for MTi MkIV; normal mode is default mode for all products now.

^ [MTSDK-3410] FreeAcceleration output improved after periods of excitation.

# [MKIVFW-22] The magnetometer output will no longer flip polarity when saturated.

# [MTSDK-3294] Sample mixer now correctly subtracts gyroscope bias.

^ [MKIVFW-28, MTSDK-3407] Default output configuration mode is Normal Mode (no longer Legacy Mode).

+ [MTSDK-3159] Updated World Magnetic Model to WMM2015.