

Manta Firmware Release Notes

Manta G-031B/C
Manta G-032B/C
Manta G-033B/C
Manta G-046B/C
Manta G-095C
Manta G-125B/C
Manta G-145B/C
Manta G-145B/C-30fps
Manta G-145B NIR
Manta G-146B/C
Manta G-201B/C
Manta G-201B/C-30fps
Manta G-504B/C

Document number: V3.0.1

[Note: This document number does not correspond with any firmware number.]

Date:

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Summary

This release note details the new features and bug fixes of the firmware of the **AVT Manta series** of cameras in relation to the earlier firmware versions listed above. This is intended to provide an indication of new features available with this release and the progress since the last major release.

Manta Firmware Release Notes

Release history

Release	Manta G-031B/C	Manta G-032B/C	Manta G-033B/C	Manta G-046B/C	Manta G-095C	Manta G-125B/C	Manta G-145B/C	Manta G-145B/C-30fps	Manta G-145B NIR
Current	1.44.09 20121211	1.44.09 20121211	1.44.09 20121211	1.44.09 20121211	1.44.09 20121211	1.44.09 20121211	1.44.09 20121211	1.44.09 20121211	1.44.09 20121211
Pre-decessor	1.44.05 20120319	1.44.08 20120927	1.44.04 20120127	1.44.04 20120127	1.44.08 20120927	1.44.04 20120127	1.44.04 20120127	1.44.04 20120127	1.44.06 20120521
Initial	1.44.05 20120319	1.38 20100415	1.42 20101025	1.40 20100608	1.44.05 20120319	1.38 20100415	1.40 20100608	1.44 20110708	1.44.06 20120521

Release	Manta G-146B/C	Manta G-201B/C	Manta G-201B/C-30fps	Manta G-504B/C
Current	1.44.09 20121211	1.44.09 20121211	1.44.09 20121211	1.44.09 220121211
Pre-decessor	1.44.04 20120127	1.44.04 20120127	1.44.04 20120127	1.44.04 20120127
Initial	1.40 20100608	1.40 20100608	1.44 20110708	1.42 20101025

Manta Firmware Release Notes

Firmware 1.44.09 (all Manta cameras)

1.	Bug fixes: <ul style="list-style-type: none">● Fixed StreamBytesPerSecond calculation issues for all Manta cameras (GEV-59)● Fixed LUTControl parameters (e.g., LUTEnable, LUTMode) not saved in ConfigFile for all Manta cameras (GEV-263)● Fixed: changed Gain or Offset could lower maximum gray level, only Manta G-032(GEV-283)
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Firmware 1.44.08 (only Manta G-032B/C, Manta G-095C)

1.	Bug fixes: <ul style="list-style-type: none">● Improved production yield for Manta G-032B/C and Manta G-095C (GEV-217)
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Firmware 1.44.06 (only Manta G-145B NIR)

1.	New camera: Manta G-145B NIR (Sony ICX285)
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Firmware 1.44.05 (only Manta G-031B/C, Manta G-095C)

1.	New cameras: Manta G-031B/C (Sony ICX618) Manta G-095C (Sony ICX692)
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Firmware 1.44.04 (all Manta cameras)

1.	<p>Bug fixes:</p> <ul style="list-style-type: none">● #270: Corrected: wrong timestamp between first and second frame● #1048: Renamed according to SFNC 1.5: Blacklevelvalue ⇒ Blacklevel● #1038: Renamed according to SFNC 1.5: Gainraw ⇒ Gain <p>Note  #1048/1038: This change does not affect the use of PvAPI or any API based on PvAPI. Former used feature names were deprecated by the SFNC standard. 3rd party software should be able to handle this change without any impact.</p> <ul style="list-style-type: none">● #1046: Corrected: exposure value in level mode● #960: Corrected: trigger controlled acquisition: delay between first and second frame
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Firmware 1.44 (all Manta cameras)

1.	<p>New cameras: added support for Manta G-145B/C-30fps and Manta G-201B/C-30fps</p>
2.	<p>New features:</p> <ul style="list-style-type: none">● Look-up table● Gamma: three default values available● Horizontal decimation / vertical decimation (sub-sampling) (All models except Manta G-032 B/C)● New video output formats: Mono12Packed / Bayer12Packed● ChunkData support● Event channel support● SyncInGlitchFilter support● RS232 interface: serial baud rate configurable speeds● Image optimization● Video iris support

3.	<p>Bug fixes:</p> <ul style="list-style-type: none"> ● #858: Corrected: baud rate of serial interface not configurable ● #848: Corrected: Manta 032B/C and 125C/B first image defective ● #819: Manta G-201 -> picture optimization ● #837: Corrected: Manta 032: Camera runs continuously in external level trigger mode ● #917: Corrected: varying image brightness in level and edge mode ● #921: Corrected: Exposure signal jitter in external trigger mode ● #859: Corrected: AVT_Universal_Package_1_1: UniCam viewer crashes at single shot ● #947: Corrected: Manta 145B/C stops grabbing in free-run @ exposure time 320 µsec. ● Improved image quality for: <ul style="list-style-type: none"> - Manta G-145 B/C - Manta G-201 B/C
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Firmware 1.42 (all Manta cameras)

1.	<p>New cameras: added support for Manta G-033B/C (Sony ICX414) and Manta G-504B/C (Sony ICX655).</p>
2.	<p>Bug fixes:</p> <ul style="list-style-type: none"> ● #820: fixed the min shutter values on all Manta models ● #834: Manta G-032 only: SyncOut1 had a delay of 12ms at short exposure times ● #841: all Mantas family members show sometime gaps within the histogram of an image. This error is only sometimes reproducible. ● fixed the max gain on the Manta G-032B/C ● fixed a problem with color transformation (the ColorTransformationValueBB could not be set correctly) ● fixed the xml file for the UniCam viewer (one-push auto functions)

Firmware 1.40

1.	<p>New cameras: First common commercial release for the following cameras: Manta G-032B/C, Manta G-046B/C, Manta G-125B/C, Manta G-145B/C, Manta G-146B/C, Manta G-201B/C</p>
2.	<p>Bug fixes:</p> <ul style="list-style-type: none"> ● corrected problem/error of the serial receive direction ● Acquisition Mode ⇔ Recorder bug (AcquisitionFrameCount == StreamHoldCapacity results in an error)

Firmware 1.38

1.	<p>New cameras: First Manta release for the following cameras: Manta G-032B/C, Manta G-125B/C</p> <ul style="list-style-type: none">● added Color Correction Matrix● added Sharpness● added Offset/Black Level● added Hue● added Saturation
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Appendix

How to find out which **firmware versions** your camera has: See Application Note **How to update Manta firmware**. This application note and the firmware itself is only accessible for distributors. End customers have to contact technical support.