EXOCET

RELEASE NOTES

Version 002.17

PIXEL SUR MER

Contents

1 EXOCET_2026-03_002-17

Important note: Some n2k boxes compatibility is broken. These boxes must be updated or replaced in the Manta Graph.

New features:

- *Manta:* Add nmea0183_enc box
- *Manta:* Add AIS_enc box
- *Manta:* Add GoFree_in box
- *Manta:* Add Expedition_in and Expedition_out boxes
- *Manta, N2k boxes:* Add "Source selection" type
- *Manta, Calibration box:* Add user controls to change units
- *Manta, Expression box:* Add "set_unit()" function
- *Manta, DisplayB&G, DisplayGarmin boxes:* Add "Dynamic settings" input
- *Manta, Exocet boxes:* Add an option for send data policy
- *WebApp, dashboards:* Add ability to overlay widgets
- *WebApp, dashboards:* Add ability to color data

Updates:

- *Exocet:* Safety fixes
- *Exocet:* Colorization of non "public" connectors of Manta boxes
- *Manta, N2k boxes:* Update database for B&G compatibility + automatic management of reference for PGN 129026 and 130577 + safety fixes
- *Manta, nmea0183 box:* Renamed nmea0183_dec + miscallanous fixes
- *Manta, AIS box:* Renamed AIS_dec + miscallanous fixes
- *Manta, GoFree_out box:* Miscallanous fixes
- *Manta, DistanceLog box:* Fix if missing speed data + add mapping
- *Manta, GNSS box:* Fix Date/Time unit
- *Manta, FailSafe box:* Fix status when output disabled
- *Manta, AHRS box:* Safety fix
- *Manta, DisplayB&G box:* Remove NAN filtering
- *WebApp:* Fix display on MFD
- *WebApp:* Improve data table and table input widgets
- *WebApp:* Fix Cloud connectivity test
- *WebApp:* Miscellanous fixes and improvements

2 EXOCET_2026-02_002-16

New features:

- *Manta:* Add DistanceLog box
- *Manta, FailSafe box:* Add enable output control
- *Manta, Calibration box:* Add automatic sort of 1D and 2D tables

Updates:

- *Manta, Nortek box:* Fix box access
- *WebApp, Status page:* Improve management of home page
- *WebApp:* Miscellanous fixes and improvements

3 EXOCET_2026-01_002-15

New features:

- *Manta, Nortek box:* Add Nucleus support
- *Manta, Scalar box:* Add ability to add or delete inputs into the predefined values list
- *Manta, Blink box:* Add management of "Address Claim" option
- *Manta, TCP_in box:* Add ability to send data
- *Manta, TCP_out box:* Add ability to receive data
- *WebApp, dashboards:* Add circular gauge widget

Updates:

- *Exocet:* Safety fix on alerts via Buzzer
- *Manta, Exocet boxes:* Change send data policy + improve box state management
- *Manta, String box:* Safety fix
- *Manta, TargetManager box:* Fix MMSI management
- *WebApp, dashboards:* Fixes on linear gauge widget
- *WebApp, dashboards:* Fixes on data table and table input widgets
- *WebApp:* Miscellanous fixes and improvements

4 EXOCET_2026-01_002-14

Important note: Http boxes compatibility is broken. These boxes must be replaced in the Manta Graph.

New features:

- *Manta:* Add WS_in and WS_out boxes
- *Manta:* Add GoFree_out box
- *WebApp, Status page:* Add Cloud connectivity test
- *WebApp, Records page:* Add ability to do simultaneous action on several files
- *WebApp, dashboards:* Add ability to delete unused widgets and panels

Updates:

- *Manta:* Safety fixes + miscellanous fixes
- *Manta, Alert box:* Improve status
- *Manta, Ascii boxes:* Improve configuration interface
- *Manta, Http box:* Improve error management + rename output variables
- *WebApp, Status page:* Improve Cloud configuration
- *WebApp, Status page:* Fix indicator of Manta graph changes
- *WebApp, Status page:* Fix and improve activation keys management
- *WebApp, Alerts page:* Fix buzzer configuration
- *WebApp:* Safety fixes + miscellanous fixes

5 EXOCET_2025-12_002-13

New features:

- *Manta, Expression box:* Add type conversion functions
- *WebApp, Alerts page:* Add medias status
- *WebApp, dashboards:* Button widget, add color choice

Updates:

- *Manta, Exail box:* Renamed from IxBlue box
- *WebApp, Status page:* Fix indicator of Manta graph changes
- *WebApp, Graph page:* Improve support of data in timeout
- *WebApp:* Miscellaneous improvements
- *WebApp:* Miscellaneous fixes

6 EXOCET_2025-12_002-12

New features:

- *Exocet:* Add "public" property for output connectors of Manta boxes
- *Manta:* Add ASCII_decoder box
- *Manta:* Add H5000_Pilot box
- *Manta, Python box:* Ajout AI prompt
- *WebApp, Status page:* Add indicator of Manta graph changes
- *WebApp, dashboards:* Add Polar widget

Updates:

- *Exocet:* Safety fixes
- *Manta, AHRS box:* Fix magnetic deviation computation
- *Manta, Serial box:* Fix RS422 mode
- *Manta, Wind boxes:* Fix Manta box state management
- *WebApp, dashboards:* Improve display of variables with opaque type
- *WebApp, Graph page:* Fix display and angle management
- *WebApp:* Miscellaneous fixes

7 EXOCET_2025-11_002-11

New features:

- *Exocet:* Add backup at configuration update
- *Manta:* Add boites MantraCAN_enc and MantraCAN_dec boxes
- *Manta, System box:* Add Eth0 Rx/Tx errors
- *Manta, TargetManager box:* Increase number of managed obstacles + add hysteresis on dangerosity
- *Manta, MovingMean box:* Add "Reset processing" input
- *Manta, AHRS box:* Add manual management of Magnetic Deviation
- *Manta, Tick box:* Add Timestamp option

Updates:

- *Exocet:* Safety fixes
- *Manta, TargetManager box:* Renamed from ObstacleManager + miscellaneous fixes
- *Manta, SBG box:* Fix unit in LOG_EKF_EULER message
- *Manta, Probe box:* Fix to support special chars
- *Manta, MovingMean box:* Fix Mean Deviation processing
- *Manta, N2k boxes:* PGN 128520, add "ReferenceTarget" field
- *Manta, MagneticVariation box:* Export only if input has been refreshed
- *Manta, H5000ws box:* Safety fix
- *WebApp, Anticollision page:* Improvements and miscellaneous fixes
- *WebApp, dashboards:* Graph widget, miscellaneous fixes
- *WebApp:* Alert pop-up, display fix
- *WebApp:* Miscellaneous fixes
- *Doc:* Update

8 EXOCET_2025-09_002-09

New features:

- *Manta:* Add HTTP box
- *Manta, System box:* Add UTC date and time

Updates:

- *Exocet:* Miscellaneous fixes
- *Exocet:* Safety fix on alerts via Telegram
- *Manta, Telegram box:* Safety fixes + connection improvement
- *Manta, Alert box:* Improve medias informations
- *Manta, FailSafe box:* Reduce logs
- *Manta, Expression box:* Help improvement
- *WebApp:* Fix MFD groups
- *WebApp:* Miscellaneous fixes
- *WebApp:* Help improvement

9 EXOCET_2025-09_002-08

New features:

- *Manta, Alert box:* Add medias connexion status + add option for variables details + add ability to acknowledge only one alert
- *Manta, System box:* Add software version
- *WebApp:* Add MFD pages groups
- *WebApp:* Gaph widget, add support of time on Y axis

Updates:

- *Exocet:* Safety fixes
- *Manta, ObstacleManager box:* Optimization + manage MMSI white list + miscellaneous fixes
- *Manta, CollisionAvoidance box:* Improve management of obstacles metrics
- *Manta, N2k boxes:* Improve contextual help
- *Manta, ExocetVoice box:* Miscellaneous fixes
- *Manta, Telegram:* Miscellaneous fixes
- *WebApp:* Fix coloration of data in alert
- *WebApp:* Graph, fix management of angles
- *WebApp:* Miscellaneous fixes

10 EXOCET_2025-08_002-06

New features:

- *Exocet:* Add alert deactivation at start-up
- *Manta:* Add ExocetVoice box
- *Manta, FailSafe box:* Add user controls to rename inputs
- *PSM decoder:* Add resaampling methods

Updates:

- *Exocet:* Safety fixes
- *Exocet:* Fix upload of .pak files
- *Exocet:* Fix alert medias settings + improve alert messages
- *Manta, N2k_in box:* Fix reception of PGN 59904
- *Manta, N2k boxes:* Generate of a default Unique Number + help improvement
- *Manta, Display_BandG box:* Fix list of known "user vars"
- *Manta, Python box:* Help improvement
- *Manta, Exocet boxes:* Modification of Manta box status
- *Manta, Scalar box:* Fix settings for list of numbers
- *Manta, CollisionAvoidance box:* Miscellaneous improvements
- *WebApp:* Improve display of fixed digits numbers
- *WebApp:* Miscellaneous fixes
- *PSM decoder:* Cosmetic redesign + miscellaneous fixes

11 EXOCET_2025-07_002-05

New features:

- *Exocet:* Add an integrated management of alert notification medias
- *Exocet:* Add an alert mute
- *WebApp:* Add an alert history page

Updates:

- *Exocet:* Update alert acknowledge
- *Exocet:* Update alert logs
- *Manta, N2k boxes:* Add PGN 127252 + help improvement
- *Manta, ReinterpretNumber box:* Fix
- *Manta, ObstacleManager box:* Miscellaneous fixes
- *Manta, CollisionAvoidance box:* Safety fix
- *WebApp:* Update alert page

12 EXOCET_2025-06_002-04

New features:

- *Manta:* Add ReinterpretNumber box
- *Manta, Modbus_in box:* Add option to rename variables
- *Manta, CollisionAvoidance box:* Add input for pause

Updates:

- *Exocet:* Fix network configuration
- *Manta, CollisionAvoidance box:* Fix output rate + help improvement
- *Manta, SeaState box:* Help improvement
- *Manta, N2k boxes:* Help improvement
- *Manta, Python box:* Safety fix

13 EXOCET_2025-06_002-03

New features:

- *WebApp, dashboards:* Button widget, add confirmation message option

Updates:

- *Exocet:* Safety fix

14 EXOCET_2025-06_002-02

Important note: Some n2k boxes compatibility is broken. These boxes must be updated or replaced in the Manta Graph.

Updates:

- *Exocet:* Optimization and miscellaneous fixes
- *Manta, Calibration box:* Fix limits of user controls
- *Manta, N2k boxes:* Fix RPM for engine speed
- *Manta, CollisionAvoidance box:* Miscellaneous fixes
- *Manta, LeeCurTools box:* Fix current calculation
- *WebApp:* Safety fixes
- *WebApp:* Miscellaneous fixes

15 EXOCET_2025-05_002-01

New features:

- *WebApp:* Graph of boolean variables
- *Manta, GNSS box:* Add management of COG/SOG variables

Updates:

- *Exocet:* Fix physical interfaces management
- *Exocet:* Miscellaneous fixes
- *Manta, Json_enc box:* Fix size management of generated message
- *WebApp, dashboards:* Fix widget edition
- *WebApp:* Improve alerts setting
- *WebApp:* Miscellaneous fixes

16 EXOCET_2025-05_002-00

Important note: In order to improve the user settings management, the configuration files architecture has been modified. A backward compatibility is ensured, but configurations generated as of this firmware are not compatibles with older firmwares.

Important note 2: Some n2k boxes compatibility is broken. These boxes must be updated or replaced in the Manta Graph.

New features:

- *Exocet:* Add an activation keys mechanism on Blue and Gold
- *Manta, N2k boxes:* Add support of Blink PG8 gateway
- *Manta, Datalogger box:* Add file duration option
- *Manta, SBG box:* Add support of messages 44/52/53/54
- *WebApp:* Add graph pages
- *WebApp:* Add HTML widget
- *WebApp:* Add customizable button in header
- *WebApp:* Add option to display web pages on MFD

Updates:

- *Exocet:* Bugfix on network disconnection
- *Exocet:* Improve user settings management
- *Exocet:* Re-organization of Manta boxes
- *Exocet:* Sanitization of box, flow and variable names
- *Exocet:* Miscellaneous fixes
- *Manta, ObstacleManager box:* Miscellaneous fixes + optimization
- *Manta, CollisionAvoidance box:* Miscellaneous fixes
- *Manta, MagneticVariation box:* Model update + bug fixes
- *Manta, N2k boxes:* Miscellaneous fixes
- *Manta, OPC, Modbus boxes:* Miscellaneous fixes
- *Manta, Calibration box:* Safety fix
- *Manta, Table box:* Fix initialization from filegran
- *Manta, Scalar box:* Fix for huge integer numbers
- *Manta, Oscar box:* Miscellaneous fixes + add size uncertainty
- *Manta, KVH box:* Fix packets 25/26
- *Manta, WindMastRot box:* Replace Bypass option by user control
- *Manta, GNSS box:* Fix COG unit and altitude input
- *WebApp:* Miscellaneous fixes

17 EXOCET_2025-01_001-11

Important note: Some n2k boxes compatibility is broken. These boxes must be updated or replaced in the Manta Graph.

New features:

- *Exocet:* Add network options DNS and DHCP
- *Manta:* Add differential between loaded and executed configuration
- *Manta:* Add MagneticVariation box
- *WebApp:* Add graph widget

Updates:

- *Exocet:* Minor optimizations + safety fix
- *Exocet:* Fix factory reset
- *Manta, N2k boxes:* Remove all devices selection from WebApp + improve support of PGN 126208
- *Manta, Python box:* Help improvement
- *Manta, ShapeReconstruction box:* Help improvement
- *Manta, H5000ws box:* Fixes for WTP4 compatibility
- *Manta, Json boxes:* Fix encoding/decoding
- *Manta, Telegram box:* Fix connectivity test
- *WebApp:* Display "–" for variables in timeout
- *WebApp:* Miscellaneous fixes

18 EXOCET_2024-10_001-09

New features:

- *Manta:* Add SeaState box
- *Manta, FailSafe box:* Add "use duration" and "disabled in manual" options for"smooth switching"
- *Manta, Expression box:* Add support of "FloatArray" variables

Updates:

- *Exocet:* Safety fixes
- *Manta, Datalogger box:* Fix chronology with frequency limitation
- *Manta, MQTT box:* Optimization + fix subscription after disconnection/reconnection
- *Manta, Oscar box:* Increase allowed detection limit
- *Manta, FailSafe box:* Fix "check presence" when several mappings on the same output port
- *Manta, GPIO_in box:* Fix frequency mode
- *WebApp:* Fix access control
- *PSM decoder:* Fix progression bar

19 EXOCET_2024-09_001-08

New features:

- *Manta:* Add Telegram box
- *Manta, System box:* Add CAN errors counters
- *WebApp, dashboards:* Add ability to hide or disable from a Manta variable

Updates:

- *Manta, N2k boxes:* Fix PGN 126208
- *Manta, Canbus boxes:* Fix automatic restart
- *Manta, ObstacleManager box:* Miscellaneous fixes
- *Manta, CollisionAvoidance box:* Miscellaneous fixes
- *WebApp:* Miscellaneous fixes

20 EXOCET_2024-09_001-07

New features:

- *Manta, AdrenaXdr box:* Add "Export" option
- *Manta, System box:* Add SD card status
- *Manta, MQTT box:* Add support of QoS 1 & 2
- *Manta, ShapeReconstruction box:* Add export of tip position
- *WebApp, dashboards:* Add "visibility" option
- *WebApp:* Add support of Safari 11
- *WebApp:* Add status of current record
- *WebApp:* Add status of SD card + ajout possiblité de formatter la carte SD

Updates:

- *Manta, Datalogger box:* Fix start + fix Cloud variables list
- *WebApp:* Fix access control
- *WebApp:* Miscellaneous fixes

21 EXOCET_2024-08_001-05

New features:

- *Manta, Oscar box:* Add export of Oscar timestamps
- *Manta, KVH box:* Add decoding of packets 25/26
- *Manta, nmea0183 box:* Add decoding of HVD, MMB, MTA, ROT, RSA, VPW, WPL frames
- *Manta, Python box:* Add "Requests" and "Requests-Toolbelt" libraries
- *WebApp, Text widget:* Add support of internal links in html

Updates:

- *Exocet:* Optimizations + safety fixes
- *Manta, Hyperion box:* Optimizations + safety fixes
- *Manta, System box:* Improve load indicator
- *Manta, ShapeReconstruction box:* Safety fix
- *WebApp:* Menu reorganization + miscellaneous fixes

22 EXOCET_2024-07_001-04

Important note: Some n2k boxes compatibility is broken. These boxes must be updated or replaced in the Manta Graph.

New features:

- *Manta:* Add ShapeReconstruction box
- *Manta:* Add GNSS box
- *Manta, System box:* Add load indicators
- *WebApp:* Add access control

Updates:

- *Exocet:* Safety fixes
- *Manta, Datalogger box:* Safety fixes
- *Manta, MantaStatus box:* Safety fix
- *Manta, DisplayGarmin box:* Safety fix
- *Manta, WindApparent box:* Fix Leeway initialization
- *Manta, Polar box:* Remove trigo & spline interpolation + fix interpolation + improve files parser
- *WebApp:* Fix night mode + miscellaneous fixes

23 EXOCET_2024-05_001-01

Important note: Some n2k boxes compatibility is broken. These boxes must be updated or replaced in the Manta Graph.

New features:

- *Exocet:* Add log of alert acknoledges
- *Manta, N2k boxes:* Add EXOS support
- *Manta, HeightEstimation box:* Add option "Ref. to" for outputs
- *Manta, Keel box:* Add support of debug frame
- *WebApp:* Page "Status", add "hardware interfaces" management

Updates:

- *Exocet:* Safety fixes
- *Exocet:* Improve activation keys mechanism
- *Manta, ModBus box:* Safety fix
- *Manta, FailSafe box:* Safety fix
- *Manta, Sentea box:* Fix read of FBGs definitions csv file
- *Manta, MQTT boxes:* Start local broker only if needed
- *Manta, IxBlue box:* Safety fix
- *WebApp:* Fix alert group acknoledge
- *WebApp:* Performance improvement
- *WebApp:* Miscellaneous fixes

24 EXOCET-2024.03_001-00

Important note: Installation of this firmware is only possible from EXOCET-2024.02.

Important note 2: Some n2k boxes compatibility is broken. These boxes must be updated or replaced in the Manta Graph.

Important note 3: AHRS and WindUpwash boxes compatibility is broken. These boxes must be replaced in the Manta Graph.

New features:

- *Exocet:* Add an activation keys mechanism
- *Manta:* Add SignalComparison box
- *Manta:* Add MQTT_in et MQTT_out boxes
- *Manta:* Add WindMotionCutoff box
- *Manta, WindMastRot box:* Add mapping
- *Manta, N2k boxes:* Add support of PGN 127506
- *Manta, nmea0183 box:* Add support of MWD frame
- *Manta, Json_enc box:* Add option "Extend with time"
- *Manta, GPIO_in box:* Add duty cycle measurement in "frequency" mode
- *Manta, Exocet_in/Exocet_out boxes:* Add export of connectivity status
- *Manta, Bravo boxes:* Add controls from WebApp
- *Manta, MovingMean box:* Add control from WebApp for "percentile"

Updates:

- *Exocet:* Safety fixes
- *Manta, AHRS box:* Fixes + improve true and magnetic heading management
- *Manta, WindTrue box:* Remove option "Ref to Course"
- *Manta, WindUpwash box:* Remplace option "Bypass" by a control from WebApp
- *Manta, HeightEstimation box:* Safety fix
- *Manta, FailSafe box:* Fix status
- *Manta, nmea0183 box:* Fix magnetic COG in RMC frame
- *Manta, RegulationPerformance box:* Safety fixes
- *Manta, Oscar box:* Fix connection loss management
- *WebApp:* Miscellaneous fixes

25 EXOCET-2024.02

Important note: Some n2k boxes compatibility is broken. These boxes must be updated or replaced in the Manta Graph.

Important note 2: Senix boxes compatibility is broken. These boxes must be replaced in the Manta Graph.

New features:

- *Exocet:* Add support of Exocet WebApp on Garmin display
- *Manta, Expression box:* Add internal variables of type "vector"
- *Manta, Senix box:* Add mapping + "add status" option
- *Manta, FailSafe box:* Add "check presence" option
- *Manta, MovingMean / Stats boxes:* Add "percentile" option

Updates:

- *Exocet:* Safety fixes + optimization
- *Manta, Senix box:* Improve status management
- *Manta, PID box:* Remplace "StopIntegration" option by "SetIntegral"
- *Manta, N2k box:* Improve management of error or unavailable data + fix typo pgn 127237 + fix pgn 130846 + safety fix
- *WebApp:* Miscellaneous fixes
- *Doc:* Improve User Manual

26 EXOCET-2023.12

Important note: Some n2k boxes compatibility is broken. These boxes must be updated or replaced in the Manta Graph.

New features:

- *Manta, N2k box:* Add controls from WebApp + add "parameters" input/output
- *Manta, PID box:* Add "feed forward" and "stop integration" options
- *Manta, System box:* Add web controls usage monitoring
- *WebApp:* "Alerts" page, add table display
- *WebApp:* Dashboards, add "button" option for panels

Updates:

- *Manta, FailSafe box:* Fix "smooth switching"
- *Manta, Datalogger box:* Fix Cloud sending period + safety fixes
- *Manta, Expression box:* Fix management of integer with big value
- *Manta, N2k box:* Fix device selection + fix PGN 130821 + safety fix
- *WebApp:* Miscellaneous fixes

27 EXOCET-2023.11_02

New features:

- *Manta, UDP/TCP boxes:* Add controls from WebApp
- *Manta, Exocet boxes:* Add controls from WebApp + disconnection notification
- *Manta, Serial boxes:* Add controls from WebApp

Updates:

- *Exocet:* Safety fixes
- *Manta, UDP/TCP boxes:* Safety fixes
- *Manta, Datalogger box:* Fix power cut management

28 EXOCET-2023.11

Important note: Some n2k boxes compatibility is broken. These boxes must be updated or replaced in the Manta Graph.

New features:

- *Manta, Expression box:* Add management of ASCII characters arrays
- *WebApp:* "Alerts" page, add compact display
- *WebApp:* "Data" page, add status icon in "Alert" column

Updates:

- *Exocet:* Safety fix
- *Manta, PID box:* Fix initialization
- *Manta, HeightEstimation box:* Safety fixes
- *Manta, Gpio_in box:* Fix PWM setting
- *Manta, Damping box:* Fix "apply to all" with order 2
- *Manta, WindMotion box:* Fix "MHUz" setting
- *Manta, Calibration box:* Add LUT check
- *Manta, N2k box:* Fix device selection + fixes PGN 130846 + fix NAN management
- *WebApp:* Miscellaneous fixes

29 EXOCET-2023.10_02

Updates:

- *Manta, N2k box:* Fix device selection via WebApp

30 EXOCET-2023.10_01

Important note: Some n2k boxes compatibility is broken. These boxes must be updated or replaced in the Manta Graph.

New features:

- *Manta:* Add ZeroMQ_in and ZeroMQ_out boxes
- *Manta:* Add Json_dec and Json_enc boxes
- *Manta, AIS box:* Add timestamp management
- *Manta, Damping box:* Add "Design" option
- *Manta, Damping / MovingMean / Stats boxes:* Add boolean support
- *Manta, Calibration box:* Add "Prefix" and "Replace/by" options
- *WebApp:* Add "Image" widget

Updates:

- *Exocet:* Safety fixes
- *Manta, PID box:* Safety fix
- *Manta, Damping box:* Fix band-stop
- *Manta, FailSafe box:* Fix management of all inputs disabled + fix "smooth switching"
- *WebApp:* Improve "Alarmes" page
- *WebApp:* Miscellaneous fixes
- *PSM decoder:* Fix "Var filter"

31 EXOCET-2023.09

New features:

- *Manta, Polar box:* Add support of Expedition / SailingPerformance format
- *Manta, Calibration box:* Add LUT control from WebApp
- *Manta, TCP box:* Add controls from WebApp
- *Manta, FailSafe box:* Add enable/disable of inputs from Manta
- *Manta, Expression box:* Add ability to not sending
- *WebApp:* "Records" page, add pagination
- *WebApp:* "Alarms" page, add status et acknoledge by group
- *WebApp:* "Text" widget, add vertical centering option
- *WebApp:* "Curve" widget, add management of display settings

Updates:

- *Exocet:* Safety fixes
- *Manta, Polar box:* Increase size of WTP tables + fix NKE tables
- *Manta, WindUpwash box:* Fix H5000 tables
- *Manta, System box:* Load indicators limited to 100%
- *Manta, Calibration box:* Fix 180/360 modulos
- *Manta, Damping box:* Fix 180/360 modulos
- *Manta, LeeCurTools box:* Fix negative speed
- *WebApp:* Miscellaneous fixes

32 EXOCET-2023.08_01

Important note: Some n2k boxes compatibility is broken. These boxes must be updated or replaced in the Manta Graph.

Important note 2: Exocet WebApp has now a new interface. Refer to the User Manual if needed. A "WebApp V1" link provides access to the old interface.

New features:

- *Manta:* Add Opc_in box
- *Manta, nmea0183 box:* Add decoding of MOB frame
- *WebApp:* New interface

Updates:

- *Exocet:* Safety fix
- *Manta, Gpio box:* Improve error messages
- *Manta, Display B&G box:* Safety fix
- *Manta, Calibration box:* Fix LUT-2D extrapolation + conversions improvement
- *Manta, OverlayManager box:* Add unit
- *Manta, LeeCurTools box:* Fixes
- *Manta, System box:* Fix WebRefresh
- *Manta, N2k boxes:* Improve devices list + fix PGNs
- *Manta, Oscar box:* Fix sending period

33 EXOCET-2023.07_05

Updates:

- *Manta, N2k box:* Fix device selection via WebApp

34 EXOCET-2023.07_03

Updates:

- *Manta, Damping box:* Fix 180/360 modulos

35 EXOCET-2023.07_02

New features:

- *Manta, LeeCurTools box:* Add data to output 1+ add WebApp controls + add North/East velocity option

Updates:

- *Manta, LeeCurTools box:* Activation of input timeouts by default + improve box states management
- *Manta, Oscar box:* Safety fix
- *WebApp:* Developements on new interface

36 EXOCET-2023.06_01

Important note: In order to improve robustness, but also reactivity and stability of our system, some changes have been made to the software architecture. These changes may lead to a significant increase of CPU consumption which should not affect the product general operation.

Important note 2: Some n2k boxes compatibility is broken. These boxes must be updated or replaced in the Manta Graph.

New features:

- *Manta:* Add Sentea box
- *Manta, Hyperion box:* Add enable control from WebApp
- *Manta, Python / Expression boxes:* Manage string with more than 32 characters
- *Manta, RegulationPerformance box:* Add "Status" variable
- *Manta, Stats box:* Add units

Updates:

- *Exocet:* Safety fixes
- *Manta, FailSafe box:* Safety fixes + warning if one input on error + improve debug output
- *Manta, N2k, WtpSerial boxes:* Increase PGn 130822 "SerialData" field size
- *Manta, System box:* Improve accuracy of interfaces loads + change web refresh processing
- *Manta, Ascii_encoder box:* Fix hexadecimal constant
- *Manta, Gpio box:* Safety fix
- *WebApp:* Developements on new interface

37 EXOCET-2023.05

Important note: Some n2k boxes compatibility is broken. These boxes must be updated or replaced in the Manta Graph.

New features:

- *Manta, GPIO_in box:* Add "frequency" mode
- *Manta, N2k boxes:* Add AIS PGNs

Updates:

- *Manta, Alarm box:* Safety fix
- *Manta, SBG box:* Safety fix
- *Manta, Watt&Sea box:* Safety fix
- *Manta, Oscar box:* Safety fix
- *Manta, N2k boxes:* Safety fix
- *Manta, AIS box:* Safety fix + standardization with n2k
- *Manta, GPIO boxes:* Safety fixes
- *WebApp:* Developements on new interface

38 EXOCET-2023.04_01

Important note: Oscar and Polar boxes compatibility is broken. These boxes must be replaced in the Manta Graph.

New features:

- *Manta, Alarm box:* Add number of variables in alarm/warning state
- *Manta, Stats box:* Add sum
- *Manta, Watt&Sea box:* Add Aero-v2

Updates:

- *Exocet:* Safety fix
- *Manta, Oscar box:* Fix URI control from WebApp + fix management of objects persistence + safety fix
- *Manta, Hyperion box:* Fix references and normalized values to align with Enlight
- *Manta, Datalogger box:* Safety fix
- *Manta, AntiCapsize box:* Standardize status + add units
- *Manta, AIS box:* Harmonization of output variables with N2k
- *Manta, Blink box:* Fix night mode initialization
- *Manta, Polar box:* Rename some variables + improve contextual help
- *Manta, nmea0183 box:* Fix initialization of GGA frame
- *Manta, Watt&Sea box:* Safety fix
- *WebApp:* Developements on new interface
- *PSM decoder:* Fix CSV encoding as UTF-8

39 EXOCET-2023.04

Important note: Oscar, PilotSettings and some n2k boxes compatibility is broken. These boxes must be replaced in the Manta Graph.

New features:

- *Exocet:* Add Alarms logs + logs of Manta boxes on error
- *Manta:* Add AHRS box
- *Manta:* Add Stats box
- *Manta, Expression box:* Add internal variables
- *Manta, PID box:* Add units managment
- *Manta, Serial box:* Add low baudrates
- *Manta, String box:* Add "List of strings" type
- *Manta, Hyperion box:* Add "enable" input
- *Manta, UDP_in box:* Add IP address filtering option
- *Manta, IxBlue box:* Add decode of Control, Long Bin Nav Hr and Seapath messages
- *Manta, Calibration box:* Add "Apply to all" option
- *Manta, MovingMean box:* Add "Apply to all" and "Frequency divider" options
- *Manta, Damping box:* Add "Apply to all" option + add high-pass, band-pass and band-stop filtering
- *Manta, Modbus box:* Add ability to use any mapping address
- *Manta, VarMux box:* Replace "Send if refreshed" option by "Policy" option + add monitoring algorithm for "slowest" sending
- *Manta, System box:* Add monitoring of record files number and configuration space usage
- *Manta, WindMotion box:* Add degraded mode if unavailable data
- *Manta, PilotSettings box:* Add new customizable parameters
- *Manta, Polar / WindUpwash / Table boxes:* Add ability to manage file change in live
- *WebApp:* Add ability to manage user files + add "satellite only" option for Cloud

Updates:

- *Exocet:* Performance and safety fixes
- *Exocet:* Fix system logs
- *Exocet:* Remove ability to download .psm files in CSV format
- *Exocet:* Change cloud server IP address
- *Manta, Expression box:* Remove "Export result" option
- *Manta, Oscar box:* Receive messages from WebSocket + improve management of multiple objects
- *Manta, HeightEstimation box:* Improve wave model + slope in degree + improve documentation

- *Manta, RegulationPerformance box:* Safety fixes + rename some variables
- *Manta, System box:* Connectors and variables number in percent + update status variables + improve error management
- *Manta, Button / Scalar / String / Table boxes:* Fix dynamic input
- *Manta, Datalogger box:* Cloud bugfixes
- *Manta, UDP_out box:* Manage in live recipient change
- *Manta, Python box:* Safety fix
- *Manta, AIS box:* Safety fix
- *Manta, LeeCurTools box:* Improve management of abnormal COG/SOG values
- *PSM decoder:* Safety improvement + optimization + fix start and end dates + fix NAN management
- *WebApp:* Developements on new interface

40 EXOCET-2023.01_01

Updates:

- *Exocet:* Optimization
- *Manta, Alarm box:* Acknowledge only on rising edge
- *Manta, System box:* Safety fix
- *WebApp:* Developements on new interface

41 EXOCET-2023.01

Important note: A bug in System box of this software version can cause an important CPU consumption. This version must be replaced by EXOCET-2023.01_01.

New features:

- *Manta:* Add ASCII_encoder box
- *Manta, System box:* Add monitoring of Ethernet and Serial loads

Updates:

- *Manta, System box:* Improve CAN bus load processing + change "Low power" status to counter
- *Manta, Serial box:* Safety fix
- *Manta, Datalogger box:* Fix satellite transmission for Cloud
- *WebApp:* Developments on new interface

42 EXOCET-2022.12

New features:

- *Manta:* Add AIS box
- *Manta, Oscar box:* Add multiple objects management
- *Manta, Polar/ WindUpwash boxes:* Add support of NKE and H5000 formats
- *Manta, nmea0183 box:* Add decoding of VDO/VDM/TTM/TLL/TLB/OSD frames
- *PSM decoder:* Add informations on PSM file + add multiple files management

Updates:

- *Exocet:* Safety fixes + optimization
- *Manta, VarMux box:* Fix on variables origin check
- *Manta, Datalogger box:* Safety fixes + fix on exported stats + optimization
- *Manta, Exocet_in/Exocet_out boxes:* Optimization
- *Manta, nmea0183 box:* Optimization
- *Manta, N2k boxes:* Optimization
- *PSM decoder:* Safety fixes + optimization
- *WebApp:* Developments on new interface

43 EXOCET-2022.10

New features:

- *Manta, Expression box:* Add "init" option
- *Manta, FailSafe box:* Add "debug" option
- *Manta, System box:* Add status variables
- *Manta, Serial_out box:* Add support of string type variables
- *Manta, TCP_in box:* Add support of Server mode
- *Manta, TCP_out box:* Add support of Client mode
- *Manta, Modbus_in box:* Add support of Slave mode
- *Manta, Modbus_out box:* Add support of multiple data write + add support of write/read data

Updates:

- *Exocet:* Improve power cut management
- *Exocet:* Improve system slowdown management
- *Exocet:* Safety fix to access record files
- *Exocet:* Improve date in file names
- *Manta, Datalogger box:* Safety fix to send data into the Cloud
- *Manta, System box:* Improve system slowdown detection
- *Manta, FailSafe box:* Improve incomplete data stream detection + improve accuracy of failure ratio threshold + safety fixes
- *Manta, OnBoardAssistant box:* Improve "Sails" and "Phase" decode
- *Manta, MovingMean box:* Safety fix on variance calculation
- *Manta, Probe obx:* Improve frequency measurement
- *Manta, Python box:* Minor optimization
- *PSM decoder:* Fix resampling + fix non-chronological data
- *WebApp:* Developments on new interface

44 EXOCET-2022.09_01

New features:

- *Manta, nmea0183 box:* Add PHLIN frame decode

Updates:

- *Manta, KVH, Oscar, Victron boxes:* Safety fix

45 EXOCET-2022.09

New features:

- *Manta, Exocet_out box:* Add send frequency choices
- *Manta, System box:* Add webApp refresh monitoring
- *Manta, Python box:* Add units management

Updates:

- *Exocet:* Saefty fixes
- *Manta, Pid box:* Fix notifications
- *Manta, LeeCurTools box:* Improve error management
- *Manta, Hyperion box:* Safety fix
- *Manta, IxBlue box:* Fix output frequency for Submergence_b
- *Manta, FailSafe box:* Fix "smooth switching" function
- *WebApp:* Fixes on new interface

46 EXOCET-2022.07_03

Updates:

- *Manta, Hyperion box:* Safety fix
- *Manta, System box:* Optimization
- *WebApp:* Fixes on new interface

47 EXOCET-2022.07_02

New features:

- *Manta, Polar/WindUpwash boxes:* Add user controls for WebApp + tables list management
- *Manta, Williamson box:* Add ref WILPA3029A

Updates:

- *Manta, Table box:* Fix save in text file
- *Manta, WTP box:* Improve contextual help

48 EXOCET-2022.07_01

New features:

- *Manta, EmpirBus_out box:* Add configuration check
- *Manta, UDP/TCP boxes:* Add ability to send "string" variables
- *Manta, SignalGenerator box:* Add "Output name" option
- *Manta, Williamson box:* Add "prefix" option

Updates:

- *Exocet:* Safety fixes + optimizations
- *Manta, Modbus_out box:* Fix TCP Slave
- *Manta, KVH, Ainstein boxes:* Optimization
- *Manta, Oscar, Nortek boxes:* Safety fix
- *Manta, SBG box:* Optimization + evolution for protocol v2.2
- *Manta, EmpirBus_out box:* Fix "Bit" encoding
- *Manta, Canbus_in box:* Fix ID filter
- *Manta, N2k_out box:* Optimization + fix load calculation
- *PSM decoder:* Fix variables selection with filtering

49 EXOCET-2022.06

New features:

- *Manta:* Add EmpirBus_out box
- *Manta, N2k box :* Add "Rig" type
- *Manta, Datalogger box :* Add "Activated" status
- *Manta, ModBus box :* Add "Salve ID" parameter in TCP mode
- *Manta, VarMux box :* Add "Disable checks" option

Updates:

- *Exocet:* Safety fix
- *Manta, N2k boxes:* Improve devices detection + optimization
- *Manta, boite FailSafe:* Improve "outlier" detection
- *Manta, boite PID:* Fix angular data management

50 EXOCET-2022.05

New features:

- *Manta, Canbus box:* Add filter on list of CAN ID
- *Manta, Datalogger box:* Add "Decimals" option
- *PSM decoder:* Add "Float format" option

Updates:

- *Manta, System box:* Remove ability to rename
- *Manta, Expression box:* Rename "float" type
- *Manta, HeightEstimation box:* Rename "1sigma accuracy" + support inertial accelerations + NaN management + safety fix
- *Manta, Exocet boxes:* Fix type change + fix float resolution + safety fixes
- *Manta, Datalogger box:* Fix type change for Cloud + fix float resolution + files name with serial number
- *Manta, decode boxes:* Safety fixes
- *Manta, SBG, Ainstein boxes:* Fix timestamp if invalid message
- *Manta, Analogue box:* Fix output frequency
- *WebApp:* Fix alarm notifications
- *PSM decoder:* Fix "Var filter"

51 EXOCET-2022.04_01

Important note: Analog boxes compatibility is broken. These boxes must be replaced in the Manta Graph.

New features:

- *Manta:* Add SignalGenerator box
- *Manta, iDataNet box:* Add decimals number parameter
- *Manta, VarFilter box:* Add "splitter" option

Updates:

- *Exocet:* Safety fixes
- *Manta, Analog box:* Fix initialization + gain range 0/5V + working ranges
- *Manta, Datalogger box:* Fix default decimals for data recording

52 EXOCET-2022.04

Important note: SBG and KVH boxes compatibility is broken. These boxes must be replaced in the Manta Graph.

New features:

- *Manta, BlinkManager box:* Add night mode + brightness setting + falling edge + "periodic" option + multiple LED command
- *Manta, WindMotion box:* Add "MHUaltitude" user control
- *Manta, RegulationPerformance box:* Add external control of the offset
- *Manta, Tick box:* Add measured frequency and period outputs
- *WebApp:* Add link to new interface in "preview"

Updates:

- *Exocet:* Safety fixes
- *Manta, SBG, KVH boxes:* use one output connector per message
- *Manta, PID box:* bugfix on input connectors + safety fix
- *Manta, nmea0183 box:* fix variable name "INDYN_ALTITUDE"
- *Manta, Scalar box:* improve warning message
- *Manta, BlinkManager box:* Safety fixes
- *Manta, N2k boxes:* Usage of address in memory disabled
- *Manta, Datalogger box:* "Full log" option active by default
- *Manta, System box:* Rename box
- *Manta, RegulationPerformance box:* Fix "deadband"
- *Manta, Tick box:* Improve accuracy

53 EXOCET-2022.03_02

Updates:

- *Exocet:* Safety fix

54 EXOCET-2022.03_01

New features:

- *Manta:* Add Keel box
- *Manta, HeightEstimation box:* Add accelerations support

Updates:

- *Exocet:* Safety fix
- *Exocet:* Fix on Alarms
- *Manta, decode boxes:* Fix on Timestamp
- *Manta, PID box:* Safety fix
- *Manta, SBG box:* Safety fix
- *Manta, Delay box:* Safety fix
- *Manta, RegulationPerformance box:* Safety fix

55 EXOCET-2022.03

Important note: Communication protocol used in Exocet_in and Exocet_out boxes has changed. The firmware must be updated on emitter and receiver at the same time.

Important note 2: The PSM format of Datalogger box files has been upgraded from version 3 to version 4. The new version of the PSM decoder must be installed.

New features:

- *Exocet:* Alarm trigger on NAN
- *Manta:* Add Add_Delay box
- *Manta:* Add PID box
- *Manta:* Add HeightEstimation box
- *Manta:* Add Ainstein box
- *Manta:* Add Regulation_Performance box
- *Manta:* Add Timestamp on input data
- *Manta, Expression box:* Support CanFrame data
- *Manta, PilotOverlayB&G box:* Support SelectMe
- *Manta, VarFilter box:* Support multiple wires on input
- *Manta, VarMux box:* Add variable mapping + ability to filter variables
- *Manta, FailSafe box:* Add input data check options + error filter + smoothing data on input change
- *Manta, Canbus box:* Add message filter
- *Manta, MovingMean box:* Add "Range" and "Maximum of absolute" processing
- *Manta, Python box:* Support export of integer numbers
- *WebApp:* Remove option "decimals acquisition" per variable
- *WebApp:* Add option to process extrema

Updates:

- *Exocet:* Improve real time + optimizations + safety fixes
- *Exocet:* Fix PSM files download
- *Manta:* Increase output connectors max number to 2048
- *Manta, Probe box:* Tabulation as CSV separator + fix date
- *Manta, VarMux box:* Add frequency choices + fix SendIfRefreshed option + improve safety
- *Manta, ModBus box:* Optimization
- *Manta, Expression box:* Improve error messages
- *Manta, Datalogger box:* Safety fix
- *Manta, Table box:* Fix EOL support for text file
- *Manta, N2k box:* Optimizations + fix devices discovery + manage timeout

- *Manta, Hyperion box:* Improve management of communication loss with interrogator
- *Manta, WindMotion box:* Fix Trim reception
- *Manta, FailSafe box:* Fix status output
- *Manta, Delay, Python, Expression, Exocet, Datalogger boxes:* Support Timestamp
- *Manta, VarFilter, Datalogger boxes:* Improve variables selection
- *Manta, Senix box:* Remove "out of optimum range" warning
- *Manta, PID_controller box:* Obsolete
- *Manta, RangeAccelFusion box:* Obsolete
- *Decoder:* Fix selected variables + add "–alldata" option + fix install folder + fix read file

56 EXOCET_TJV-2021.10

Updates:

- *Manta, Hyperion box:* Improve sensor loss management
- *Manta, RangeAccelFusion box:* Fix Kalman filter

57 EXOCET-2021.09_01

Updates:

- *Exocet:* Safety fix
- *Manta, WtpSerial box:* Fix "All" mode + safety fixes

58 EXOCET-2021.09

Important note: N2k-UserVars boxes compatibility is broken. These boxes must be replaced or updated in the Manta Graph.

New features:

- *Manta, FailSafe box:* Add "Save" option
- *Manta, Expression box:* Add "Export result" option
- *Manta, DisplayB&G, n2k boxes:* Add support of 32 B&G user vars

Updates:

- *Exocet:* Optimizations + Safety fixes
- *Exocet:* Change unit symbols "min" and "kB"
- *Manta, PilotSettingsB&G box:* Improve settings resolution
- *Manta, Williamson box:* Fix state of charge
- *Manta, Analog box:* Add unit to output variable
- *Manta, n2k box:* Fix WebApp device selector
- *Manta, System box:* Fix negative CPU temperature + improve CAN bus load calculation
- *Manta, WindMotion box:* Add option to disable fix of july 2021
- *WebApp:* Safety fixes + ergonomic improvement
- *WebApp:* Fix clock synchronization
- *WebApp:* Improve night mode

59 EXOCET-2021.07_01

New features:

- *Manta, WindTrue box:* Add option Ref. to Course or Ref. to boat axis

Updates:

- *Exocet:* Safety fix
- *Manta, Victron box:* Fix "maxpowtoday"
- *Manta, n2k, WTPSerial boxes:* Ergonomic improvement
- *Manta, Hyperion box:* Display parsing errors of MOI file
- *Manta, WindMotion box:* Fix calculations + improve accuracy
- *Manta, WindApparent box:* Fix calculation when Ref. to boat axis
- *WebApp:* Safety fixes

60 EXOCET-2021.07

Important note: N2k-Autopilot boxes compatibility is broken. These boxes must be replaced or updated in the Manta Graph.

New features:

- *Exocet, decoder:* Add variables type display
- *Manta:* Add Modbus boxes
- *Manta:* Add Senix box
- *Manta, WTPSerial box:* Add device selector
- *Manta, System box:* Add internal data monitoring + management of box state
- *Manta, n2k box:* Add data to Autopilot type
- *Manta, Serial_out box:* Add warning if failed to send
- *Manta, Varmux box:* Add secundary input + timeout management + option "send if refreshed"
- *Manta, Calibration, Damping, MovingMean boxes:* Add WebApp widget Settings
- *Manta, Calibration box:* Add Linearization parameter from WebApp + add extrapolation option + add "Linear 2D-LUT"
- *Manta, LeeCurTools box:* Add HullShapeFactor from WebApp
- *Manta, Victron box:* Decode additional data

Updates:

- *Exocet:* Safety fixes
- *Manta, Wind boxes:* Safety fix
- *Manta, n2k box:* Ergonomic improvements
- *Manta, Victron, IxBlue, nmea0183, Oscar, Penon boxes:* Safety fix + optimization
- *Manta, SBG, Nortek boxes:* Optimization
- *Manta, Calibration box:* Fix slope/offset from WebApp
- *Manta, FailSafe box:* Change initialization of input status + management of all inputs disabled
- *Manta, Serial_in box:* Fix to support several boxes on the same COM port
- *Manta, WindMotion box:* Remove sign convention option + fix calculations
- *WebApp:* Increase possible connections number on server

61 EXOCET-2021.06_03

Updates:

- *WebApp, dashboards:* Add widget digit size option on container settings

62 EXOCET-2021.06_02

Updates:

- *Manta, KVH box:* Add error log
- *Manta, Williamson box:* Fix RSOC calculation

63 EXOCET-2021.06

New features:

- *Exocet:* Add red LED blink on box Error
- *Manta:* Add Expression box
- *Manta, Table box:* Add text file support
- *Manta, Williamson box:* Add support of WILPA2935A
- *WebApp, Slider widget:* Add state variable support
- *WebApp:* Add ability to save/restore data settings

Updates:

- *Exocet:* Optimization + Safety fixes
- *Manta, FailSafe box:* Change Status output + change box states + fix Auto / Manual transition
- *Manta, SBG box:* Safety fix + update GPS_HDT message
- *Manta, GPIO box:* Safety fix
- *Manta:* Williamson box:* Improve charge level accuracy

64 EXOCET-2021.04_02

New features:

- *Exocet Blue:* Add "String "Manta box and "Set Text" WebApp widget
- *Exocet Essential:* initial support

Updates:

- *Exocet:* Safety fixes

65 EXOCET-2021.03_03

New features:

- *Manta:* Add EmpirBus box
- *Manta, Calibration, Damping, MovingMean, n2k_in, n2k_out, UDP_out boxes:* Add WebApp option
- *Manta, Calibration, Damping, MovingMean boxes:* Add Export parameters option
- *Manta, FailSafe box:* Add input activation from WebApp
- *Manta, Datalogger box:* Add logged data frequency limitation + add Cloud configuration from WebApp
- *Manta, WindMotion box:* Add Full Motion option

Updates:

- *Exocet:* Change dependency to Network service
- *Exocet:* Safety fixes
- *Exocet:* PSM Decoder, same default column separator as Exocet
- *Manta, FailSafe box:* Send status on change only + safety fix
- *Manta, WindMotion box:* Change Triple rotations correction
- *Manta, Python box:* Safety fix
- *WebApp:* Safety fixes

66 EXOCET-2021.03

Important note: Add "Parameters" output on Calibration, Damping and MovingMean boxes causes a change of main output connector name:* Calibration → Calibration#0. This could impact dashboards or logged data.

New features:

- *Manta:* Add Anti-Capsize box
- *Manta, Debounce box:* Add string and double type input support
- *Manta, Alarm box:* Add acknoledge input
- *Manta, Datalogger box:* Add selection of variables to send to Cloud
- *Manta, String box:* Add external control
- *Manta, Calibration, Damping, MovingMean boxes:* Add "Reset" input + "Parameters" output

Updates:

- *Exocet:* Safety fixes + optimization
- *Exocet:* PSM Decoder, fix CSV files names
- *Exocet:* PSM Decoder, fix CSV files encoding (UTF-16le)
- *Exocet:* PSM Decoder, fix UTF-8 characters support
- *Exocet:* PSM Decoder, fix filter function
- *Exocet:* PSM Decoder, various fixes
- *Manta:* Safety fixes
- *Manta, Debounce box:* Filtering function improvement
- *Manta, VarFlter box:* Ergonomic improvement
- *Manta, Calibration, Damping, MovingMean boxes:* Standardize "PassThrough" option

67 EXOCET_VG-2021.03

Important note: This release is based on EXOCET_VG-2020.10_02.

Updates:

- *Exocet:* Safety fix

68 EXOCET-2020.12_01

New features:

- *Manta:* Add Cycle box
- *Manta:* Add Debounce box

Updates:

- *Exocet:* Fix variables customizable from WebApp
- *Manta, nmea0183 box:* Fix PHROT frame + safety fix
- *Manta, Calibration box:* Safety fix
- *Manta, Hyperion box:* Fix interrogator initialization

69 EXOCET-2020.11

Important note: N2k-Temperature, n2k-DevicesInfo and n2k-ExocetRed boxes compatibility is broken. These boxes must be replaced or updated in the Manta Graph.

New features:

- *Exocet:* Add support of units km/h and liter
- *Manta:* Add KVH box
- *Manta, n2k_in, n2k_out boxes:* Add PGN 65285 to Temperature types, addPGN 59904 to DevicesInfo type
- *Manta, Display B&G, Garmin, NKE boxes:* Add higher emission frequency
- *Manta, DisplayGarmin box:* Add data conversion from their unit
- *Manta, System:* Add record space usage

Updates:

- *Exocet:* Improve angular data management
- *Exocet:* Safety fix
- *Exocet:* Improve PSM decoder
- *Exocet:* Optimization of system logs
- *Manta, DisplayGarmin box:* Improve of contextual help
- *Manta, DisplayNKE box:* Fixes
- *Manta, Python box:* Safety fix
- *Manta, Oscar box:* Increase input buffer size
- *Manta, VarMux box:* Fix emission at 0,1Hz
- *Manta, SBG, Nortek boxes:* Optimizations
- *Manta, n2k_in, n2k_out boxes:* Fix PGN 130861 of Exocet RED type, improve connected devices detection
- *WebApp:* Safety and display fixes

70 EXOCET_VG-2020.10_02

Updates:

- *Manta, FailSafe box:* Send status before data

71 EXOCET_VG-2020.10_01

New features:

- *Manta, Brentronics box:* Manage new communication protocol

72 EXOCET_VG-2020.09_02

New features:

- *Exocet:* Add network connection monitoring script

Updates:

- *Manta, Victron box:* Fix unknown message support
- *Manta, MovingMean box:* Fix angular data
- *Manta, PilotOverlayNke box:* Fix User Target

73 EXOCET_VG-2020.09_01

Important note: N2k-AngleMast and n2k-ExocetRed boxes compatibility is broken. These boxes must be replaced or updated in the Manta Graph.

New features:

- *Manta:* Add Oscar box
- *Manta, Victron box:* Add circular buffer on input
- *WebApp:* Automatic display of variables created after start up

Updates:

- *Exocet:* Fix system logs
- *Exocet:* Fix Manta configuration deployer
- *Manta, Sirius box:* Safety fix
- *Manta, nmea0183, IxBlue, Nortek, Penon, SBG boxes:* Safety fix
- *Manta, n2k_in, n2k_out boxes:* Safety fix + performance improvement
- *Manta, n2k_in, n2k_out boxes:* Add PGN 65330 to AngleMast type + modification PGN 130861 of Exocet Red type
- *Manta, FailSafe box:* Safety fix
- *Manta, MovingMean box:* Fix samples timestamping
- *Manta, Victron box:* Fix protocol decode
- *Manta, OverlayManager box:* Fix error management
- *Manta, datalogger box:* Fix FIFO overflow management

74 EXOCET_VG-2020.09

Important note: TCP_in and TCP_out box compatibility is broken. These boxes must be replaced in the Manta Graph.

Updates:

- *Exocet:* Safety fix
- *Manta, TCP_in, TCP_out boxes:* Protocol bugfix

75 EXOCET-2020.08_01

Important note: N2k-Wind boxes compatibility is broken. These boxes must be replaced or updated in the Manta Graph.

New features:

- *Manta, overlayManager box:* Automatic reactivation after safety overlay preemption
- *Manta, PID-controller box:* Add nex type + add options

Updates:

- *Exocet:* CPU and Memory performance optimization
- *Manta, System, PilotSettings, WindProcHr boxes:* Performance optimization
- *Manta, System box:* Safety fix
- *Manta, GPIO box:* Safety fix
- *Manta, WindMotion box:* Fix gyroscopic compensation
- *Manta, N2k_out box:* Performance optimization of timer sending
- *Manta, N2k_in box:* Fix address filter
- *Manta, N2k box:* Fix wind data according to standard
- *Manta, Hyperion box:* Fix initialization
- *Manta, PilotOverlay box:* Performance optimization
- *Manta, PilotOverlayNke box:* Rename PilotMode to PilotModeNke
- *Manta, nmea0183 box:* Fix GGA frame decoding
- *Manta, overlayManager box:* Improve status data
- *Manta, PID-controller box:* Fix initialization
- *Manta, Sailnet box:* Fix connection research
- *WebApp:* Performance optimization + safety fix
- *WebApp:* Ergonomic improvement

76 EXOCET-2020.07_01

Important note: WattAndSea and Cloud configuration box compatibility is broken. These boxes must be replaced in the Manta Graph.

New features:

- *Exocet:* Add Alarm automatic acknoladge option
- *Manta:* Add WTPSerialManager box
- *Manta, Datalogger box:* Add Full Log option + Cloud sending every 10s and 30s
- *Manta, Probe box:* Add data frequency
- *Manta, WattAndSea box:* Add pump decode (hydro version)

Updates:

- *Exocet:* Fix firmware update process
- *Manta, MovingMean box:* Fix initialization + optimization
- *Manta, WindTrue box:* Change Leeway correction sign
- *Manta, DisplayB&G box:* Fix User Vars initialization
- *Manta, N2k box:* Fix User Vars decoding

77 EXOCET-2020.07

New features:

- *Manta, DisplayB&G box:* Add known User Vars

Updates:

- *Exocet:* Improve firmware update process
- *Manta, Damping box:* Add input protection
- *Manta, Average box:* Add input protection
- *Manta, FreqDivider box:* Add input protection
- *Manta, VarFilter box:* Add input protection
- *Manta, Calibration, Damping, MovingMean boxes:* Add protection on dynamic input
- *Manta, PID box:* Improve safety
- *Manta, Datalogger box:* Improve Cloud safety
- *WebApp:* Fix number widget visibility in dark mode

78 EXOCET-2020.06_05

New features:

- *Manta, nmea0183 box:* Add DBT, DPT, VBW, VHW, VLW, VMNLA frames

Updates:

- *Manta, N2k box:* Fix PGN and variables paramaters
- *Manta, IxBlue box:* Fix support of unknown frames
- *Manta, e-telltales box:* Update

79 EXOCET-2020.06_04

Updates:

- *Exocet:* Change TCP port for PSM files decoder
- *Manta, Datalogger box:* Fix debug infos for cloud

80 EXOCET-2020.06_03

New features:

- *Manta, Datalogger box:* Add cloud datalogging
- *Manta, Display_B&G, Display_Garmin boxes:* Add interface box to facilitate custom variables display
- *Manta, Hyperion box:* Add data frequency divider

Updates:

- *Exocet:* Fix memory overflow
- *Manta, IxBlue box:* Fix "YawRate" sign from INDYN and PIXSE frame
- *Manta, MovingMean box:* Fix initialization + add protection
- *Manta, Bravo box:* Bugfix
- *Manta, Brentronics box:* Fix signed data
- *Manta, nmea0183 box:* Add PHROT frame
- *WebApp:* Fix widget delation
- *WebApp:* Fix widget settings
- *WebApp:* Improve safety
- *WebApp:* Fix widget position inside container

81 EXOCET-2020.06_01

Updates:

- *Manta, Bravo box:* Bugfix + safety improvement
- *Manta, N2k box:* Fix variable size PGN

82 EXOCET-2020.06

Important note: PilotSettings and N2k WTP Serial box compatibility is broken. These boxes must be replaced in the Manta Graph.

New features:

- *Exocet:* Add protection against empty variable dictionnary
- *Exocet:* Add protection against configuration boxes conflicts
- *Manta, Button, Scalar, Table boxes:* Add reset input
- *Manta, Calibration box:* Add spline and trigonometric interpolation
- *Manta, MantaStatus box:* Add names and number of boxes in error/warning
- *Manta, FailSafe box:* Add HTML icon corresponding to box state into Status output
- *Manta, MovingMean box:* Add median
- *Manta, PilotSettings box:* Add pilot dynamic detection

Updates:

- *Manta, Button, Scalar, String, Table boxes:* Fix save
- *Manta, NavData box:* Fix decimals number
- *Manta, MovingMean box:* Bugfix + optimization
- *Manta, Hyperion box:* Fix sensor peak awarding
- *Manta, LeeCurTools box:* Fix box state management
- *Manta, N2k box:* Optimization + update PGN 65280/130822/130823 (WTP Serial) + fix destination address
- *Manta, python box:* Improve error messages
- *Manta, Adrena_xdr box:* Fix checksum format

83 EXOCET-2020.05_02

Updates:

- *Exocet:* Fix disable of active alarm
- *Manta, PilotSettings box:* Initialize improvement + fix RudderLimit
- *Manta, n2k box:* Fix encoding/decoding character string + fix variable name mapping
- *Manta, nmea0183 box:* Decoding improvement
- *WebApp:* Fix alarm popup

84 EXOCET-2020.05_01

New features:

- *Manta, Nmea2000 box:* Check messages according to database
- *Manta, Upwash, Polar boxes:* Add linear and trigonometric interpolation
- *WebApp:* Add ability to clone widget container

Updates:

- *Manta, PilotOverlay box:* Fix a disengage event
- *Manta, Upwash box:* Modification of TWS correction calculation + fix point at 180° + fix table management where TWS = 0,0
- *Manta, Nmea2000 box:* Fix PitchRate and RollRate
- *WebApp:* Display improvement
- *WebApp:* Fix GPS icon
- *WebApp:* Fix widget container importation
- *WebApp:* Fix widget size if larger than the container
- *WebApp:* Fix NAN data management
- *WebApp, slider widget:* Fix "ticks" display

85 EXOCET-2020.05

New features:

- *Manta, Button box:* Add initial value
- *Manta, GPIO in box:* Add data sending period
- *WebApp:* Add widget container

Updates:

- *Manta, nmea0183 box:* Fix XDR frame
- *Manta, MovingMean box:* Fix WebApp data
- *Manta, Calibration box:* Fix unit of None type
- *WebApp:* Change display to improve compatibility with different screen

86 EXOCET-2020.04

Important note: Analogue and LeeCurTools box compatibility is broken. These boxes must be replaced in the Manta Graph.

New features:

- *Exocet:* Add alarm on boolean
- *Manta:* Check hardware compatibility for boxes which have a link to a physical interface
- *Manta, FailSafe box:* Send status at start up
- *Manta, Probe box:* Add quotation marks to string
- *Manta, Calibration, Upwash, Polar boxes:* Check dynamic tables before update
- *Manta, Calibration box:* Add None type
- *WebApp:* Add video widget

Updates:

- *Exocet:* Improve firmware and configuration files download
- *Exocet:* Fix disable tab management
- *Exocet:* Fiw and improve boxes start up
- *Decoder:* Several fix on PSM files and decoder
- *Manta, BlinkManager box:* Fix data access from WebApp + secure
- *Manta, Brentronics box:* Increase request frequency
- *Manta, Analog box:* Fix box settings
- *Manta, Nmea2000 box:* Fix data send order + secure
- *Manta, Calibration box:* Fix non scalar management + fix multi-outputs table management
- *Manta, LeeCurTools box:* Fix box settings + secure
- *Manta, nmea0183 box:* Fix protection mechanism
- *Manta, Scalar box:* Fix +/- step mechanism + fix predefined list initialization
- *Manta, IxBlue box:* Fix sign in SubmergenceB frame
- *Manta, PilotOverlayNke box:* Fix initialization
- *WebApp:* Fix footprint data display
- *WebApp,curves widget:* Fix curve selection by dropdown list
- *WebApp, shape widget:* Improvement
- *WebApp, multiples data widget:* Bugfix

87 EXOCET-2020.03_01

Updates:

- *Exocet:* Fix PSM decoder usage
- *Manta:* Fix dynamic inputs
- *Manta, FailSafe box:* Send status at start up

88 EXOCET-2020.03

Important note: System and OverlayManager box compatibility is broken. These boxes must be replaced in the Manta Graph.

Important note 2: The PSM format of Datalogger box files has been upgraded from version 2 to version 3. The new version of the PSM decoder must be installed.

New features:

- *Manta:* Add Polar box
- *Manta, Pilot Settings B&G box:* Add Status output
- *Manta, nmea0183_decoder box:* Add $BWC, $RMB, $XTE and $ZTG support
- *Manta, Serial box:* Add Read mode
- *Manta, Système box:* Add CAN bus load
- *Nmea2000:* Automatic encode Time to seconds
- *WebApp, dashboard:* Add Wind and Polar Table widget
- *WebApp, dashboard:* Add curve display widget
- *WebApp, dashboard:* Update multi data widget to be able to order the list
- *WebApp, dashboard:* Add light function to button widget

Updates:

- *Exocet:* Fix PSM decoder access
- *Exocet:* Fix rotating system logs
- *Manta, FailSafe box:* Minor optimization
- *Manta, Brentronics box:* Fix identification
- *Manta, Pilot Overlay boxes:* Update + add "Super" mode support
- *Manta, Overlay Manager box:* Bug fix and update
- *Manta, MovingMean box:* Improve angle support and add units
- *Manta, GPIO_out box:* Bugfix, add init state and Invert option
- *WebApp:* Alias bugfix
- *WebApp:* Data display bugfix

89 EXOCET-2020.02

New features:

- *Manta, Calibration box:* Add possibility to use multi-out LUT
- *Manta, PilotSettingsBandG box (Silver):* Add box to facilitate setting of B&G pilot parameters
- *Manta, Brentronics box (Blue):* Add box to decode Bren-Tronics batteries
- *Manta, iDataNet box:* Add possibility to change UDP port
- *Manta, WindUpwash box (Silver):* Add possibility to dynamically update correction tables
- *Manta, VarMux box:* Add box to mux Manta data streams
- *WebApp:* Add Table edition widget
- *WebApp:* Add alarm popups
- *WebApp:* Add filter in Alarms page

Updates:

- *Exocet:* Fix file cleaning at configuration upload
- *Exocet:* Fix CAN driver
- *Manta:* Improve Table type variable support
- *Manta, Nmea0183_dec box:* Fix VTG sentence decode
- *Manta, Nke_display box:* Rename to Display_nke
- *Manta, FailSafe box:* Set in warning state if switch to a secondary input
- *Manta, PID box:* Bug fix
- *Nmea2000:* Support improvement
- *WebApp:* Fix angle and set number widgets for IPad
- *WebApp:* Improve widget displacement in dashboard
- *WebApp:* Several user interface improvement

90 EXOCET-2020.01

New features:

- *Exocet:* General performance optimization
- *Exocet:* Add internal monitoring and associated user warning
- *Manta (Silver):* Add Overlay Manager box
- *Manta:* Add TCP in/out box
- *Manta, UDP box:* Add broadcast
- *Manta, Scalar box:* Add unit
- *Manta, Scalar & button box:* Add optional input to update data from Manta graph
- *Manta, Failsafe box:* Add optional input to drive box from the Manta graph
- *Manta, Failsafe box:* Add switch mode
- *Manta, Probe box:* Set to warning state in case of full speed mode
- *Manta, Williamson box:* Extend support to other battery reference
- *Nmea2000:* Add Garmin user vars support
- *Nmea2000:* Extend B&G support
- *WebApp, dashboard:* Ability to set color of boolean widget
- *WebApp, dashboard:* Ability to display icons or HTML from opaque Manta variables
- *WebApp, dashboard:* Improvement of data edit widget

Updates:

- *Exocet:* General multi-threading protections
- *Manta, Scalar box:* bug fix & improvement
- *Manta, Sirius box:* bug fix & improvement
- *Manta, WindMotion box:* bug fix & improvement
- *Manta, BlinkManager box:* bug fix & improvement
- *Manta, Serial in/out box:* bug fix & improvement
- *WebApp:* bug fix & improvement

91 EXOCET-2019.10_02

New features:

- *Manta, Failsafe box:* Ability to rename output variables.
- *Manta, Scalar and Button (Silver and Gold):* add optional input

Updates:

- *Manta, Exocet_in and Exocet_out:* Fix protocol support.
- *Manta, Pilot Overlay B&G and NKE:* Harmonization and security improvement.
- *Manta, GPIO box:* Fix initial value.
- *Manta, H5000ws box:* Update communication timeouts.
- *Web app, alarm page:* Performance improvement when displaying a huge number of alarms.
- *PSM_decoder:* Fix preset support.

92 EXOCET-2019.09

Important note: the compatibility of the Damping box is broken. This box must be replaced within the Manta graph and it's setting adapted to use either the time constant, either the cutoff frequency. See box documentation for further details.

Updates:

- *Manta, Damping box:* Improve Nan input support and change filter setting to use either the time constant, either the cutoff frequency.
- *Manta, Tick box:* Extend output frequency up to 1KHz.
- *Manta, On Board Assistant box:* Add sail change events support, the box is now available on Silver and Gold.
- *Manta, lee_cur_tool box (Silver & Gold):* Fix the leeway processing when no current data.
- *Web app, alarm page:* Fix alarm page display and fix alarm support fox boxes with multiple output connectors.
- *Manta, Pilote Overlay B&G box:* Security and robustness improvements.
- *Manta:* Improve boxes startup time after deploying the graph.

93 EXOCET-2019.08_01

New features:

- *Manta, Nortek box:* decode Nortek DVL messages.
- *Manta, NMEA0183:* Add PGOEX sentence.

Updates:

- *Manta, Pilot Overlay B&G box:* bugs fixes.
- *Manta N2k:* Add socketCAN automatic restart.
- *Web app dashboard:* Improve and standardize widget titles.

94 EXOCET-2019.08

New features:

- *Manta (Silver&Gold):* Table box.

Updates:

- *Manta, Pilote Overlay B&G box:* Security update.
- *Manta, Python box:* Update doc, error handling and CanFrame type creation.
- *Manta, Moving mean box:* dynamic window.
- *Manta, boite Damping:* Filter incoming Nan values.
- *System :* Improve CAN bus robustness to bus errors.

95 EXOCET-2019.07

New features:

- *Manta:* SBG INS support.
- *Manta (Silver):* NKE pilot overlay.
- *Manta:* Mantracout loadcell support.
- *Web app setting page:* Manta library management:* list, import, export, delete.
- *Web app dashboard (Silver & Gold):* range slider widget.
- *Web app dashboard:* Title support for all widgets.

Updates:

- *Manta (Silver & Gold):* Unify leeway and current handling in a single box.
- *Manta (Silver):* Security update of B&G pilot overlay.
- *System:* Improve thermal resistance.
- *System:* Decrease CPU usage.

96 EXOCET-2019.06_02

Important note: N2K, Damping and wind boxes backward compatibility has been broken. All these boxes must be replaced in the Manta graph.

New features:

- *Manta (Silver & Gold):* Dynamic setting for Calibration and Damping boxes.
- *Manta:* version control for all the boxes.
- *Manta:* NMEA0183 $VDR et $LWY sentences.
- *Web app dashboard:* Provide "Slider" and "Set number" widgets to Exocet Blue.
- *Web app status page:* Display configuration file name.
- *Web app status page:* Display system uptime.
- *Web app status page:* Display CPU usage for each CPU.
- *Web app:* Control Manta access with login/password

Updates:

- *Manta:* update N2K sources definitions.
- *Manta:* Update N2K/WTP3 box to export with opaque format.
- *Manta:* Rename wind boxes variables names.
- *System:* Improve format and size of system logs.

97 EXOCET-2019.04_02

New features:

- *Manta:* Wind_ProcessorHR box to export Pixel Sur Mer true wind calculation to NKE ProcessorHR.

Updates:

- *Manta:* Update calibration box options naming and documentation.
- *Manta:* Fix a memory leak tied to Python structure pixel.canFrame.
- *Manta:* Fix missing data with Exocet_in/Exocet_out boxes.

98 EXOCET-2019.04_01

New features:

- *Manta:* Watt&Sea hydro generator support.
- *Manta:* NMEA083 sentences $PIXSE SUBGP1 and SUBGP2 support.

Updates:

- *Manta:* Fix calibration table 1D support.

99 EXOCET-2019.04

New features:

- *Manta/Web app (Silver & Gold):* Add Manta boxes and widgets to control Manta scalar or string data from Web app dashboards.
- *Manta (Blue):* Add Energy data acquisition boxes:* Williamson battery, Watt&Sea wind turbine, Victron load controller et ETA energy distributor.
- *Manta NMEA0183:* Add sentences $HDG, $HCHDM, $PIXSE-SUBGP3 and fix support of multiple boxes decoding the same sentence.
- *Manta:* New NKE_out box to send data to NKE MultiDisplay.
- *Web app:* Manta status is displayed on top navigation bar.

Updates:

- *Manta N2k:* Bug fixes and performance improvement. Support multiple CAN handle per bus. Rename sources.
- *Manta N2k:* Simplify configuration with pre configured CAN Handle and device selection with drop down list.
- *Manta N2k:* Improve sending with Exocet data mapping, ability to sent partially filled PGN and ability to update the prioriry.
- *Manta Damping:* Improve dumping formula.
- *Manta (Siver &Gold):* Fix wind lookup table file upload.
- *Web app:* top navigation bar content can be configured and page footer is optional.
- *Web app:* Improve status page showing, report system uptime and time specific data.
- *PSM decoder:* Add comma as CSV column separator.

100 EXOCET-2019.02_05

New features:

- *Manta:* List discovered devices from CAN handle page.

101 EXOCET-2019.02_04

Updates:

- *Manta:* Remove10 entries limitation for Moving mean box.
- *Manta:* Fix moving mean processing for min.
- *Manta:* Restore error display for Python box.
- *PSM decoder:* Fix filter support.
- *System:* Encrypt configuration files.

102 EXOCET-2019.02_03

New features:

- *Manta (Gold):* PID box.
- *Manta Python:* Ability to hide code with password.

Updates:

- *Manta NMEA2000 out:* Variables mapping, emit on trigger or variable change. Send to a single receiver.
- *Manta:* rename CAN buses.
- *Manta Tick:* extend frequency up to 200Hz.

103 EXOCET-2019.01

New features:

- *Manta:* Exocet in and Exocet out to transfer data between Exocet devices.
- *System:* clock synchronization with GPS (via GPSD over UDP) and/or NTP server. Exocet is also a NTP server.
- *Manta:* Display state changes timeline.
- *System:* Hardware platform detection to adapt firmware.
- *Web app status page:* Display hardware platform revision and serial number.
- *PSM decoder:* Filtering, alias, configuration backup and restore.

Updates:

- *Manta:* Improve boxes documentation.
- *Manta:* Improve Hyperion MOI files handling (list, import, export, delete).
- *Manta:* Fix B&G H5000 support.
- *Manta:* Fix NMEA0183 support.
- *Manta:* Remove min, max et average boxes that are replaced by Moving Mean box.