

# **EXOCET**

## RELEASE NOTES

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Version 001.11



**PIXEL SUR MER**



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## 1 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



## 2 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/reconnexion
- *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



### 3 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





## 4 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 possibilité de formater la carte SD

### Updates:

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



## 5 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



## 6 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



## 7 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 acknowledges
- *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 acknowledge
- *WebApp:* Performance improvement
- *WebApp:* Miscellaneous fixes



## 8 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 H5000Analog et H5000Serial 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:* Replace 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



## 9 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



## 10 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



## 11 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





## 12 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



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## 13 EXOCET-2023.10\_02

### Updates:

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



## 14 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”



## 15 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 acknowledge 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 modulus
- *Manta, Damping box*: Fix 180/360 modulus
- *Manta, LeeCurTools box*: Fix negative speed
- *WebApp*: Miscellaneous fixes



## 16 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



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## 17 EXOCET-2023.07\_05

### Updates:

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



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## 18 EXOCET-2023.07\_03

### Updates:

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



## 19 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





## 20 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



## 21 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



## 22 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



## 23 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 management
- *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



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## 24 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



## 25 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



## 26 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





## 27 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



## 28 EXOCET-2022.09\_01

### New features:

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

### Updates:

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



## 29 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



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## 30 EXOCET-2022.07\_03

### Updates:

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



## 31 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



## 32 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



## 33 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



## 34 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”





## 35 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



## 36 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



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## 37 EXOCET-2022.03\_02

### Updates:

- *Exocet*: Safety fix



## 38 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



## 39 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 Einstein 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



## 40 EXOCET\_TJV-2021.10

### Updates:

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



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## 41 EXOCET-2021.09\_01

### Updates:

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





## 42 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



## 43 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



## 44 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 secondary 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



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## 45 EXOCET-2021.06\_03

### Updates:

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



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## 46 EXOCET-2021.06\_02

### Updates:

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



## 47 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



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## 48 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



## 49 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





## 50 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 acknowledge 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, VarFilter box:* Ergonomic improvement
- *Manta, Calibration, Damping, MovingMean boxes:* Standardize “PassThrough” option



## **51 EXOCET\_VG-2021.03**

*Important note:* This release is based on EXOCET\_VG-2020.10\_02.

### **Updates:**

- *Exocet:* Safety fix



## 52 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



## 53 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, add PGN 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



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## 54 EXOCET\_VG-2020.10\_02

### Updates:

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



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## **55 EXOCET\_VG-2020.10\_01**

### **New features:**

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



## 56 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



## 57 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, lxBBlue, 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





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## 58 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



## 59 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, WindProHr boxes:* Performance optimization
- *Manta, System box:* Safety fix
- *Manta, GPIO box:* Safety fix
- *Manta, WindMotion box:* Fix gyroscopic compensation
- *Manta, net2000\_out box:* Performance optimization of timer sending
- *Manta, net2000\_in box:* Fix address filter
- *Manta, net2000 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



## 60 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 acknowledge 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, net2000 box:* Fix User Vars decoding



## 61 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



## 62 EXOCET-2020.06\_05

### New features:

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

### Updates:

- *Manta, net2000 box*: Fix PGN and variables parameters
- *Manta, IxBlue box*: Fix support of unknown frames
- *Manta, e-telldata box*: Update



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## 63 EXOCET-2020.06\_04

### Updates:

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



## 64 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



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## 65 EXOCET-2020.06\_01

### Updates:

- *Manta, Bravo box*: Bugfix + safety improvement
- *Manta, net2000 box*: Fix variable size PGN





## 66 EXOCET-2020.06

*Important note:* PilotSettings and net2000 WTP Serial box compatibility is broken. These boxes must be replaced in the Manta Graph.

### **New features:**

- *Exocet:* Add protection against empty variable dictionary
- *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, net2000 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



## 67 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



## 68 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



## 69 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



## 70 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:* Fix 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



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## 71 EXOCET-2020.03\_01

### Updates:

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



## 72 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



## 73 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





## 74 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



## 75 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, H5000 box*: Update communication timeouts.
- *Web app, alarm page*: Performance improvement when displaying a huge number of alarms.
- *PSM\_decoder*: Fix preset support.



## 76 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 for boxes with multiple output connectors.
- *Manta, Pilote Overlay B&G box:* Security and robustness improvements.
- *Manta:* Improve boxes startup time after deploying the graph.



## 77 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 Net2000*: Add socketCAN automatic restart.
- *Web app dashboard*: Improve and standardize widget titles.



## 78 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.



## 79 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.



## 80 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.



## 81 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.





## 82 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.



## 83 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 Net2000*: Bug fixes and performance improvement. Support multiple CAN handle per bus. Rename sources.
- *Manta Net2000*: Simplify configuration with pre configured CAN Handle and device selection with drop down list.
- *Manta Net2000*: Improve sending with Exocet data mapping, ability to sent partially filled PGN and ability to update the priority.
- *Manta Damping*: Improve dumping formula.
- *Manta (Silver & 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.



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## **84 EXOCET-2019.02\_05**

### **New features:**

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



## 85 EXOCET-2019.02\_04

### Updates:

- *Manta*: Remove 10 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.



## 86 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.



## 87 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.