# What firmware changes have taken place on the Maretron DSM250?

You can update the device with Maretron's N2KAnalyzer software tool.

1.7.5.3 (2018-01-24):

- Correctly display invalid data in LAT/LON screen (4405)
- Correctly display PGN 129029 data in LAT/LON screen (4418)
- Fixed crashing issue in control mode while setting anchor position (4421)
- Corrected an issue which caused DSM250 to re-start after shutting down (4230)
- Updated Fluid Type List (4260, 4261)
- Re-enabled restore factory defaults menu to IPG100 configurations (4268)
- Added DSM410 menu lockout mode (4363)

1.7.2.1 (2017-05-11):

- Added support for differential mode with single-phase fuel flow sensors (e.g., Coriolis sensors) (4214)
- Added support for the NMEA 2000 Heartbeat Message (PGN 126993) (4216)
- Added support for variable PGN transmission intervals for TLA100, TAA100, TLM100, TLM150, and TLM200 (4215)
- Corrected a problem where PGN 130312 did not display for certain sources (4041)
- Corrected a problem where Total Fuel Rate and Total Fuel Economy did not display under certain circumstances (4174)
- In SMS100 configuration, corrected an issue sending test messages (4180)
- Added support for PGN 127497 for Total Fuel Rate display (4053)
- Corrected a problem in the display of VDR100 memory sizes (4062)

1.6.6.3 (2016-08-29):

- Corrected month display errors in time display (3938)
- Corrected a problem where the ALM100 configuration menu was not displayed correctly (3986)

1.6.5.2 (2016-07)

- Added ability to display the 127252 Heave PGN (3412)
- Corrected a problem displaying force values when units are specified as kg (3737)
- Corrected a crash that occurred when color setup was performed (3747)
- Corrected a problem that sometimes occurred in sunrise/sunset calculations (3920)
- Corrected a problem where testing an alert did not result in an audible alarm on the local display (3923)
- Corrected a crash that occurred during the test option in SMS100 configuration (3847)
- Corrected a problem where, after the power off sequence was performed, the device would power back on for 10 seconds before shutting off completely (3733)

1.6.4.1, 2.6.4.1 (2016-03)

- Corrected problem displaying gauge/sender types in EMS100 configuration (3677)
- Corrected display number of static IP dialog in IPG100 configuration (3685)
- Corrected problem displaying set/clear values in alerts editor (3706)
- Corrected a problem where the Battery Time Remaining display showed a dash instead of "Infinite" (3711)

1.6.3.4, 2.6.3.4 (2015-10)

- Corrected a problem in SSC200/SSC300 configuration where NMEA0183 sentence ID's were incorrectly displayed (3609)
- Corrected a problem introduced in version 1.6.2.4 where alerts did not work (3660)
- Corrected a problem where the "Since" time was not correctly displayed for hardware timers and counters (3663)

1.6.2.4, 2.6.2.4 (2015-10)

- Corrected a mathematical error which affected Anchor Watch display (3609)
- Added support for configuration of the new CLM100 Current Loop Monitor
- Added support for display of proprietary PGN's transmitted by the CLM100
- Removed unnecessary instance selection from Fuel Management->Trip Fuel Used screen setup (3233)
- Corrected a problem where multiple labels could be displayed on a favorite screen in case of an instancing conflict (2982)
- Removed Demo Mode: Output Mode (2504)
- Corrected a problem where the display could reset during configuration of favorite screens in the "four quarters" format (3518)
- Corrected a display problem during configuration of Switch/Breaker favorite screen (3512)

- Corrected a problem with DST110 speed calibration (3494)
- Removed decimal point from wind speed Numeric display (it is still there in Numeric/Precision) (3076)
- Corrected an issue selecting the half gauge display in favorite screen configuration (3043)
- Corrected an issue with scaling of line graphs for true wind speed (2989)

1.5.3.5 (2015-03-11)

- Added support for configuring FPM100 to report Altimeter, Filter, Fuel, and Oil pressure sources
- Added calibration/configuration support for upcoming devices
- Corrected a problem where VDR usage percentage was incorrectly displayed

1.5.2.2 (2014-04-21)

- Added the ability to display SMS status and signal strength on favorite screens.
- Added the ability to create an alert when the SMS100 is not transmitting on the NMEA 2000 network.
- Added the ability to display engine and transmission warnings in a format similar to the Indicator Status component.
- Changed to automatically enable the Anchor Watch Alert whenever the anchor watch position is set.
- On the FFM100 configuration menus, changed so that the fuel flow sensor K-factors can be entered with the full precision found on the sensor labels (requires FFM100 F/W 1.2.1.1 or later).
- Added the ability to test alerts in the Alert menus.
- Added the "Numeric/Precision" data type to most displayable data to allow higher resolution display of data values when desired.
- Added the ability to create alerts based on switch counter and timer values.
- Added the ability to reset Airmar depth/speed/temperature transducers to factory default settings.
- The DSM250 device instance and the alert source instance (used to identify the display generating a global alert) have been combined into a single parameter.
- Changed the dew point to display a dash ("-") if humidity is not available or measures 0%.
- Added SMS100 data to the demo mode.
- Minor changes to language used on the displays.
- Changed DC Voltage Line Graph fixed (manual) scale settings to allow finer resolution to be specified.
- Removed the label setting in the USB100 configuration menu since the USB100 does not support labels.
- Corrected a problem where the DSM250 would reset if, while the unit was in control mode, the power button were pressed and held for a long time.
- Corrected a problem where burnt out bulb alerts sometimes did not work correctly.
- Corrected a problem in the TLA100 configuration menus where the tank capacity change confirmation screen was shown incorrectly.
- Corrected a problem in the RAA100 configuration menu where the gauge resistance values could be viewed and changed even if the operating mode specified that no gauge was being used.
- Corrected a problem where the bar graph title could overlay the bar graph on certain screen sizes.
- Corrected a problem where manual variation was not always displayed correctly on the SSC200 configuration menus.

- Corrected a problem where the line graph title overlaid a portion of the line graph for certain screen sizes.
- Corrected a problem saving files from the DSM250 Emulator
- Corrected a problem with configuring device selection on USB100 devices in which the display exits the menu when you attempt to scroll the device list.

1.4.19.3 (2013-07-19)

- Supports display and reset of hardware timers and counters in DCR100, RIM100, and SIM100
- Uses any available SMS100's on the network if there initially are multiple units on the network and one is later removed
- Supports display of the 130316 Temperature, Extended Range parameter group
- DC->Battery Time Remaining will display "Infinite" if the battery is being charge or is not providing any current to its load
- Supports reset of the Total kW Hours parameter transmitted by the ACM100
- Updated the supported NMEA 2000 database version to 2.000

1.4.18.8 (2013-06-05)

- Supports sending text messages on alerts via SMS100 SMS (Text) Module
- Supports configuration and displaying status of SMS100 SMS (Text) Module

1.4.17.5 (2013-04-03)

- Supports configuration of VDR100 LAN connectivity which will be available in an upcoming release of VDR100 firmware.
- Fixed a problem configuring custom titles on favorite screens where a custom title on one favorite screen could be inadvertently overwritten when a custom title was defined for a different favorite screen.
- Removed 127502 Binary Switch Control from received PGN list since it is not used by the display.

1.4.15.3 (2012-08-14)

- Supports configuration of and status display of upcoming VDR100 Vessel Data Recorder
- Supports configuration of DCR100 channels to function as annunciators for alerts

- Corrects a problem with display of temperature offset in Fahrenheit on Airmar product configuration

- Increased alert set delay and clear delay limits to 1 hour, and alert re-trigger period to 12 hours

1.4.14.4 (2012-04-06)

- Added support for configuring FFM100 to use single-phase sensors (typically used for non-fuel fluid flow applications)
- Improved display of IPG100 Maretron Cloud Services status
- Corrected problems with line graph display
- Added support for Maretron proprietary fluid flow rate and fluid volume PGN's, for non-fuel flow application

1.4.13.4(2011-10-24)

- Adds support for enabling/disabling Maretron Cloud Services on IPG100 Internet Protocol Gateways.
- Supports display of Maretron Cloud Services connection status.
- Adds support for displaying N2KView licenses in new format (Separate Base, Alerts, Control, Fuel, and Video licenses)
- Adds support for configuring switch lock state on DCR100 DC Relay Modules.
- Adds support for configuring switch power-up state on DCR DC Relay Modules.
- Corrects an issue with Vacuum Gauge color bands getting reset on startup.

1.4.12 (2011-10-01)

- Added FFM100 Configuration Menu
- Added NBE100 Configuration Menu
- Added Total Trip Fuel Used parameter to Fuel Management Group
- Added Gauge and Line Graph display types for Fuel Rate, Fuel Economy, and Fuel Consumption
- Added Alert Source Instance configuration to Alert Setup menu
- Added support for PGN 127497 (Trip Parameters, Engine)
- Adjusted the way gauges display decimal points in the digital display. This now depends on the minimum and maximum gauge settings
- Corrected a problem where FPM100 configuration menus were not redrawn after tank capacity change
- Corrected a problem in the DCM100 configuration menu where popup windows would appear multiple times

1.4.11 (2011-04-22)

- Added ability to control switches/breakers (for example, DCR100)

- Added alerts for Burnt Out Bulb detection and Low Current When On which will generate an alert when a DCR100 channel is switch on but current is below a user-define threshold
- Added ability to zero the current sensors in the DCR100
- Added ability to display breaker/switch current for DCR100 and other devices which support it

- Corrected an issue where the Alert Edit menu could still be reached in lockout mode
- Corrected a problem with the Enter button repeating when menus were displayed
- Changed wording on heading display type from "Course Up" to "Head Up"

1.4.9 (2011-03-15)

- Added the ability to configure the DST110 and the following Airmar transducers:Added the ability to reverse the direction of the rudder angle display pointer.

    - B122 (44-151-1-01), firmware version1.010 or later

    - DST800 (44-127-1-02), firmware version 1.010 or later

    - DT800 (44-135-2-02), firmware version 1.010 or later

    - P79 (44-142-1-01), firmware version 1.010 or later

    - P39 (44-138-1-02), firmware version 1.010 or later

    - P39DT, firmware version 1.010 or later

    - HT200 (44-162-1-02), firmware version 4.000 or later

    - ST850 (44-153-1-01), firmware version 1.011 or later

    - ST800, firmware version 1.011 or later

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- The minimum brightness is now 1% instead of 0% to prevent making the display so dark it can't be seen.

- Corrected an issue where a heading sensor label was sometimes displayed incorrectly.

- Added a feature where the configuration of the DSM250 can be locked.
    - As shipped, the configuration is unlocked and all functions and configuration menus are accessible. When the configuration is locked, the only menu that is accessible is the Alerts menu, an no configuration changes can be made. The locking can be toggled on or off by holding button 2 (backlight) and button 4 (left arrow) while the DSM250 is being powered on.

- Changes to Show Room Demo mode.

1.4.8 (2011-01-01)

- Added ability to configure IPG100
- Add support for ACM100 (with firmware version 1.0.7 or later) to use 400 Amp AC Transducer with Cable (M000612)
- Manufacturing-related changes

1.4.7 (2010-11-01)

- Added support for configuring the FPM100 Fluid Pressure Monitor
- Added pressure data type

- Added humidity data type

- On powerup, if in "manual" favorites mode, the DSM250 will now display the favorite screen that was

- being displayed when the unit was powered down

- Increased maximum range of Alert Re-trigger Period and Set/Clear Delay from 15 minutes to 12 hours

- Remote Alerts are now always enabled

- Corrected an issue where configuration data could sometimes incorrectly be displayed for the

- TLM100, TLM150, or TLM200 Tank Level Monitors
- Corrected problem with custom window titles

1.4.6 (2010-03-18)

- Added line graph support for most data types.
- Added support to configure J2K100's to support Dometic (MarineAir Elite and CruiseAir Q- Logic) Air Conditioners and Dometic (Eskimo) Icemakers – J2K100 requires firmware 1.0.9 or later to support this.
- Added Inclinometer Component to display pitch and roll in a graphical manner.
- Added line graph options menu with preview to allow you to see the configuration of your line graph as you are configuring it.
- Added favorite window layout preview to let you see the layout of your favorite screen as you are configuring it.
- Added new display types "Total Fuel Consumption" and "Engine Fuel Consumption", so you can now display fuel usage in unit volume per unit distance (example: gallons/mile or liters/km).
- Added units of degrees/second for Rate of Turn
- Added "Charge" or "Discharge" to the units displayed on the Battery Current screen
- Added ability to set the NMEA0183 sentence ID on SSC200 compasses
- Added ability to program rate of transmission of heading PGN 127250 to 25ms (40 Hz) – SSC200 requires firmware 2.0.12 or later to support this.

- Improved quality of line graph display of data.
- Simplified setup of Total Fuel Rate, Total Fuel Remaining, Time To Empty, Total Fuel Capacity, and Total Fuel Level

## 1.4.5 (2010-02-12)

- Corrects a problem where the unit will occasionally reset on busy networks, returning to the opening screen with the warning disclaimer.

- Added the ability to create a line graph for temperature.

- Added the ability to create a line graph for humidity.
- Changed GPS status screen to explicitly indicate that it displays UTC time, as opposed to local time.

## 1.4.4 (2009-10-19)

- Corrected a problem where the device would reset when the device was displaying the powerup screen while an alert was active, and the power button was pushed.

- Made some improvements for demo modes

- Restructured menus so that ac parameters, which used to all appear in the top level of the data selection menus, are moved into categories of their own, so there are less items to step through in the top level, which should make configuration easier

- When setting an anchor watch alert, you can now choose the instance number of the GPS to listen to for purposes of triggering the alert

- In line graph displays, the line graph line itself is changed to be red by default, to make it easier to see
- Added support for configuration of the gps200 5hz GPS antenna/receive

## 1.4.3 (2009-08-18)

- Corrected the production rate units text in the watermaker screen

- Added colors to the gps status display. SBAS satellites are denoted with a red box, satellites that are tracked and used in the solution have green signal strength bars, satellites that are tracked but not used in the solution have blue signal bars, and satellites that are available but not tracked will have yellow signal bars

- Fixed a problem where an alert that was disabled could still show on the alert status screen

- Added numeric/precision type to heading and cog

- Simplified settings for switch indicator display type

- Increased font size for switch indicator display

- Added choice of n/a (not available) for tank capacity in tla configuration

- Show "unknown" for the magnetic variation type when it is received from the heading PGN, which does not indicate the variation source

- Added the ability to program tank capacity to data not available (" – ") for TLA100, TLM100, TLM150, TLM200

- Add the ability to configure transmission periods for periodic PGN's in ems100 with f/w 1.4 or greater

- Added the ability to configure flywheel teeth to a resolution of 0.1 to support alternator tachometer signals for ems100 with f/w 1.4 or greater
- Added support for labeling for ems100 with f/w 1.4 or greater

1.4.2 (2009-08-07)

- Added depth line graph display type

- Increased the display resolution of GPS lat/long in alert setup

- Changed annunciator periodic command period to 2.5 s (from 4s)

- Added anchor watch screen

- Added watermaker screen

- Added anchor device/category in favorite screens menu

- Added special device/category in favorite screens menu

- Added demo data for watermaker

- Corrected display of variation source in SSC200 configuration menus

- Changed menu item text for direction alert for heading and cog, and for time alerts

- Changed size of all screens with dial to be the same size in quarter display.

- Made the line in line graph display types thicker so it is more visible

- Made improvements to how the dsm250 works with annunciators, such as the ALM100
- Add anchor alert as a new alert type (separated from outside radius alert)

1.4.1 (2009-06-01)

- Added support for alerts in the DSM250

- Added support for DCM100's with optional 400a and 600a current sensors

- Added display type "numeric/precision" for sea temperature displays

- Added frequency indication to the time period indication for sentences in the nmea0183 sentence/rate selection menu

- Fixed an issue that occurred when there were more than 24 j1939 nodes

- Made minor changes to indicator favorite screen menus

- Fix issue with weather screen and line graph which could cause device reboot after several days of operation
- Added capability to configure tlm150 devices

1.3.11 (2009-04-28)

- Added capability to configure TLM200 devices

1.3.10 (2009-03-20)

- Changed device configuration menus so all options are alphabetically sorted an easier to locate

- Add device label to SIM100 configuration menu

- Add device label to RIM100 configuration menu

- Add device label to TMP100 configuration menu

- Made favorite screen titles default to the device label, if one is set

- Removed am/pm indications from the elapsed time display type

- Added support for programming the rate of transmission for periodic messages from the WSO100 and DCM100 devices

- Added menu item "remove all offline devices" and "restore factory defaults" to the device selection menu

- Added support for multiple line graphs of a data type (such as multiple barometer)

- Added gauge display for wind speed

- Corrected EMS100 configuration issue

- Added support for device labeling to GPS100 configuration menu

- Added support for device labeling to J2K100 configuration menu

- Added support for device labeling to SSC200 configuration menu

- Added support for device labeling to EMS100 configuration menu

- Add primary device selection menu in display->advanced configuration menu

1.3.9 (2009-02-06)

- Added ability to configure TLM100 devices

1.3.8 (2008-12-11)

- Added ability to program and use text labels in supported devices, so that a used can easily identify a device's function

- Added ability to configure ALM100 devices

- Added ability to configure TLM100 devices

- Added capability to display switch indicator status

- Simplified configuration by removing the "device enable/disable" menu (support for device instancing makes this unnecessary)

- Enable display of cog in either magnetic or true heading (previously was only true)

- Added "water below transducer" data type for depth device

- Added capability to display negative values for "water depth"

- Modified the way in which variation source is displayed

- Added "device properties" configuration menu

- Added support for device instancing, which allows easy selection of devices in systems with multiple GPS antenna, compasses, or other transducers

- Add instance setting to device configuration for all Maretron products which do not have data instance (located in "advanced" menu)

- Changed demo mode selection text

- Increased number of favorite screens from 12 to 16

- Corrected an issue when the NMEA2000 receive PGN's list was transmitted incorrectly when it was too large for a single fast packet

- Added the cardinal display type to heading and wind direction, ground referenced

- Removed the degree sign from numeric temperature display types, because it shows in units display in the lower right of the display already

- Made font sizes in numeric display types consistent

- Added the display type "time (hh:mm)" and "time (hh:mm:ss)" for utc and local time

- Added the display type "numeric/precision" for pitch, roll, and tank/fuel level

- Minimized the number of address claim request opn display power-up

- Added the ability to display user defined temperature sources

- Added initial data for barometric pressure line graph
- For true wind calculation, when wind direction is unknown and wind speed is less than 0.01 knots, assume wind direction is 0, so the DSM250 can display true wind when the vessel is moving and we read wind speed as zero

1.3.7 (2008-10-02)

- Added display of j1939 source addresses to the J2K100 configuration screen, to make it easier to see if the J2K100 is connected correctly to the J1939 engine

- Added preview screens for color setup

- Added preview screens for gauge display type setup
- Corrected truncated text in TLA100 calibration

1.3.6 (2008-09-26)

- Added a demo mode in which device defaults are not reloaded after an idle time
- Changed display of the fuel management warning screen

1.3.5 (2008-09-19)

- Added fuel management capability

- Added a fuel management warning screen

- Added black edges to the line gauge display type

- Added color ranges to the tank gauge display by default

- Added green and red color to rudder gauge display type

- Added additional fuel management capabilities

- Added switch status screen

- Improved options for entering text

- Added switch status to favorite menu and device enable/disable menu

- Added capability to configure SIM100 devices
- Added capability to configure RIM100 devices

## 1.3.4 (2008-08-27)

- Added type 2 gauge (faria type current source gauge) option for TLA100 configuration

- Improved TLA100 configuration menus to hide unused parameters

- Modified the way device instances are used (removed the "priority" indication)

- Added support for "avg/total" for ac devices in favorite screen setup

- Removed "ac" from the title of ac device in favorite screen

- Allowed instance in data enable/disable menu to range from 0 to 252

- Added support in device enable/disable menu for 4 generator, 4 utility, and 4 bus devices
- Corrected an issue with alarms where depth alarms were sometimes triggering falsely

## 1.3.1 (2008-05-28)

- Added ability to configure ACM100 devices

- Added ability to display ac power data

- Change number of supported devices device index maximum to 200 instead of 64

- Reduce manual device name from 32 bytes to 1 byte (don't use it)

- Added ability to display DC and battery data
- Changed gauge configuration such that the min/max values do not change when display units are changed

1.2.2 (2008-03-10)

- Reduced network load when searching for devices on power up

1.2.1 (2008-03-04)

- Fixed problem where the device tried to transmit a PGN before it had acquired a node address

- Increased the number of devices that were supported in device configuration and device selection menus from 50 to 256

- Added ability to configure DCM100 devices

1.0.10 (2008-01-10)

- Added support for new display types

- Enhanced WSO100 configuration to display live data from the device

- Corrected a problem that sometimes occurred when exiting the color settings menu

- Made SSC200 magnetic deviation calibration more reliable

1.0.9 (2007-11-15)

- Added new configurable gauges and half gauges

- Now use a red needle for most gauges

- Made data categories consistent with N2Kview

- Added ability to copy alarm settings from one display to another

- Added ability to copy display settings from one display to another

- Added ability to copy all settings from one display to another

- Corrected issues with copying favorite screens from one display to another

- Improved visual quality of some screen elements

- Added capability to configure the EMS100

- Fixed a problem with scrolling device configuration menus data fields being updated in wrong screen locations

- Changed default gauge settings: limit major divisions to 4 and 5 only, and minor divisions from 1 to 5 only

1.0.8 (2007-10-05)

- Correction in calibration of certain OEM products

1.0.7 (2007-09-28)

- Added close hauled wind direction

- Added meters/second units for speed (boat and wind)

- Removed the decimal point in all numerical heading screens

- Corrected wind direction display to ±0-180 degrees with starboard/port indication instead of 0-360 degrees

- Corrected issues in device configuration menus

- Added display of more N2K manufacturer codes

- Updated conversion ratio of engine fuel pressure to match NMEA2000 v1.2

1.0.6 (2007-05-18)

- Added support of new hardware configurations

1.0.5 (2007-05-11)

- Added support of both crystal and external oscillator

1.0.4 (2007-05-04)

- Modified shutdown routines to allow wake-up

1.0.3 (2007-05-02)

- Corrected issues with line graph displays

1.0.2 (2007-04-03)

- Removed unused PGN's from transmitted PGN's list

1.0.1 (2007-03-03)

- Initial customer release