

## TECHNICAL SERVICE BULLETIN

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Release to Manufacturing: N2KAnalyzer® Version 3.3.0.18

Maretron announces the release of version 3.3.0.18 of the N2KAnalyzer® NMEA 2000 Network Analysis Software. The program is available from (<http://www.maretron.com/downloads>), under the "Software Tools" category.

### Changes in the N2KAnalyzer® version 3.3.0.18 from version 3.2.0.2:

- CLMD16 software enhancements from 1.0.2.4 to 1.0.3.66 include the following:
  - New Feature: Hardwired Input(s) sensed voltage value can now be broadcast over NMEA 2000 via PGN 127508 (CLMD16SW-23)
  - Correct bug where direct (Network) PWM control of a breaker could not be commanded when Counter switching element is implemented on a breaker(s) (CLMD16SW-31)
  - Correct bug where PWM default is ignored when a Counter switching element is implemented on a breaker (CLMD16SW-53)
  - New Feature: 'Soft Turn ON/OFF'. An automatic lighting effect that enables a PWM ramp over 1s for a breaker(s) PWM value from 0% to 100% when turning ON, and from 100% to 0% when turning OFF. (CLMD16SW-66)
  - Correct bug where when commanding PWM level via 127500, the CLMD16 would not accept the command (CLMD16SW-79) (CLMD16SW-81)
  - Changed PWM frequency rate of breaker channels 1,2,11,12 from 20khz to 200Hz when applicable (PWM Enabled) to reduce CLMD16 electrical noise (CLMD16SW-82)
  - Improvements to NMEA 2000 Binary Status Report PGN 127501 periodic update refresh rate. Rate has been changed from 15s periodic update to 1.5s periodic update. (CLMD16SW-71)
  - New Feature: 'Group Switching', enabling this 'Global Commander' capability that can command any breaker On or Off and it's PWM value. This feature supports Sequential Input detection. (CLMD16SW-58)
  - Corrected bug where input signal would be ignored if in an 'Active High' or (On) state before power-up initialization and channel stay off. (CLMD16SW-19)
  - Improvement to 'One Button Smooth Scroll' Counter switching element. The Toggle signal for this feature now operates on the Falling Edge of the assigned input signal if not longer than 'Hold Period'. This improvement allows for the breaker not to turn Off before allowing the user to re-enter 'Smooth Scroll Mode'. (CLMD16SW-21)
  - Correct bug where breakers configured 'Default State On' 'Default Lock State On' will not enable breaker on at power-up. (CLMD16SW-56)
  - Improvement to paralleled breaker on indication. Both breakers will now show on instead of just the primary breaker when breakers are paralleled. (CLMD16SW-60)
  - Correct bug where Counters 9-16 would not write to device. (CLMD16SW-61)
  - Correct bug where Default State: 'Last State' would not be restored after power-up. (CLMD16SW-78)
  - Improvement to Current Loop Input channel: The Current Loop channel will now periodically reset after a short-circuit is detected, allowing incorrect wiring of a sensor not to disable the input even after wiring is corrected. (CLMD16SW-87)
  - Improvement to Current Summation (Unit Over-Current Fault) detection. The unit Overcurrent fault will now activate when the unit's live current consumption of all breakers summed exceeds 140A for a duration of over 1s. (CLMD16SW-115)

- Discrete I/O input count increased from 32 to 48. (CLMD16SW-55)
- Resolved the issue of counter channels resetting to the default dim value instead of min value. (CLMD16SW-80)
- Resolved the issue of channel with active input turning off instead staying on when Manual Override is turned off. (CLMD16SW-107)
- Resolved the issue of high in-rush current with high capacitive or inductive loads tripping the channels. (CLMD16SW-119)
- Resolved the issue of Analog Input indexing causing a stuck-low in certain inputs. (CLMD16SW-114)
- Resolve issue of CLMD16 in bootloader mode not being able to upload new firmware.
  
- CLMD12 software enhancements from 01.14.10 to 01.15.50 include the following:
  - New Feature: Create ability to have a channel controlled by a flash map but with inverse polarity from normal (CLMD12-7)
  - New Feature: Sequential Switching (Logic State Machine) (CLMD12-8)
  - New Feature: Ability to "Turn On" Individual Instance Broadcast of 127508 PGN for Voltage Sensing Inputs 1-7 (CLMD12-9)
  - New Feature: Addition of CLMD12 'Manual Mode' (CLMD15-15)
  - Correct Bug where Channel 1 can flash and/or turn on or off unexpectedly (CLMD12-22)
  - New Feature: Create an Automatic Lighting Effect via Pre-Defined PWM Ramp (Soft ON/OFF) (CLMD12-25)
  - Improvement: Change CLMD12 Factory Current Rating and ECB Current Rating Write Order (CLMD12-33)
  - New Feature: Allow the CLMD12 Hardwired Voltage Sensing Inputs to be Configurable (CLMD12-39)
  - New Feature: Multiple channel Windshield wiper synchronization (CLMD12-31)
  
- Add support for WSO200.
  
- Add support for upcoming SMS200.
  
- Correct support for installation on TSM/MBB devices using WINE on Linux.
  
- Correct support for TSM/MBB devices that have limited screen resolution. The dialogs now correctly scale and scroll.
  
- Bug fixes and improvements.

## Updated Firmware Since Last Release:

Device	Version	Changes
**CLMD12	01.15.50	See notes above.
**CLMD16	1.0.3.66	See notes above.
**IPG100	4.1.10.1	Fixed issues that could result in loss of communications with Cloud Services.
**DSM410/570	1.8.8.4	Added support for upcoming SMS200
*WSO200	1.0.2.1	New firmware for WSO200

\* - New, or missing in previous release

\*\* - updated since last release

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