

**Product: 2018-LED**

Release Date: March 8, 2006

Scope: This bulletin applies only to the LED version of the 2018.

Issue 1: Diagnostic Error Display Shows the Wrong Error Code

Symptom: If the monitor experienced a diagnostic fault, the diagnostic code is displayed on the front of the unit in binary. The code displayed did not always match the actual code of the diagnostic error.

Root Cause: The display of bits 9 through 16 were reversed on the front panel display.

Operational Issues: If the monitor had a diagnostic fault, the monitor could display an incorrect diagnostic code. The correct diagnostic code can be viewed using the RaeComM software. This issue caused no operational issues while the monitor was operating without a diagnostic fault.

Corrective Action: Upgrade to 2018 Firmware version 01.02.01 or greater.

Issue 2: Conflicts for Channels that have a Yellow Disable Jumper Take 1.5 Seconds Instead of the Designed 333 ms

Symptom: After installing Yellow Disable jumpers for multiple channels, any conflicts involving only channels with Yellow Disable jumpers would take 1.5 seconds to trip to fault instead of the designed 333 ms.

Root Cause: A programming error in the implementation of the Yellow Disable jumpers caused any channel with a Yellow Disable jumper installed to not be included in the primary conflict test. The secondary conflict test did not have this error and caught the fault at a later point in time.

Operational Issues: Conflicts between channels that had Yellow Disable jumpers installed would be displayed for 1.5 seconds before causing a conflict fault. If a channel did not have a Yellow Disable jumper then any conflict involving that channel, even if the conflicting channel had a Yellow Disable jumper installed, was identified and caused a fault at 333 ms. Under no conditions was a conflict allowed to exist for more than 1.5 seconds before causing a fault.

Corrective Action: Upgrade to 2018 Firmware version 01.02.01 or greater.

**Issue 3: Setting to Default Baud Rate**

Symptom: After pressing and holding the front panel reset button for 10 seconds the monitor would default to a baud rate of 9600 baud, no parity, 8 data bits, and 1 stop bit instead of the intended 57600 baud, no parity, 8 data bits, and 1 stop bit.

Root Cause: The wrong baud rate was used as the default baud rate.

Operational Issues: This issue caused no operational issues.

Corrective Action: Upgrade to 2018 Firmware version 01.02.01 or greater.

Feature 1: Low AC Thresholds

Purpose: To deal with the fact that some agencies use lower AC voltage levels for the valid power, we have added a factory option that allows Reno A & E to configure the monitor to use 98 V as the ON threshold and 92 V as the OFF threshold instead of the CalTrans spec of 103 V as the ON threshold and 98 V as the OFF threshold.

User Interface: The RaeComM windows software is used to change the state of the Low AC Threshold Enable. It is located in Monitor Configuration / Electronic Options / Factory Setup Options. This option can only be changed when logged in with a factory level password. If you want to enable this feature after upgrading your monitor, contact Reno A & E Tech Support to get a temporary factory level password that will allow you to enable this feature.

Interactions: On power up, the monitor stays in the fault condition and the Watchdog monitoring is not started until the AC line voltage equals or exceeds the selected ON threshold. The monitor returns to the fault state and suspends monitoring of the Watchdog once the AC line voltage drops below the OFF threshold.

Implemented: 2018 Firmware version 01.02.01