Product Management – Coal Mining Industry Notification ▌ **IN00011 October 2022**

GG2 Display Firmware Update

PURPOSE
Users of the GG2 (Gasguard 2) have requested several enhancements be added to the GG2 Display to improve user traceability and accountability of their real time gas monitoring system configuration. The purpose of this notification is to inform users of GG2 of features being added to the GG2 Display.

ITEMS AFFECTED
All GG2 Displays

Note that GG2 Detector firmware remains unaffected by the Display upgrade.

Equipment List – Displays	
Part Number	**Description**
178983	DISPLAY GASGUARD2 MODBUS
178984	DISPLAY GASGUARD2 IMAC
178985	DISPLAY GASGUARD2 GLANDED MODBUS/IMAC

Equipment List – Detectors	
Part Number	**Description**
177870	DETECTOR GASGUARD2 NONDISPERSIVE INFRARED METHANE 5%
177871	DETECTOR GASGUARD2 CATALYTIC METHANE 5%
177872	DETECTOR GASGUARD2 ELECTRO CHEMICAL OXYGEN 25%
177873	DETECTOR GASGUARD2 ELECTRO CHEMICAL CARBON MONOXIDE 50PPM
177874	DETECTOR GASGUARD2 ELECTRO CHEMICAL CARBON MONOXIDE 100PPM
180733	DETECTOR GASGUARD2 NONDISPERSIVE INFRARED CARBON DIOXIDE 5%
180734	DETECTOR GASGUARD2 NONDISPERSIVE INFRARED CARBON DIOXIDE 2%
190998	DETECTOR GASGUARD2 NONDISPERSIVE INFRARED METHANE 100%
192855	DETECTOR GASGUARD2 ELECTRO CHEMICAL HYDROGEN SULPHIDE 50PPM
193071	DETECTOR GASGUARD2 ELECTRO CHEMICAL HYDROGEN SULPHIDE 100PPM

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WHAT'S CHANGED

GG2 Display enhancements:

- GG2 Display Configuration menu lock. This feature can be applied from either of the digital protocols to prevent unauthorised configuration changes to the instrument once commissioned.
- Falling response time test for the O2 detector. This feature improves the workflow for the t90 test procedure
- Visibility of the detector's gas value when the instrument status banner is active or when the user navigates away from the main screen

WHAT TO DO

All GG2 instrumentation new and overhauled from the 24th of October 2022 will have the latest Display firmware incorporating these changes. Should users of the GG2 wish to update their entire GG2 fleet to take advantage of any of these enhancements, please contact customer service to arrange a quotation for this service.

SOFTWARE CHANGE LOG

The GG2 instrumentation has 3 layers of software. New versions of software are backwards compatible with early versions, however for the new features to be available the following software combination is required:

1. **GG2 Display Firmware** – Display operating system
   Version 21 – V21 to be released 24th of October 2022.
   - Alteration of menu structure
     This enhancement is to provide GG2 Application software the ability to change between menu structures for different sensor types.
   - Addition of new status title string function.
     This enhancement added a new function to the GG2 Display Application software so it can call to obtain the status title string, allowing it's display position and style to be controlled from within GG2 Display Application software.
   - Modbus Register Table Modification.
     This enhancement adds an additional Modbus register to allow for the new GG2 Configuration lock.
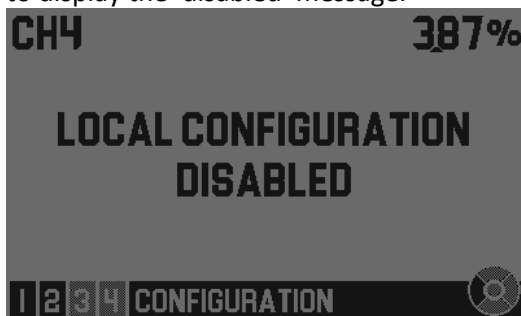
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2. **GG2 Display Application Software** – Detector configuration software
   Version 25 - V25 to be released 24th of October 2022.

   - Restricted UI Menus
     This enhancement added a 'Restricted UI' setting into the system. When enabled, the Configuration menu, Factory Reset and Catalytic latch reset options are removed/modified to display the 'disabled' message.

   - iMAC/Modbus modified code for UI Restriction bit.
     This enhancement modified the iMAC and Modbus code to allow the read/write feature for the 'Restricted UI' setting. Refer to the "*GG2B032 – GG2 Communications Manual*" for the modified iMAC and Modbus registers.
   - Modified Status display and gas reading area.
     This enhancement ensures that the gas value will always be visible.
   - Modified "Response Time Test" ambient gas starting value.
     When carrying out a response test, the starting ambient gas value is now read from the sensor rather than assuming that it is 0% full scale. A check has been added to warn the user if the response time test difference between the starting value and the target value is under 10% of full scale. The user can ignore this warning and carry out a response time test with a small difference in start and target gas values. This test is restricted when an ambient starting value is higher than the target value.
   - Added storage of the "Response Time Test" target value.
     This enhancement stores the last target gas value. This is now stored and offered as the target value for the next response time test.
   - Modified O2 response time test to be a falling test.
     The response time test for O2 detector has been modified to occur with a starting gas value above the target gas value. This means the response test for O2 is now to be carried out with the sensor in air and the target gas being nitrogen.
   - Modified Modbus details on "System Info" Page.
     The Modbus settings have been moved to their own page in the System Info section and the displayed Modbus information has been increased. This is so that Modbus details can be viewed while in Restricted UI mode.

3. **GG2 Detector Firmware** – Detector operating system *(Unchanged)*
   Version 9 – V9 and any future releases are compatible.

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GG2 Real Time Gas Monitoring System

For those users of the GGL (Gasguard Live) Programming, diagnostic and maintenance application.
The modified software features have been included in the application.

FIND OUT MORE

For more information on this Notification, contact Ampcontrol Customer Service on +61 1300 267 373 or
customerservice@ampcontrolgroup.com

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