

Software Changes and Validation Summary

**505DR (control part numbers: 8200-1330, 8200-1331)
GAP Application 5418-7833 to Rev C
GUI Application 5418-7833 to Rev C**

The following table describes the application software changes implemented and tested in this release.

**August/2024 – socean
505DR Product Support – Rev C Issues Addressed**

Issue #	Tracker	Subject
151347	Bug	Auto Dimming was working only on primary unit – no works on backup
151320	Bug	AO range shouldn't be adjustable when used as a driver
151003	Bug	Corrected GUI in focus navigation to set Device tag for DI Chan 1
148329	Bug	Remove support for Varistroke-II interfacing via CAN
147853	Bug	Reset of Off Map condition affecting AUX corrected so that control will only come off Ratio Limiter if P feedback is less than 0 (when 0 stay on Ratio Limiter)
147850	Bug	Load Rejection reset logic corrected to always use correct rated speed setting
147848	Bug	Corrected Visibility of Breaker options in AUX configuration on GUI – should be available when either a control or a limiter
147829	Bug	Exhaust in control relay indication wrong – was corrected to use the correct indication from the LSS Bus
147828	Bug	Relay function for SPD in Control always on during AUX control condition – corrected with additional conditions
147827	Bug	Relay for HP Valve Limiter in Control was corrected with additional logic
147796	Bug	AO channels have option to disable RB fault – corrected this so these are available if the channel is NOT a driver – the readback fault is required to be used when it is a driver
147398	Bug	Logic added to correct the AUX threshold value when AUX is inverted. This same correction was added to the Inlet and Exhaust controls
141870	Bug	Improved logic related to the Zero speed detect indication when 1 probe or both probes fail. Added this indication to the BO menu list
138862	Bug	Corrected the AUX control PV fault value being used when the control is configured for inverted action. This same correction was added to the Inlet and Exhaust controls
127259	Bug	Local display access to ALM & TRIP history – correct the user navigation to place the list in focus to allow scrolling down thru entire list
127244	Bug	Corrected the GUI navigation to DI#1 & DI#13 function menus which have different options depending on use of the DR-FTM
124792	Bug	Manually disabling Ext Cntrl causing load swings – corrected logic where in certain configurations (using AUX as load control) – manually disabling Extraction caused load swings, but auto disabling Extraction did not

123968	Bug	Added logic to allow overriding Display faults without overriding other faults related to the chassis (to support possible Bulkhead units)
123356	Bug	Added note to the GUI to clarify the minimal low current settings for the control to be capable of detecting an actuator fault
122064	Bug	Idle/Rated Commands not working (as per manual) properly – this was determined to be changes in start sequence enabling more than 1 Idle setpoint. Added a configuration error check related to this condition
120763	Bug	Added Modbus multiplier tunables to the AW values that were missing these tunables
102213	Feature	Add option for user to select which sensor to follow when 1 fails when configured to user redundant signals
147826	Feature	Add GAP & GUI to provide a Speed Difference ALM – based on maximum speed setting.
148330	Feature	Remove screens related to High Protec & MFR300
147895	Feature	Update the Modbus list w/ Rev C feature info – Shutdown warmup, GEN load limiter, parameters related to SPC nodes
147894	Feature	Added logic to configure an Ethernet interface to the EasyGenXT product under the Woodward Links menu
147891	Feature	Add options for Primary Freq Control operation. Options under Service/Speed Droop, including alarm settings and ability to disable controllers if action is desired. Added an appendix to manual that clarifies controls response in all operating modes
147852	Feature	Added on option for a DI to trigger reduced OSPD test
147851	Feature	Re-enabled the original Accel Limiter load reject function and added an option for a DI to trigger the load rejection logic
147824	Feature	Added optional 'Security' alarms, in the Service menus / Communications, for annunciating remote Servlink communication connections
147823	Feature	Added option for half hour time zone for RTC setting
147822	Feature	Added the ability to make 'Online Steam Map adjustment' (in service)
147397	Feature	Added a deadband option to the AUX PV input (for AUX controller) and did the same for Inlet and Exhaust controls
147395	Feature	Added GUI access to the AI Lag Filters that are available for all AI channels
147394	Feature	Added QR code access image to the GUI (Site Info screen) to provide direct link to product documentation secure website
122522	Feature	Added a Turbine Shutdown Warmup function – allowing operator to position HP and LP valves during warmup
113459	Feature	Added some GAP IP protection and optional Site Key logic for improved field support of backup units
102641	Feature	Added a Load Limiter PID for GEN applications using KW droop – located under the Service menus / Breaker Logic
97051	Feature	Added the option to Configure the control to Run in a Simplex Mode - Masking all Backup Alarms

Validation tested remotely using lab hardware units (FLEX_DR1 & FLEX_DR2).