

LITTON MARINE SYSTEMS UK
Service Bulletin No.16

Product: BridgeMaster E Series Radars

Subject: Graphics Reset Alarm

The BridgeMaster E series Radar system is a Microprocessor based product. The various modules within the system are designed around microprocessors or microcontroller technology.

The Processor module uses 3 microprocessors. Within this module are two Printed Circuit Boards (PCBs), the Display Processor PCB and the Radar Processor PCB. The Display Processor PCB has 2 microprocessors, the Display Processor and the Graphics Processor. The Radar Processor PCB has one microprocessor, the Radar Processor. All three processors run asynchronously communicating with each other via common memory planes.

The BridgeMaster E is designed to automatically detect problems with the microprocessor's operation which might stop it carrying out its essential tasks. Without this, the radar display might freeze or incorrect information might be displayed on the screen. The system used to recover from this situation is called a watch dog system and simply if any microprocessor fails to respond to a given task within a given time, it will 'reset' itself and put up an alarm message saying 'Display Reset', 'Graphics Reset' or 'Radar Reset' depending on which microprocessor did reset. These alarms are in the 'alarms list' in the User Guide and can appear from time to time.

On selective installations, the Graphics Reset alarm has been reported as being frequently raised. This issue has been addressed and fitting version 3.04 (or any later version) of software should greatly reduce the occurrence of the Graphics Reset alarm for specific installations where it was being seen frequently.

However, there can never be a complete guarantee that the Graphics Reset, Display Reset or Radar Reset alarms will never appear.