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TECHNICAL NOTE TN0144

Title: Kadet 2 Screen Image Ghosting

Product(s): G307K2 Kadet 2

PROBLEM DESCRIPTION

Under certain circumstances, the screen image on a G307K2 Kadet 2 HMI can be inverted and partially duplicated toward the bottom of the screen, yielding a "ghosted" appearance. When this does occur, it is usually when the unit has just started up. As the unit warms up, the ghosted image recedes and eventually disappears entirely.

CAUSE OF THE PROBLEM

This occurs as a result of the unique manner in which the G307K2 LCD screen and/or its controller respond to secondary initializations without a power cycle in-between. Under normal operation during a start-up or reset, the screen and its controller are initialized first by the boot loader and then by the runtime. In all but the G307K2 HMI this poses no issues. In this case, though, ghosting can occur after this sequence.

CORRECTIVE ACTION

Crimson 3 has been modified to eliminate the secondary initialization. You must use Crimson 3.0 Gold Build 530.003 or later in order to avoid this issue.

Note: There is one scenario in which ghosting might reappear, but is easily corrected. After a firmware update the unit will reset without a power cycle, resulting in a secondary screen initialization. If ghosting appears, a simple power cycle will eliminate it. Further power cycles or database uploads (without firmware updates) will not result in ghosting. Finally, if a build of Crimson 3 prior to 530.003 is used, older firmware will be reinstalled in the unit and the ghosting issue could return. Simply use build 530.003 or later to once again update the firmware.