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ERRATA - G315 USB PROGRAMMING PORT

The G315, released for sale in late 2007, was built using a Freescale ColdFire micro-processor. This processor was selected for its performance, as well as its embedded peripherals, including USB device and host support.

Red Lion has learned that the processor contained a bug which causes it to conflict with other USB devices and USB hubs. This affects only the USB device port, aka programming port, of the G315. The bug resulted in the occasional problem for our customers, depending on the type and design of their computer.

Previously, the work-around to this problem was to disable the PC's USB2 (Enhanced USB) controllers via Device Manager. However, newer computers are built using only Enhanced controllers, and therefore cannot be made to work using these methods.

SOLUTION

The G3 series HMIs can be programmed via several methods, including USB, Ethernet, serial and CompactFlash. Since the G315's programming port conflicts with today's PCs, and serial ports are becoming harder to find, Red Lion made changes to the G315's bootloader which allow the customer to enable the Ethernet port to accept a download. Further, Red Lion is shipping all G315s with a serial and Ethernet cable for our customer's convenience.

ETHERNET CONFIGURATION

The following applies to new units, as well as those that have been downloaded to with a recent version of Crimson 3. If the unit contains a database, you will have to clear its memory in order to see the following.

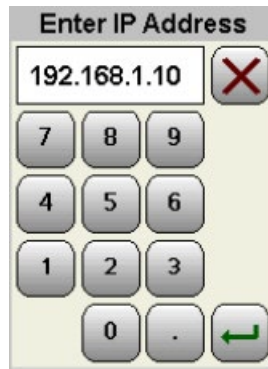When you power up a new G315, you will see the following message…
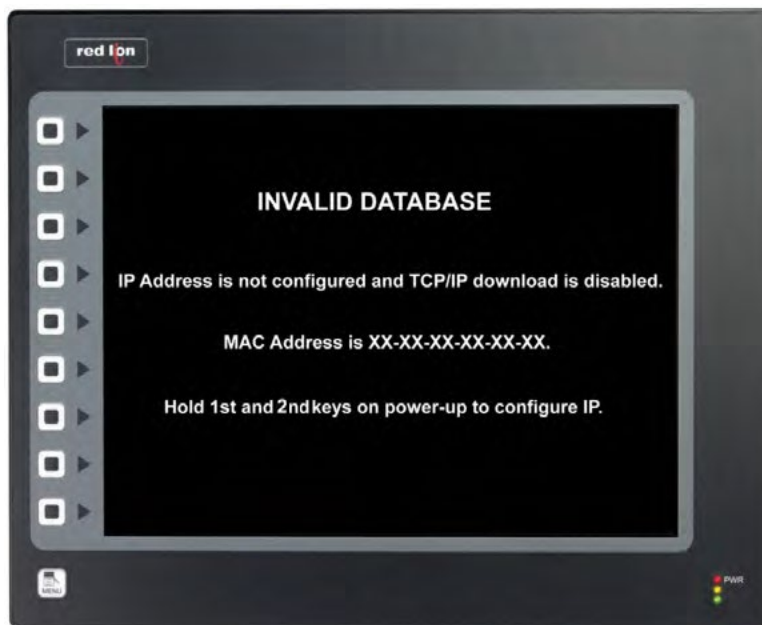
As directed, re-cycle the power to the unit while holding the 1st and 2nd keys.

A "System Menu" will appear. Touch and hold "Network Settings" until the button turns green, then release.

From "Network Settings Menu," touch and hold "Configure Manually" until the button turns green, then release.

From "TCP/IP Link Manual Menu," touch an ~~Everything for your HMI running~~ ss" until the button turns green, then release.

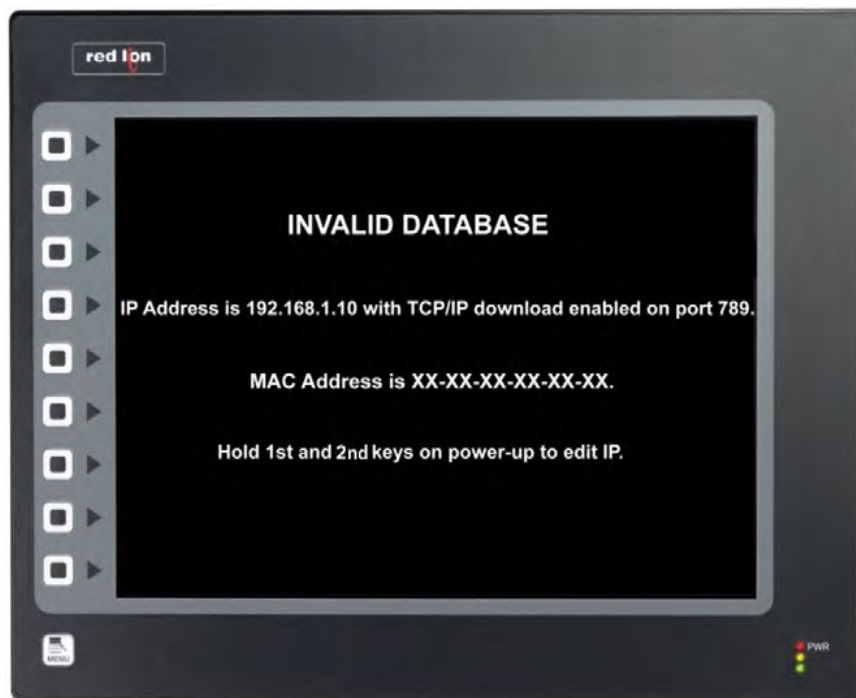A keypad will appear, allowing you to enter an IP address.

When finished, press the enter key. If the IP address is correct, touch and hold "Okay" until the button turns green, then release.

From "TCP/IP Link Manual Menus," touch and hold "Back" until the button turns green, then release.

From "Network Settings Menu," touch and hold "Back" until the button turns green, then release.

From "System Menu," touch and hold "Continue" until the button turns green, then release.

The unit will now display the following…

DOWNLOAD VIA ETHERNET

Configure your PC to use a fixed IP address. For a simple network, the first three octets should be the same as that used on the G3 – the remaining octet must be different from that used on the G3.

Connect the supplied Ethernet crossover cable between the PC's Ethernet port and the G315's Primary Ethernet port. In Crimson 3, go to Link-Options, and select TCP/IP.
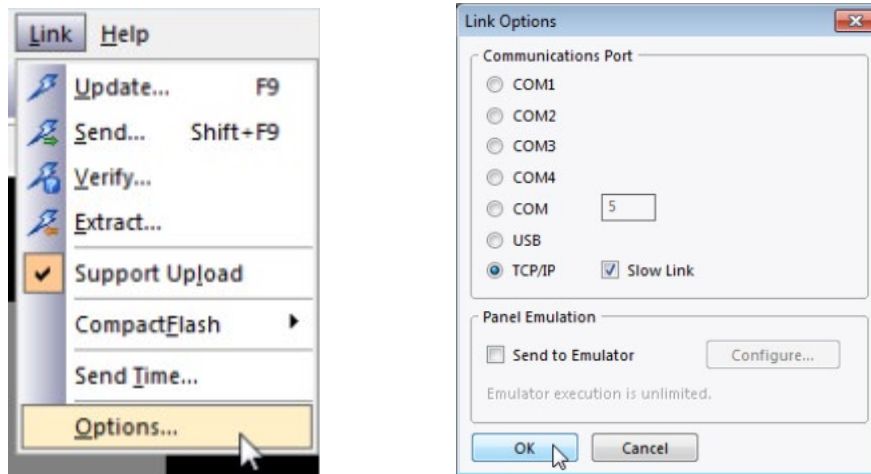
Open the database that you want to download. Navigate to the Communications category, and select Network in the Navigation pane.

Make sure that you have IP Download enabled – otherwise, as soon as you download, you'll have turned off the ability to download again, and you'll have to erase the unit's memory if you want to perform a subsequent download.
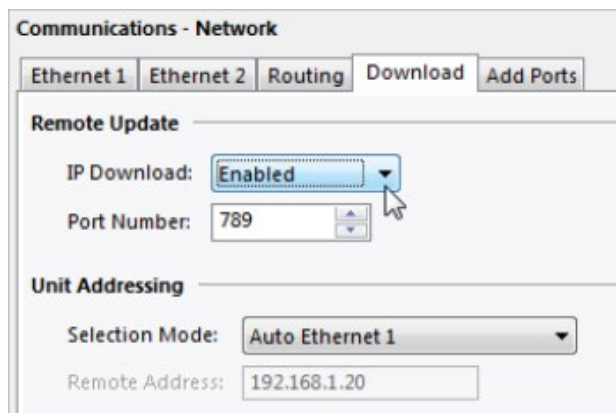
The database can be downloaded using either the Link-Send or Link-Update commands. As a shortcut, you can access Link-Update via the lightning bolt symbol on the toolbar, or via the F9 key on the keyboard.

SERIAL

To download to the unit via serial, simply connect the provided serial cable to the G315's serial programming port, and to the computer's DB9 port. Select the appropriate COM port within the Link-Options dialog.

The database can be downloaded using either the Link-Send or Link-Update commands. As a shortcut, you can access Link-Update via the lightning bolt symbol on the toolbar, or via the F9 key on the keyboard.