## LP3 PROGRAMMING

Copy all the LP3 CF programming template files/folders into a new folder under the appropriate customer directory on the network.

Using the Crimson software, open up the template database (the cd2 file).

## IN THE 'COMMUNICATIONS' TAB (IN CRIMSON SOFTWARE):

- Assign the IP Address for the unit in the 'Ethernet' tab this may be specified by the customer, or default to 192.168.1.99
- The Gateway IP is the address of the router that accesses the Internet/WAN default is 255.255.255.255
- The Subnet mask is always 255.255.255.0
- Under the ABPLC section under the 'Ethernet' tab, you can set the IP address of any PLC the LP3 might be connected to this IP is defaulted to 192.168.0.114. Note that this has not been tested with any PLC other than a PLC-5 (even though other options exist).
- The 'Enet1', 'Enet2', and 'Enet3' tabs can be used to set Remote IPs for viewing other LP3s in the network. Typically these are defaulted to 192.168.0.111, 192.168.0.112, and 192.168.0.113

## IN THE 'PROGRAMMING' TAB (IN CRIMSON SOFTWARE):

• In the 'INIT' program/tab, scroll down and make sure the IP addresses match those you set in the COMMUNICATIONS tab. This must be done via the software, as changing it through the G3 display will possibly result in errors.

Select 'File'  $\rightarrow$  'Convert to V2' and save as 'KingLP3\_V32N.cd2' to the same file location the CF files are already in. Next, go to 'File'  $\rightarrow$  'Save image...' and save as 'dbase.cdi' in the same location as the database file. Overwrite as necessary. **NOTE:** Convert to V2 only if older version databases are being used with newer version G3 displays otherwise a compatibility issue will arise.

**IMPORTANT:** Make sure you are not overwriting the template files in the original location!

Now, update the KINGLP3.DAT file to reflect the specific application by setting the different screen titles, product names, product specific gravities, etc. It is VERY important to be accurate with the construction of this file.

For MODBUS address programming in 'KINGLP3.DAT':

 Modbus 1 (first board): 'Tank Address, 257' → Channel 1 'Tank Address, 258' → Channel 2 etc.
Modbus 2 (second board): 'Tank Address, 513' → Channel 1 'Tank Address, 514' → Channel 2

Etc.

- <u>Modbus 3 (third board)</u>: 'Tank Address, 1025' → Channel 1 'Tank Address, 1026' → Channel 2 etc.
- <u>Modbus 4 (fourth board)</u>: 'Tank Address, 2049' → Channel 1 'Tank Address, 2050' → Channel 2 etc.
- Under TankInfo, a period after the unit name implies last 2 numbers in the respective value given are to the right of the decimal point (make sure this period is spaced 5 spaces after the comma in the TEXT file).
- MODBUS address programming cannot be done from the display it must be done in the .DAT file.
- TankSensor settings:
  - 0 : 0-5 psi
  - $\circ$  1 : 0-10 psi
  - o 2 : 0-15 psi
  - o 3 : 0-30 psi
  - o 4 : 0-50 psi

Once programming is complete, check to make sure the following files are in the 'package' to be loaded on the CF card:

- 1. KingLP3 V32N.cd2
- 2. KINGLP3.DAT
- 3. dbase.cdi
- 4. g310.bin
- 5. g310.ldr
- 6. g310.rom
- 7. INIT.DAT
- 8. 'LOGS' [Empty Folder]

Load these files to the CF.

**IMPORTANT:** A new "INIT.DAT" file will have to be loaded to the CF card every time new programming is to be uploaded to the G3 display. This file directs the G3 display to load the information on the CF card and disappears once the loading is complete.

**IMPORTANT:** The database can only be updated via USB connection (or other hardwire connection). The CF card does not update the database itself, rather it just updates the tank information.

- LP3 Admin Password: 5691
- LP3 Global Password: aardvark

## NOTES:

- Entering products into the product list that have specific gravities within a several thousandths of each other will cause errors in the displayed information.
- Tank values communicated to the LP3 via ASCII communications will only be displayed as whole numbers (i.e. decimal numbers are rounded)