

## **ISCO MODEL 2101 SOFTWARE HISTORY**

### **REVISION 1.08**

**Software Release Date: 03/16/06**

Corrections:

- 1- Fixed a problem that would leave the module(s) at a site reading at 15 second intervals indefinitely. This would cause rapid battery discharge

### **REVISION 1.07**

**Software Release Date: 03/21/05**

Corrections:

- 1- Fixed a problem with not erasing the down arrow on the right side of the sensor reading display list box when it reached the end of the list.
- 2- Added ability to update the software over a modem connection.

### **REVISION 1.06**

**Software Release Date: 10/07/04**

Corrections:

- 1- Added code to not process incoming messages from the SLTA or neuron while the router is configuring after an address change.
- 2- Added code for detection and clearing of a Neuron error. We were seeing error code 0x85 from the neuron which indicates a bad address. It would then stop sending messages although it would still receive them.
- 3- Added extra filtering for detection of bad addresses.
- 4- Added error log entries of NURON\_RQ from the neuron task when a bad address is detected. The neuron now waits longer - about 3 seconds of inactivity before it goes to sleep.
- 5- Added the FLOOD diagnostic command but is conditionally compiled out. Added reporting of the task associated with sending an invalid formatted IAM.
- 6- Hard coded to use the modem timing for all connections -even direct ones since Telog may use the pass-through mode.
- 7- Removed unused code from Slta\_Comm\_Buffered which read last\_rcv\_time.
- 8- Rewrote the transmit side of Slta\_Comm\_Buffered() to place the NI\_ALERT at the beginning of the buffer so we only make one call to fput\_data() which will help reduce interrupt overhead.
- 9- Changed to address looping messages when the customer disconnects the serial cable and plugs the (loopback) cap on the top connector.
- 10- Added carrier detection to terminate communications when the modem drops the line.
- 11- Added a synchronization call in the H8MASTER file to resync the Neuron and H8 communications when an unhandled command code is detected.

12- Added the HALTED state to system processes to put them in during address changes. This should help prevent lockups when a sys proc has a file open and the file system gets a reset. It will watchdog timeout if things do not go as expected.

13- Fixed problem with ZAP memory which may cause lockups or abnormal restarts.

#### **REVISION 1.05**

**Software Release Date: 04/26/04**

Corrections:

- 1- Changed to remove the bin file update code since the 2150 code is now too large to fit in program flash.
- 2- Fixed the keyboard test code that would fail the second time through.
- 3- Added functionality to reserve space for a new Last Interrogation File. This fixes a problem where a customer interrogates a completely full 2101 with Flowlink and there is no space in the 2101 for Flowlink to place an updated Last Interrogation File that contains new time stamps for auto-interrogate.

#### **REVISION 1.04**

**Software Release Date: 10/15/02**

Corrections:

- 1- Fixed a problem with the wireless schedule where it would not power the radio over a Saturday midnight when using the weekly schedule.
- 2- Fixed a problem with the Neuron (network processor) code which could cause network communications to fail.
- 3- Made a change to the file system to reduce the chance of a system lockup when the module address is changed.

#### **REVISION 1.03**

**Software Release Date: 02/24/02**

Corrections:

- 1- Added support for the buffered protocol to improve communications throughput.
- 2- Added a power-restore repair of serial data storage flash. If a page of flash was in the process of being written when power failed the flash page is corrupt. The software now saves a copy of the flash page in non-volatile ram before writing the page. On power-up the software compares the ram copy with what is in the flash and will update the flash if the original write failed.

#### **REVISION 1.02**

**Software Release Date: 21/06/01**

Corrections:

- 1- Fixed a problem with the file system that only happens when a file has a size equal to a multiple of 258 bytes (the flash page size). If this occurs then the file transfer to Flowlink or a field wizard will fail and Flowlink will not connect to the 2150.

Enhancements:

- 1- Added the ability to update the 2150 software in the INFO screen regardless of what software version is in the 2150.
- 2- Added a keyboard test menu that is initiated by pressing “.159” on the keyboard from the main menu. This should help production to ensure all keys are working properly.

**REVISION 1.01**

**Software Release Date: 23/02/01**

Corrections: Fixed a problem related to updating the 2150 software. It may have intermittently given up on the update shortly after it started. This would leave the 2150 in an application less state that would require the power to be cycled and the software update performed again.

**REVISION 1.00**

**Software Release Date: 31/01/01**

Corrections: This is the first release of software for the 2101. Attached to it is 2150V106.BIN (Release 1.06 of the 2150 code) that it can use to update older, incompatible versions of 2150 code.