1. The Introduction

This document describes the commands and methods required to configure a Hyperion siX55 interrogator for an OEM. For *special OEM instrument configurations*, Micron Optics provides an interface that allows an OEM to re-brand the instrument per their requirements. The firmware settings for the serial number, manufacturer name, and model number can all be set to custom values using this simple interface. This document assumes that the user is already familiar with the TCP/IP command and response syntax of the instrument. This is described in detail in the instrument user manual available from the Micron Optics web site.

2. Scope

These methods described in this document can be used to configure OEM settings for all OEM designated instruments within the x55 product family, including si155, si255 and si255 EV models. Each individual unit must be configured as OEM at the factory to be compatible with these commands and methods.

3. OEM TCP/IP connection port

The OEM settings are managed through a TCP/IP connection to port number 51970. After connecting to the port, the following commands are available. (Use #help to see this list of commands.)

4. OEM Settings Commands

#SetOemManufacturer	- Set the name of the OEM manufacturer.
#GetOemManufacturer	- Get the name of the OEM manufacturer.
#SetOemModel	- Set the name of the OEM model.
#GetOemModel	- Get the name of the OEM model.
#SetOemSerialNumber	- Set the name of the OEM serial number.
#GetOemSerialNumber	- Get the name of the OEM serial number.
#SaveOemSettings	- Save the settings to permanent storage.

For instance, to set the OEM Manufacturer Name to "ACME" send the command #SetOemManufacturer With argument "ACME".

After the values have been set, issue the command #SaveOemSettings.

The instrument will require a reboot for the settings to take effect.

After the reboot, the applied settings will be evident on the front panel LCD screen. The manufacturer name will appear on the top line. The OEM serial number and model will appear on the bottom line with the appropriate number of "Ctrl" button presses.

5. Example Implementation

5.1. 5.1 Standard factory settings, LCD display and user port queries

a. Top line: "Micron Optics" / Bottom Line: "IP Address XXX.XXX.XXX.XXX (D)"
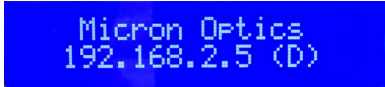
> Micron Optics
> 192.168.2.5 (D)

Associated user port (51971) query
   Query: # GetActiveNetworkSettings
   Reply: The current network settings are: IP Address: 192.168.2.5 Netmask: 255.255.255.0 Gateway: 192.168.2.1 Mode: Dynamic

b. Top line: "Micron Optics" / Bottom Line: "Scan Speed: 10 Hz"

> Micron Optics
> Scan Speed: 10 Hz

Associated user port (51971) query
   Query: #GetLaserScanSpeed
   Reply: The current scan speed is 10 Hz.

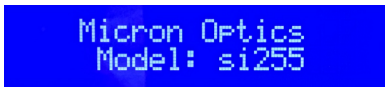c. Top line: "Micron Optics" / Bottom Line: "UNNAMED"

> Micron Optics
> UNNAMED

Associated user port (51971) query
   Query: #GetInstrumentName
   Reply: The instrument name is UNNAMED.

d. Top line: "Micron Optics"/Bottom Line: "Model: si255"

> Micron Optics
> Model: si255

Associated user port (51971) query
   Query: N/A
   Reply: N/A

e. Top line: "Micron Optics" / Bottom Line: "SN: HIACZP"
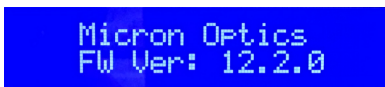
> Micron Optics
> SN: HIACZP

Associated user port (51971) query
   Query: #GetSerialNumber
   Reply: The instrument serial number is HIACZP.

f. Top line: "Micron Optics" / Bottom Line: "FW Ver XX.X.X"

> Micron Optics
> FW Ver: 12.2.0

Associated user port (51971) query
    Query: #GetFirmwareVersion
    Reply: Firmware Version: 12.2.0.21935.

g. Top line: "Micron Optics" / Bottom Line: "FPGA Ver ZZ.ZZ.Z"

Associated user port (51971) query
    Query: #GetFPGAVersion
    Reply: Firmware Version: 12.0.0.

5.2. Custom OEM settings, LCD display and user port queries

By issuing the the following commands to port 51970, a unit can be configured for custom OEM settings:

#SetOemManufacturer ACME
#SetOemModel FBG5000
#SetOemSerialNumber ABCD1234
#SaveOemSettings

The results are as follows:

a. Top line: "ACME" / Bottom Line: "IP Address XXX.XXX.XXX.XXX (D)"

Associated user port (51971) query
Query: # GetActiveNetworkSettings
Reply: The current network settings are: IP Address: 192.168.2.5 Netmask: 255.255.255.0 Gateway: 192.168.2.1 Mode: Dynamic

b. Top line: "ACME " / Bottom Line: "Scan Speed: 10 Hz"

Associated user port (51971) query
Query: #GetLaserScanSpeed
Reply: The current scan speed is 10 Hz.

c. Top line: "ACME" / Bottom Line: "UNNAMED"

Associated user port (51971) query
Query: #GetInstrumentName
Reply: The instrument name is UNNAMED.
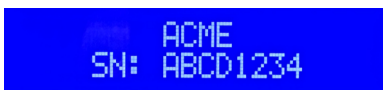
d. Top line: "ACME"/Bottom Line: "Model: FBG5000"

Associated user port (51971) query
Query: N/A
Reply: N/A

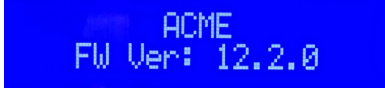e. Top line: "ACME" / Bottom Line: "SN: ABCD1234"

Associated user port (51971) query
 Query: #GetSerialNumber
 Reply: The instrument serial number is ABCD1234.

f. Top line: "ACME" / Bottom Line: "FW Ver XX.X.X"

Associated user port (51971) query
 Query: #GetFirmwareVersion
 Reply: Firmware Version: 12.2.0.21935.

g. Top line: "ACME" / Bottom Line: "FPGA Ver ZZ.ZZ.Z"

Associated user port (51971) query
 Query: #GetFPGAVersion
 Reply: Firmware Version: 12.0.0.

Note that the instrument name is not an OEM-specific command and can be customized and displayed by the user in the same way in whether in standard or OEM mode.

On user port 51971, the command #SetInstrumentName LAB_UNIT_1 is issued, resulting in the updated image for LCD position (c).

Associated user port (51971) query
 Query: #GetInstrumentName
 Reply: The instrument name is LAB_UNIT_1.