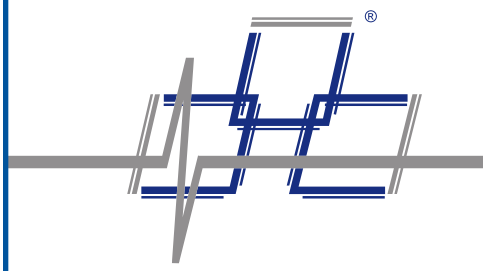
Application Note



Converting the FD-208RN to an FD-208R

SUMMARY

When any device communicates with an FD-208RN through the APU's local serial port, the device loses communication after 30 seconds if the device is idle. In order to avoid this interruption, the FD-208RN must be converted from an FSN-enabled APU to a standard FD-208R. This document describes the steps necessary to disable the FSN feature on any FD-208RN and make the conversion.

INTRODUCTION

Under normal circumstances, users calibrate an FD-208RN network-enabled APU using ASCII commands sent from the FCA-285 Host Module. In some instances however, users may need to communicate locally with an APU using its serial port and a calibration device such as a laptop PC or the Hyperion hand held calibrator. When this option is exercised, communication between the device and the APU is disrupted after 30 seconds of idle time, requiring the operator to close down the communication setup and restart it.

The communication disruption is a design feature intended to help prevent communication conflict between the FSN and any device on the APU serial port. In order to prevent a communication interruption, the user must either send commands from the device within the 30 second window or re-configure the APU hardware to disable the FSN feature, essentially converting the FD-208RN into an FD-208R.

Hardware Conversion

Hardware conversion process

Converting the FD-208RN is simply a matter of moving five jumpers on the Electronic Circuit Board (ECB).

To convert the FD-208RN into an FD-208R:

1. Remove the FD-208RN from the rack. Locate the “initialization” jumper J9, found roughly in the center of the ECB (Figure 1)
2. Place the initialization jumper into position between pins 1 and 2 of J9
3. Locate jumpers JP5, JP6, JP7 and JP8 in the lower left-hand corner of the ECB (Figure 1)
4. Move jumpers JP5, JP6, JP7 and JP8 from the “NET” to the “SA” position

“DATA” LED on the front panel

5. Re-insert the APU module into the rack. The DATA LED on the front panel of the APU module should change color from red to green (the LED blinks rapidly during operation in this configuration)

Application Note

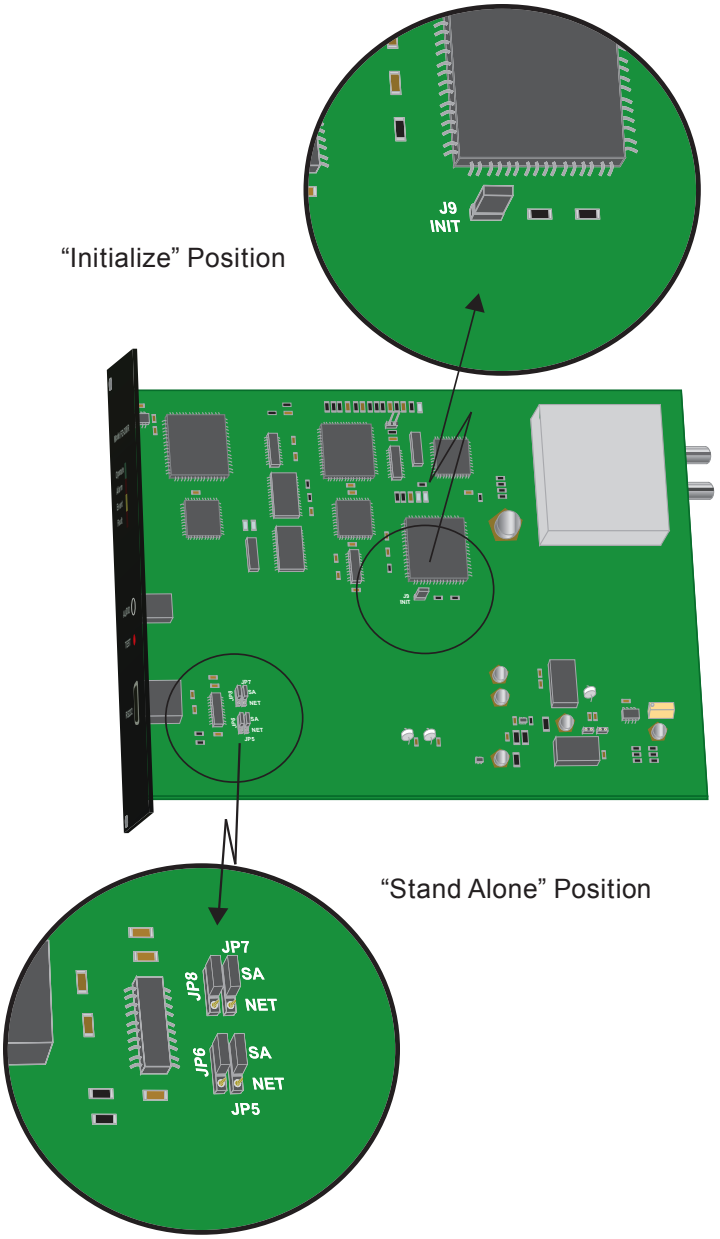


Figure 1 - Jumper locations and positions on the APU Module ECB

The APU module is now re-configured to operate as an FD-208R. Communication between the APU and any calibration device proceeds as normal without interruption.

NOTE:
All FSN network capability is disabled in the APU module while in this hardware configuration.

FSN network capability

Application Note

Returning the APU to FD-208RN Operation

The APU module can be returned to an FSN-enabled configuration at any time through the following steps:

1. Remove the APU module from the rack
2. Locate jumpers JP5, JP6, JP7 and JP8 in the lower left-hand corner of the ECB (Figure 1)
3. Move jumpers JP5, JP6, JP7 and JP8 from the “SA” position to the “NET” position
4. Locate jumper J9, found roughly in the center of the ECB (Figure 1)
5. Remove jumper J9 from pins 1 and 2 (the jumper may be placed over 1 of the pins for hardware storage purposes)
6. Re-insert the APU module into the rack. The DATA LED changes color from red to steady green

Re-assigning an FSN address

The APU module is now configured as an FD-208RN. Normal FSN capability has been re-enabled. The FSN Host Module assigns the APU an FSN address once it is inserted back into the network.

Re-assigning an APU module its original FSN address

NOTE:
The FSN Host Module re-assigns the APU module its original FSN address only if no other components have been plugged into the network while the module is disconnected. In order to ensure the same address is re-assigned, no changes to the FSN network ring must be made while the module is disconnected.

For more information about converting the Fiber Defender Model FD-208RN to an FD-208R, please contact Fiber SenSys’ technical support team at +1.503.692.4430 or by E-mail at info@fibersensys.com.

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