**DSX Access Systems, Inc.** 

# **DSX-SPS Serial Port Switcher**

#### **DSX-SPS Serial Port Switcher & Two Port Controller**

#### **DSX-SPS**

The DSX Serial Port Switcher is the hardware that physically switches serial ports from a Primary Comm Server to a Backup Comm Server. This occurs in conjunction with the Hot Swap Comm Server software that monitors the Primary Comm Server. When the Primary fails, the Backup Comm Server PC takes over. It sends an ASCII string to the DSX-SPST telling it to activate. The DSX-SPST in turn signals the individual 2PC modules to switch from Primary to Backup serial ports. When the Primary Comm Server is back on line, and the Hot Swap Supervisor Software is reset the Backup Comm Server sends another string to the DSX-SPST to deactivate, thereby switching back to the Primary serial ports. One DSX-SPS can switch up to 20 Serial Ports between the Primary and Backup Comm Servers.

#### **DSX-SPST**

The DSX-SPST (Serial Port Switch Trigger) board is the power distribution and Backup Comm Server monitoring board. It receives +15VDC (Class II Power Limited) from the DSX-1040PDM board and distributes it to the 2PC boards through 4 - 12VDC, 1A fused outputs. The SPST board has an RS-232 port that connects to an extra port on the Backup Comm Server. This is the port which sends the "activate" command. The SPST also has 4 relay outputs that are used to "trigger" the 2PC boards when the "activate" command is received.

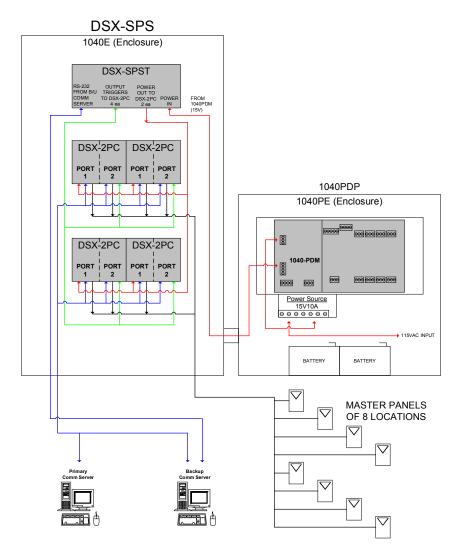
### DSX-2PC

The DSX-2PC (Two Port Controller) is where each serial port from the Primary Comm Server and the corresponding one from the Backup Comm Server connect. The output of the 2PC then goes to a direct connect DSX controller or to a dial-up modem. This board physically switches the circuits from one to the other. Each 2PC module can switch 2 serial port. The 2PC has a +12VDC input and 2 trigger inputs that connect to the SPST module. Each port on the 2PC can be triggered independently.

## Requirements

- 1. DSX-HSCS only works with WinDSX SQL.
- 2. Backup Comm Server must have 1 more serial port than what is required for the Primary Comm Server.
- 3. Shared WinDSX SQL folder cannot be on the Primary Comm Server.
- 4. The Primary and Backup Comm Server PCs both require Static TCP/IP addresses.

# **DSX-SPS Serial Port Switcher Typical Drawing**



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