



DSX Access Systems, Inc.

DSX-LAN-D

Programming and Commissioning the DSX-LAN-D

The **DSX-LAN-D** is the latest in DSX IP Communications module that supports UDP Controller communication and VLAN configurations. This Module supports RS-232/RS-485 and can be used at Master or Slave Controllers.

1. The DSX-LAN-D Module comes with a preset IP Address of 192.168.1.25 and can be programmed with a Web browser. Connect the module to your laptop or switch and connect using a browser. The Module requires **5-12VDC @ 300ma**. Power the Module from the **5VDC** output of the 1040-CDM or 1022 Controller. 12VDC will work if 5VDC is not available.

2. The Module has a default IP Address of 192.168.1.25. Connect with a Laptop or PC that has the same IP schema and subnet (255.255.255.0). Using a Web browser enter the IP address and press enter. The LAN Module will respond with a Login page where you will enter: User - master, Password - master. The screen shots below show the default Settings for the Module.

3. Once you have logged in with User - master and Password - master, you will be able to program the Module. On the Communications Settings Tab - Do Not change the top 5 items unless instructed to do so. The Serial Port Speed should be 9600, the Internet Protocol should be **IPv4**, the Addressing Mode should be **Static(v4 or v6)** and the Link Speed should be **Auto Negotiate**.

Communication Settings	Security Settings
Device name for DHCP:	<input type="text" value="DSX-00-08-66-10-00-20"/>
Serial Port Speed:	<input type="text" value="9600"/> <small>Serial Port Speed must match DSX Panel Serial Speed</small>
Internet Protocol:	<input type="text" value="IPv4"/>
Addressing mode:	<input type="text" value="Static(v4 or v6)"/>
Link Speed/Duplex:	<input type="text" value="Auto Negotiate"/>

4. Under IP Settings assign a Static IP Address, Subnet mask, Gateway, and DNS server. Leave VLAN at 0 unless you are placing the module on a VLAN. Enter your settings.

IP Settings	IP Values
Device IP address:	<input type="text" value="192.168.1.25"/> MAC Address: 00-08-66-10-00-20
Device subnet mask:	<input type="text" value="255.255.255.0"/>
Device gateway:	<input type="text" value="255.255.255.255"/>
DNS server:	<input type="text" value="255.255.255.255"/>
VLAN ID:	<input type="text" value="0"/> <small>Enter 0 to disable VLAN</small>

5. Under the UDP Settings enter the **Receive Port** which should be the same as the TX IP Port from the Comm Port settings at the Comm Server. Leave the **Transmit Port** and the **Send to this IP Address** blank and select **Dynamic Send**. This will work with most Master Controller deployments and for Hot Swap Comm Servers.

UDP Settings

Receive Port: 4002

Transmit Port: [Empty]

Send to this IP address: [Empty]

Dynamic Send:

Submit New Settings

6. Click on **Submit New Settings** to save. You must save your settings before going to another screen or your settings will be lost.

Example of Master Communications

New Comm Port

General | ASCII Smart Port Options

Port #: 42

Name: Easy Street Building

Baud Rate: 9600 Word Length: 8

Parity: None Stop Bits: 1

Poll Frequency: 500 Message TimeOut: 1000

Port Type: LAN (UDP) (Comm) Port Used By: Comm Server

TX IP Port #: 4002 RX IP Port #: 0

TCP/IP Address: 182.25.16.139

Notes:

Default Settings Previous Next Cancel OK

Comm Server - Comm Port

Communication Settings | Security Settings

Device name for DHCP: DSX:00-08-66-10-00-04

Internet Protocol: IPv4

Addressing mode: Static(v4 or v6)

Link Speed/Duplex: Auto Negotiate

IP Settings | IP Values

Device IP address: 182.25.16.139 MAC Address:00-08-66-10-00-04

Device subnet mask: 255.255.0.0

Device gateway: 182.25.16.27

DNS server: 182.25.16.9

VLAN ID: 0 Enter 0 to disable VLAN

UDP Settings

Receive Port: 4002

Transmit Port: [Empty]

Send to this IP address: [Empty]

Dynamic Send:

Submit New Settings

DSX-LAN-D module at Master Controller

7. Under Security Settings - set the **User** Name and Password and the **Admin** User Name and Password. The User can change Communication Settings and the Admin can change Security and Communications Settings. Use the **Password Format** section at the bottom to set the complexity and length of both passwords. 6 to 19 keyboard characters. Select the attributes that must be part of the password. Be careful not to lock yourself out as the Module will have to ship to DSX to be reset.

The screenshot shows the 'Security Settings' tab with a 'Passwords' section. It includes input fields for 'User name:', 'Password:', 'Repeat password:', 'Admin User name:' (pre-filled with 'master'), 'Admin Password:', and 'Repeat Admin password:'. Below this is a 'Password Format' section with checkboxes for 'Upper', 'Lower', 'Special', and 'Numeric', and a 'Length' field set to '0'.

8a. The User Password allows the changing of the Network Settings only.
 Default is > User - 123456 Default Password - 123456

8b. The Admin Password allows the changing of the Security Settings and the Network Settings.
 Default is > Admin User - master Default Password - master

The screenshot shows two sections: 'Log Settings' and 'Time Settings'. 'Log Settings' includes 'UDP Log Address' (pre-filled with 'IPv4,IPv6 or DNS lookup'), 'UDP Log Port' (set to '0'), and 'Heartbeat Frequency (in seconds)' (set to '0'). 'Time Settings' includes checkboxes for 'Daylight Savings Time' and 'NTP server Enable', a 'Security Log UTC Timezone offset' field (set to '0'), 'NTP server Address' (pre-filled with 'IPv4,IPv6 or DNS lookup'), 'System Time' (set to '00:46:09'), and 'System Date' (set to '01 / 06 / 2018'). At the bottom are buttons for 'Display System Time' and 'Manually Set System Time'.

9a. The Security Log Settings allow for an optional IP Address and Port to be defined. Once defined The Module will send all Login attempts and notification of changes made to that Log address. Each time you switch between pages it will send a Login. Enter the IP Address and IP Port number to send the information. This is not the Comm Server Address.

9b. Enter the number of seconds that the Module will send a supervisory message to the Security Log IP Address. This continual heartbeat supervises the communication and notification path for the Security Log.

9c. Enter the UTC Time Zone so these logs have the proper time and date stamp.
-6 for Central Time, -5 for Eastern Time, -7 for Mountain Time, and -8 for Pacific Time

9d. Enter the IP Address of the Time Server where the Module can get the proper time.
If you enter a NTP Time Server IP Address you must restart (repower) the module.

9e. Click on **Display System Time** to get the time from the module. Enter the time if a Time Server is not available. Once you have entered the date and time click on **Manually Set System Time**. Once the time has been set manually do not power the Module down and up.

10. Once the Passwords and Log Settings have been entered click on **Submit New Settings**.
When completely finished, close the browser completely.

Example: Sample of the Security Log Supervision Message.
DEVICE:DSXLAN-00-03-F4-09-4D-7D HB Thu Feb 11 10:14:39 2016

DSX-LAN-D Wiring Information

RS-232 Master Comm

DSX-1040 Master Controllers

DSX-LAN	1042	1043	1044
Tx	4	16	4
Rx	3	15	3
Gnd	5	17	5

DSX-1020 / 1032 Master Controllers

DSX-LAN	1022	1021	1032
Tx +	49	51	55
Tx -	48	52	56
Rx +	51	49	53
Rx -	50	50	54

RS-485 Slave Comm for PC Master and IP Hub

DSX-1040 Slave Controllers via CDM

DSX-LAN	CDM 485 In
Tx+	Rx+
TX-	RX-
Rx+	Tx+
RX-	Tx-

DSX-1020 and 1032 Slave Controllers

DSX-LAN	1022	1021	1032
Tx +	57	43	43
Tx -	56	44	44
Rx +	59	41	41
Rx -	58	42	42