



DSX Access Systems, Inc.

DSX-IP-Hub Configuration

Programming and Commissioning the DSX-IP-Hub

The **DSX-IP-Hub** is a DSX Controller communications router. It allows communication from the Master Controller to be distributed via IP to Slave Controllers using regular LAN Modules. In some applications this Module can take the place of PC Master software with the difference being it requires a Master Controller.

1. The DSX-IP-Hub 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 network 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. Wiring info on last two pages.

2. Using the browser enter the default IP Address of **192.168.1.25** with a Laptop or PC that has the same IP Schema and subnet. Using a browser enter the IP address and press enter. The DSX-IP-Hub 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, 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, Internet Protocol should be **IPv4**, the Addressing Mode should be **Static(v4 or v6)** and the Link Speed should be **Auto Negotiate**.

Communication Settings	Device Address Table	Security Settings
Device name for DHCP:	<input type="text" value="DSX-00-08-66-10-00-26"/>	
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"/> <small>MAC Address:00-08-66-10-00-26</small>
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 same user defined port number in the **Receive and Transmit Port** fields. This will be the same port number as the Receive Port of the DSX-LAN modules connected to Slave Controllers or clusters of Slave Controllers.

[Print](#)

[Click on Print for a copy of these settings](#)

6. Click on **Submit New Settings** to save. You must save before changing screens.

Example of IP-Hub connected to Master > UDP Settings

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Example of LAN module connected to Slaves > UDP Settings

7. Select the **Device Address Table Tab**. Here you will enter the **IP Address** of the DSX-LAN modules that are connected to Slave Controllers or clusters of Slave Controllers and the **Device** numbers connected to each one. In the example below there is an IP Address and then a Device List. Enter the IP Address and then click on Devices and enter the Device numbers separated with a comma. The example below shows one of three DSX-LAN modules with an IP Address of 192.168.1.20 that is connected to Devices 8,10,12, and 14. Any number of DSX-LAN modules can be used with any number of Controllers connected to each one. Click **Submit** when finished.

Select	IP Address	Devices
<input type="checkbox"/>	192.168.1.20	8,10,12,14
<input type="checkbox"/>	192.168.1.21	16,18,20,22
<input type="checkbox"/>	192.168.1.40	24
<input type="checkbox"/>	IPv4,IPv6 or DNS lookup	x,xx

[Delete Row\(s\)](#)
[Add Row](#)
[Submit New Settings](#)

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- Enter the IP Address and then the Devices separated by a comma. Then Click on **Add Row** to enter another IP Address and Device List. Enter Even Number Addresses Only.
- To Delete an IP Address and row - Click the select button and then the **Delete Row(s)** button. Click on Submit to save the changes and put them in to operation.

Security Settings > Passwords

1. 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.
- Enter at least 6 and up to 19 keyboard characters. Select the attributes that must be part of both passwords.

Be careful not to lock yourself out of the module as it will have to be shipped to DSX to be reset!

2. The **User** Password allows the changing of the Communication and Device Address Table Settings only.

- Default **User** Name = 123456 Default Password = 123456

3. The **Admin User** Password allows the changing of All Settings.

- Default **Admin User** name = master Default Password = master

Communication Settings	Device Address Table	Security Settings	
Passwords			
User name:	<input type="text" value="123456"/>		
Password:	<input type="password" value="••••••"/>	Leave blank for no password	
Repeat password:	<input type="password" value="••••••"/>		
Admin User name:	<input type="text" value="master"/>		
Admin Password:	<input type="password" value="••••••"/>	Leave blank for no password	
Repeat Admin password:	<input type="password" value="••••••"/>		
Password Format	Upper	Lower	Special
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Numeric	Length	
	<input type="checkbox"/>	<input type="text" value="0"/>	

Security Settings > LOG

1. The Optional 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 verification. Enter the IP Address and IP Port number to send this information. This is not the Comm Server Address.
2. 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. 0 = No Heartbeat 1-1800 seconds
3. 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
4. Enter the IP Address of the Time Server where the module can get the proper time.
5. 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 System Time has been set manually do not cycle power to the module.

Log Settings	
UDP Log Address:	<input type="text" value="IPv4,IPv6 or DNS lookup"/>
UDP Log Port:	<input type="text" value="0"/> Enter '0' to disable logging
Heartbeat Frequency (in seconds):	<input type="text" value="0"/>

Time Settings	
Daylight Savings Time	<input type="checkbox"/> Daylight savings Valid only for TimeZones in US & Canada
NTP server Enable	<input type="checkbox"/> Changing NTP Settings may cause a reboot
Security Log UTC Timezone offset:	<input type="text" value="0"/>
NTP server Address	<input type="text" value="IPv4,IPv6 or DNS lookup"/> Leave blank for time.google.com
System Time:	<input type="text" value="00:46:09"/>
System Date:	<input type="text" value="01 / 06 / 2018"/>

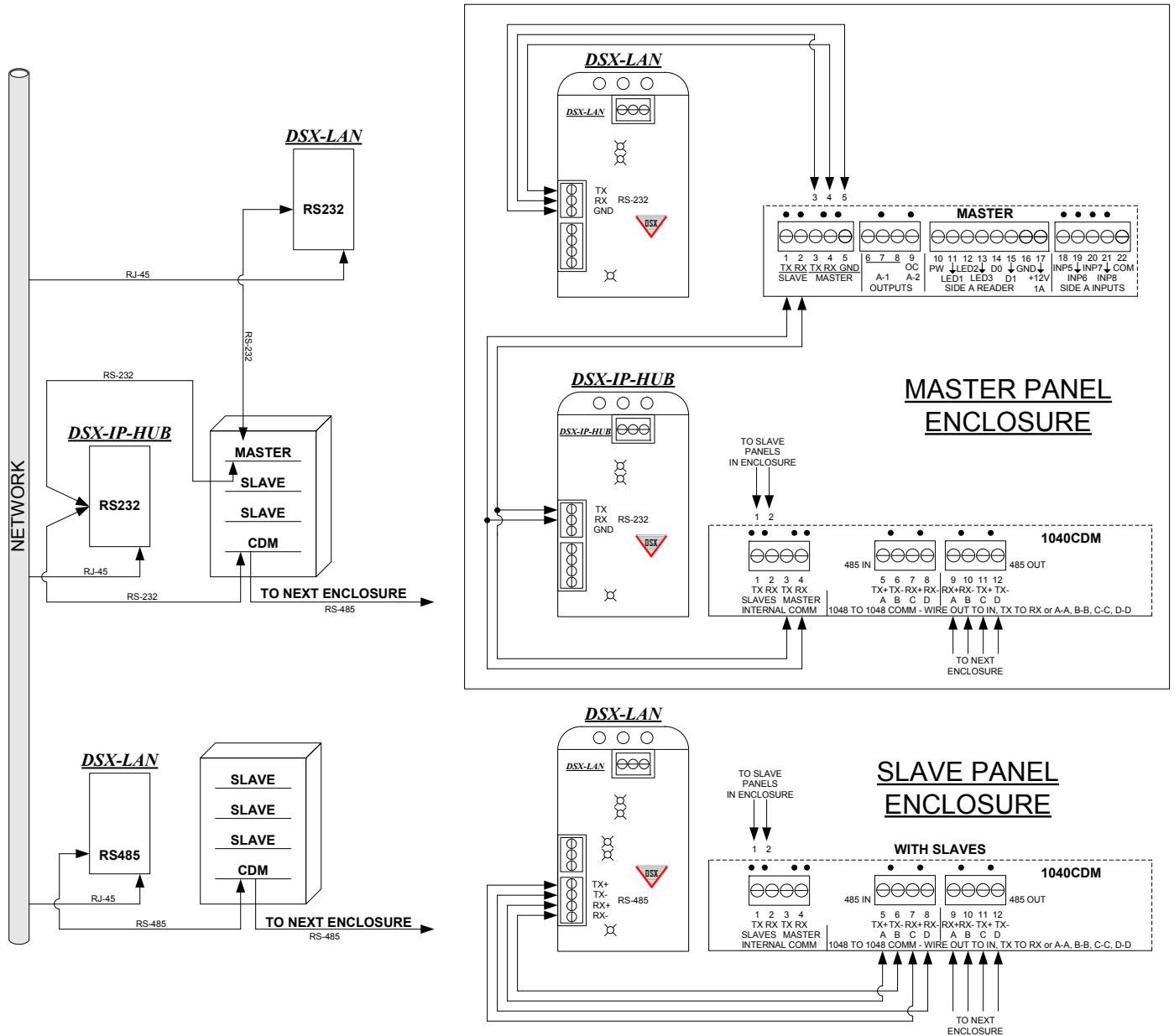
4. Once the Passwords and Log Settings have been entered click on **Submit New Settings**. When completely finished, close the browser completely.

Example: Sample of the Security Log Supervision Message.

DEVICE:DSX-00-08-66-10-00-08 New Routing Table flashed 2018-10-26 19:13:13

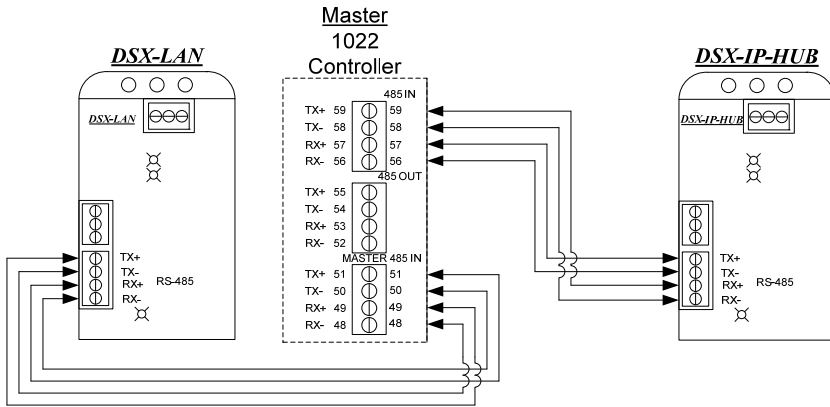
DSX-IP-Hub Wiring to 1040 Controllers

The DSX-IP-HUB will use the RS-232 port to connect to a 1040 system. It is wired to the Slave output of the Master Controller in parallel with the DSX-1040-CDM. This drawing depicts a standard DSX-LAN Module connected to the Master Controller and the DSX-IP-HUB connected to the CDM for Slave Communication using UDP over the network. The upper box is the wiring inside the Master Enclosure and the bottom drawing is of a standard DSX-LAN module connected to a Slave Enclosure.

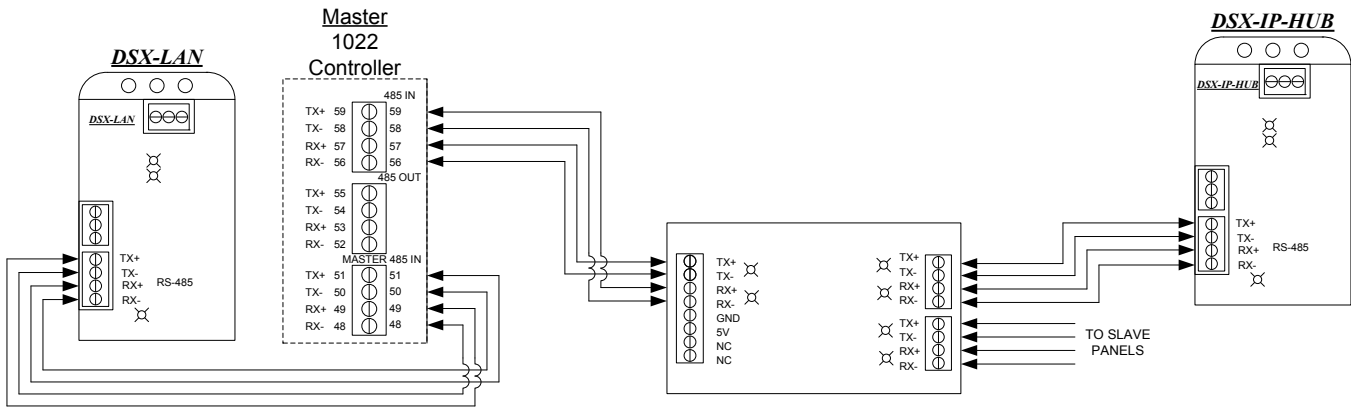


DSX-IP-Hub Wiring to 1022 Controllers

When the Master 1022 has no Slave Controllers wired to it a DSX-IP-HUB can be connected directly to the 485 IN port as in the drawing below.



When the Master 1022 has Slave Controllers wired to it a DSX-IP-HUB can be connected using a DSX-485T module which will allow both the DSX-IP-HUB and the hardwired Slave Controllers to be connected to the Master Controller as in the drawing below



Here is the wiring necessary for a standard DSX-LAN module to be connected to a 1022 Slave Controller or Cluster of 1022 Slave Controllers.

