What You've Got

Check the contents of the carton containing the DSX.
This is what you should have:
- DSX unit
- Rack mount kit (depending upon the DSX model)
- 1 or 2 power cords (depending on the DSX model)
- RJ-45 adapter (for loopback testing of console ports)
- CD-ROM and warranty card

If any piece is missing or damaged, contact your Raritan sales representative

What Else You'll Need

In addition to the equipment in the carton, you will need:
- 1 crossover Ethernet cable to configure the DSX through a browser-based interface, or
- 1 null modem cable to configure the DSX through a command line interface, and
- Enough cables to connect your managed devices to the DSX. Refer to the Raritan Price book for the types of cables needed for each type of device you intend to connect.
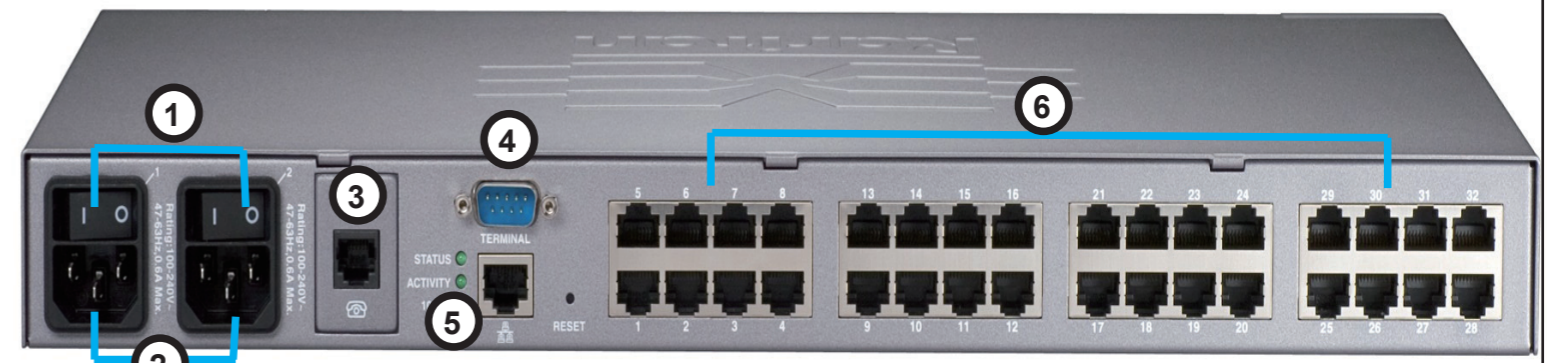
Factory Defaults

The DSX unit is shipped from the factory with the following default settings built in:

Setting	Default
IP address	192.168.0.192
Subnet mask	255.255.255.0
Gateway	192.168.0.192
Username	admin (all lowercase)
Password	raritan (all lowercase)
Unit name	DominionSX

Connect the Target Devices

The DSX comes in a variety of models. The model shown above contains two power outlets, one LAN interface, and 32 console ports. Your model may differ, but this will not affect the following installation instructions.

1. Install the DSX in your chosen location. Rack mounting is recommended but not required.
2. Connect the power cord to the power connector on the DSX and to an external power source. If your unit has two power connectors, you can connect the second power connector to a backup power source.
3. Flip the power switch to turn the DSX unit on. The unit performs a hardware and firmware self test. The software boot sequence starts and is complete when the light goes on and remains on.
4. Connect your target servers or other serially managed devices to the console ports on the DSX.

| 1 | Power on/off switch | 3 | Modem | 5 | LAN interface |
| 2 | Power connectors | 4 | Terminal port | 6 | Console ports |

a. Connect one end of a standard Cat5 Ethernet cable to one of the console ports on the DSX.
b. Connect the other end to a Raritan Nulling Serial Adapter (p/n ASCSDB9F, ASCSDB9M, ASCSDB25F, ASCSDB25M) as appropriate.
c. Connect the adapter to the console port on the target device

Important Note: Many Cisco and Sun devices have console ports with non-standard RJ-45 connections. Most can be connected to the DSX with a "serial rollover cable." This is NOT a standard Ethernet cable or crossover Ethernet cable. If you have misplaced the rollover cable that came with your Cisco or Sun device, you can purchase one from Raritan (Part Number CRLVR-15 or CRLVR-1).

Configure the DSX Using a Browser

You can configure the DSX using a Web browser or a command line interface (CLI). If you prefer a CLI, skip this section and proceed directly to the next section.
1. Connect a computer to the LAN interface on the DSX using a crossover Ethernet cable. If your DSX has two LAN interfaces, use LAN1.
2. Make sure the computer has a route to the DSX's default IP address (192.168.0.192). Open a console window and enter the route print command. If the default IP address is NOT on the Active Routes list, do the following:
   a. On a Windows machine, type ipconfig and note your IP address. Then type: route add 192.168.0.192 <installation computer IP address>
   b. On a Unix or Linux machine, type ifconfig and note your IP address. Then type:
   route add 192.168.0.192 <installation computer IP address> -interface
   c. Type: ping 192.168.0.192 This should produce a reply. If it does not, check the physical connection between the computer and the DSX, and make sure you executed the route add command correctly.
3. Open a browser and enter this URL: http://192.168.0.192
4. When the Login window appears, enter the default username (admin) and password (raritan). Use all lowercase letters.
5. You will be prompted to change the default password. Do so now, and be sure to remember this password for future login.
6. Choose Setup > Network. In the Network Basic Settings panel, select an IP configuration method (DHCP is enabled by default), give DSX an IP address, subnet mask, and gateway address on your LAN. You can give the unit a name to help identify it (up to 64 characters, but special characters and spaces are not allowed.) and a domain (required to send SMTP messages).

Network Basic Settings

IP Auto Configuration:
None

IP Address:
192.168.60.114

Subnet Mask:
255.255.255.0

Gateway IP Address:
192.168.60.126

Mode:
Auto

Domain:
raritan.com

Unit Name:
TheMonarch

OK   Cancel

Note: If DHCP is selected and the client computer used to configure DSX via crossover cable is running a DHCP server, the DSX will not be accessed at 192.168.0.192, but instead at any IP address the configuring machine assigns.

Port 5

Name:
Port5

Application:
RaritanConsole

Bits Per Second:
9600

Parity Bits:
None/8

Flow Control:
None

Detect:
Do Not Detect Physical Connection to the Target

Exit Command:

Escape Mode:
control

Escape Character:
[

Emulation:
VT100

DPA IP Address:
0.0.0.0

DPA SSH TCP Port:

DPA Telnet TCP Port:

Always Active:
Do not maintain port access without a connected user.

Messages suppressed:
none

OK   Cancel

Name	A name to identify the device connected to the port
Application	The application used to communicate with the target device
Bits Per Second	The port speed of the target device
Parity Bits	The number of bits used for parity checking
Flow Control	The type of flow control used to regulate data communications
Emulation	The terminal communications protocol used by the target device

Congratulations! Your Dominion SX is configured and ready for use. We suggest you get started by doing the following:

1. Create additional user profiles and groups.
2. Enhance the DSX's authentication and security capabilities.
3. Launch the Raritan Serial Console (RSC) and manage your target devices remotely.

7. The DSX will now reboot. Once it is rebooted, enter new IP address in a browser and log in again using your new password.
8. Choose Setup > Date/Time.
   a. Select your time zone from the drop-down menu in the UTC Offset field.
   b. You can enter the date and time manually, or you can enter the IP addresses of up to two Network Time Protocol (NTP) servers.
   c. When you are finished, click OK. The DSX's clock is now set.
9. Choose Setup > Port Configuration. You can now configure each console port that has a target device connected to it:
   a. Click the checkbox next to a port with a target device connected to it. If more than one target device will have the exact same settings, you can select multiple ports.
   b. Click Edit to display the settings for the port(s) and enter the following information. When finished, click OK and repeat for any other ports.

Configuring the DSX Using the Command Line Interface

1. Connect a computer to the Terminal port on the DSX. This port is a DB9 male port on all models except those that have 2 power connectors and 2 LAN interfaces. These models have both RJ-45 connectors and DB9 male port, such as Dominion SX model - DSXA-16-DL.
2. Open a terminal emulation program and connect to the DSX. Make sure the communications parameters are set to 9600 bps, no parity, 8 data bits, and 1 stop bit.
3. When the Login prompt appears, enter the default username (admin) and password (raritan). Use all lowercase letters.
4. You will be prompted to change the default password. Do so now, and be sure to remember this password for future login.
5. At the *admin >* prompt, enter config, and at the next prompt, enter network.
6. Give the DSX an IP address, subnet mask, and gateway address on your LAN. At the *admin > config > network >* prompt, enter: *interface enable true if lan1 ip <ip address> mask <subnet mask> gw <gateway ip address>*
7. You will now be prompted to reboot the DSX. Enter yes to start the reboot. When it is complete, log in again using your new password.
8. Give the unit a name to help identify it (up to 64 characters, spaces and special characters not (allowed) and your domain (required to send SMTP messages). Enter: *name unitname <DSX name> domain <domain name>*
9. You will now be prompted to reboot the DSX. Enter yes to start the reboot. When it is complete, log in again.
10. At the *admin >* prompt, enter config, and at the next prompt, enter time.
11. At the *admin > config > time >* prompt, set the date and time on the DSX
   a. Enter timezonelist and find the number code that corresponds to your time zone.
   b. Enter: clock tz <timezone code> datetime <"time string"> where <timezone code> is the time zone code and <"time string"> is the current date and time in "YYYY-MMDD HH:MM:SS" format (quotes included, use 24-hour time). Example: clock tz 9 datetime "2007-03-15 09:22:33"
12. Enter top to return to the top level prompt. Then, enter config, and at the next prompt, enter ports. You can now configure each console port that has a target device connected to it:
   a. Enter: config port <port number> followed by the parameters described in the table below.

Parameter	Description
name <port name>	A name to identify the device connected to the port
bps <bits per second>	The communications speed of the device
parity <parity type>	The number of bits used for parity checking. Your choices are none, odd or even.
flowcontrol <control type>	The type of flow control used to regulate data communications. Your choices are none, hw (hardware) or sw (X on/X off).
emulation <emulation type>	The terminal communication protocol used by the device. Your choices are VT100, VT220, VT320, ANSI.

Example:

config port 1 name cisco1700 bps 9600 parity odd flowcontrol none emulation vt100

Note: In addition to the above parameters, additional parameters include:
[detect <true|false>] [escapemode <none|control>] [escapechar char] [emulation type] [exitstring <cmd[#delay;]>] [dpaip ipaddress] [telnet port] [ssh port] [alwaysactive <true|false>] [suppress <none|all>]

   b. Repeat Step a for each port with a device connected to it.

Note: You can also use port ranges or the wildcard asterisk *, as in: *config port * bps 115200.* This will configure all ports for a communications speed of 115200 bps. Or: *config port 3-7 bps 115200*. This will configure ports 3 through 7 for 115200 bps. Or: config port 1,2,7-9 bps 115200. This will configure ports 1, 2, 7 trough 9 for 115200 bps.

13. When done, enter top to return to the top level prompt.

Congratulations! Your Dominion SX is configured and ready for use.