Extron

DXP 42 HD 4K PLUS • Setup Guide

IMPORTANT:
Go to www.extron.com for the complete user guide, installation instructions, and specifications before connecting the product to the power source.

The DXP 42 HD 4K PLUS is a four input, two output HDMI matrix switcher that routes HDMI signals from multiple sources to HDMI-equipped display devices. It supports computer and video resolutions up to 4K @ 60 Hz. It also supports HDMI 1.*n* and 2.0b specifications, including data rates up to 18.2 Gbps, HDR Deep Color up to 12-bit, 3D, and HD lossless audio formats. The switcher is HDCP 2.2 and 1.4 compliant, and incorporates Extron technologies including SpeedSwitch®, EDID Minder®, and Key Minder®. Digital audio can be de-embedded from any input and assigned to independent analog stereo outputs.

This setup guide enables you to quickly set up and configure your DXP 42 matrix switcher. Step-by-step instructions show you how to connect the hardware and to perform basic operations using both the front panel controls and selected Simple Instruction Set (SIS) commands. The guide also shows you how to connect to the built-in web page and load and start up the Product Configuration Software (PCS), which you can also use to configure and operate the switcher. For additional information and specifications, see the DXP HD 4K PLUS product page at **www.extron.com**.

The terms “DXP,” “DXP 42”, “matrix,” “switcher,” and “DXP 42 matrix switcher” are used interchangeably in this guide to refer to the DXP 42 HD 4K PLUS.

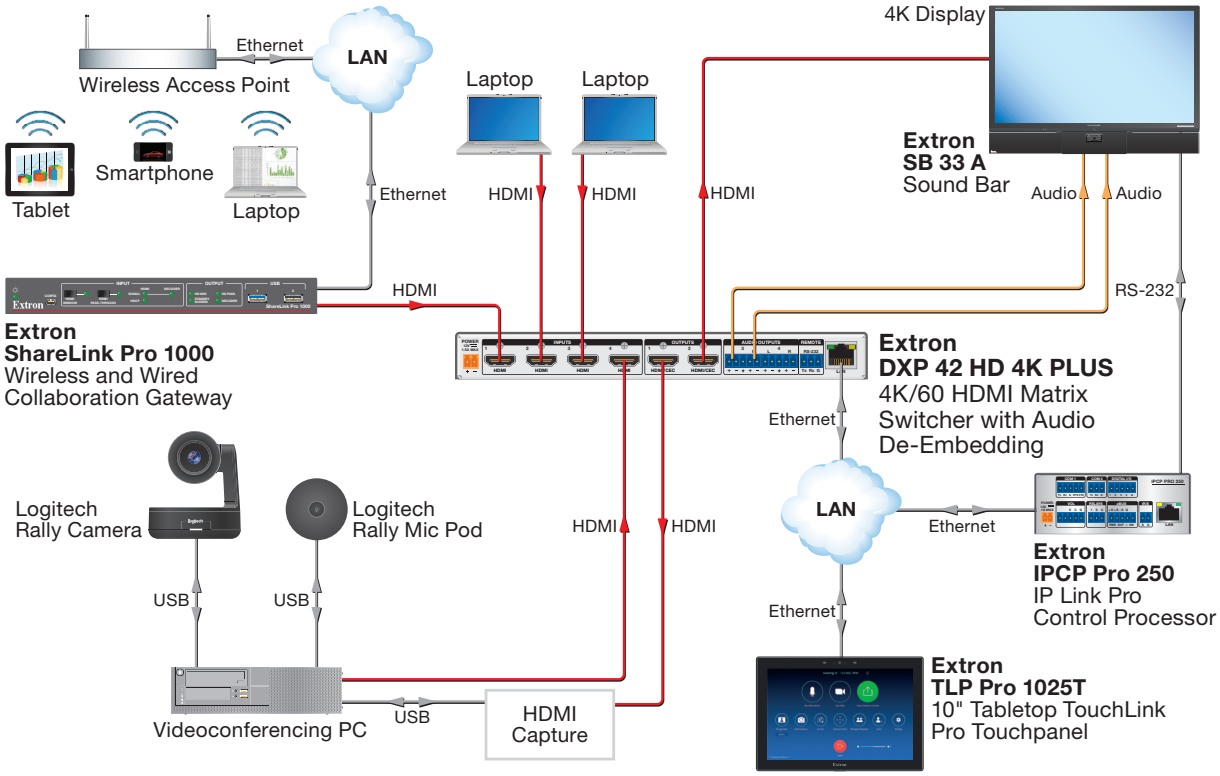


Figure 1. Typical Application of the DXP 42 HD 4K PLUS

Setup Steps

Follow these steps to set up and start operating the DXP 42 matrix switcher:

1. Turn off power to the input and output devices that will be connected.
2. Connect HDMI input devices to the rear panel input connectors (see **figure 2**, **A**, on the next page).
3. Connect HDMI audio and video output devices to the rear panel output connectors: video (**B**), audio (**C**), or both.
4. Connect control devices as desired:
   - Connect a computer or control system to the Remote RS-232 (**D**) or the front panel USB Config port (see **figure 5, C**, on page 4).
   - Connect a computer, control system, or network switch to the RJ-45 LAN (Ethernet) port (see **figure 2, E**).
5. Connect the provided 12 V, 1.5 A power supply between the DXP switcher and a 100-240 VAC, 50-60 Hz power source, and connect power to the input and output devices.
6. Download the PCS program from **www.extron.com** (see **Downloading the Software** on page 10).

7. Select EDID files to apply to inputs as desired, using PCS (see the *DXP HD 4K PLUS Series Help* file for details).
8. Create ties as desired (see **Creating Ties** on page 5).

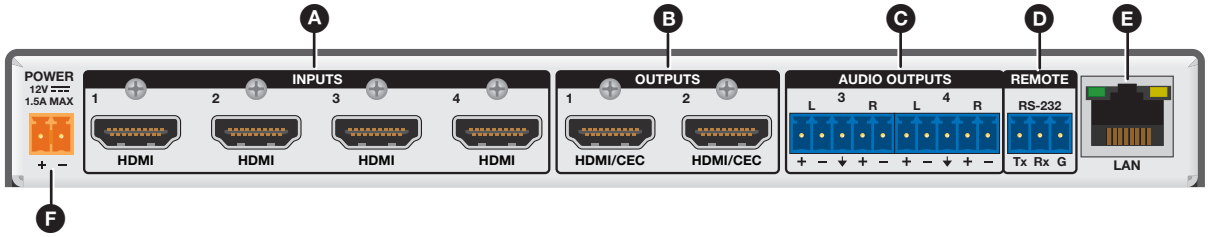
Rear Panel Connections

CAUTION: Remove power from the system before making any connections.

ATTENTION : Couper l'alimentation avant de faire l'installation électrique.

ATTENTION:

- Use electrostatic discharge precautions (be electrically grounded) when making connections. Electrostatic discharge (ESD) can damage equipment, although you may not feel, see, or hear it.
- Prenez des précautions contre les décharges électrostatiques (soyez électriquement relié à la terre) lorsque vous effectuez des connexions. Les décharges électrostatiques (ESD) peuvent endommager l'équipement, même si vous ne pouvez pas le sentir, le voir ou l'entendre.



A **Input connectors** **C** **Analog audio outputs** **E** **LAN port**

B **Output connectors** **D** **Remote RS-232 connector** **F** **Power connector**

Figure 2. DXP 42 HD 4K PLUS Rear Panel

A **Input connectors** — Connect HDMI (or DVI with an appropriate adapter) sources to these female 19-pin type A HDMI connectors for video input.

LockIt™ cable lacing brackets, one for each HDMI input and output connector, are provided with the DXP 42 HD 4K PLUS. These brackets can be used to secure the HDMI cables to the DXP connectors to reduce stress on the HDMI connectors and prevent signal loss due to loose cable connections (see **Securing HDMI Cables with the LockIt HDMI Cable Lacing Bracket** on page 4).

B **Video output connectors** — Connect HDMI (or DVI with an appropriate adapter) displays or other output devices to these female 19-pin type A HDMI output connectors for buffered video output (see **Securing HDMI Cables with the LockIt HDMI Cable Lacing Bracket**).

C **Analog audio outputs** — Connect powered speakers, an amplifier, or other audio output device to these 5-pole 3.5 mm captive screw connectors for 2-ch stereo analog audio output. These connectors can provide de-embedded LPCM audio that was routed from any DXP HDMI input and convert it to a stereo analog signal. Figure 3 shows how to wire these connectors. Use the supplied tie-wrap to strap the audio cable to the extended tail of the connector.

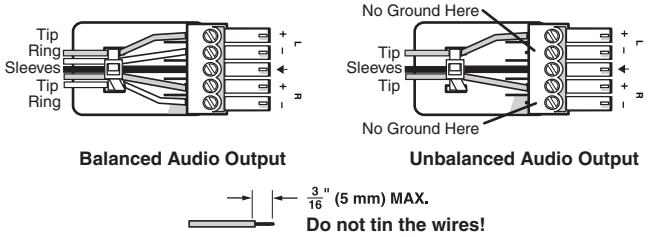


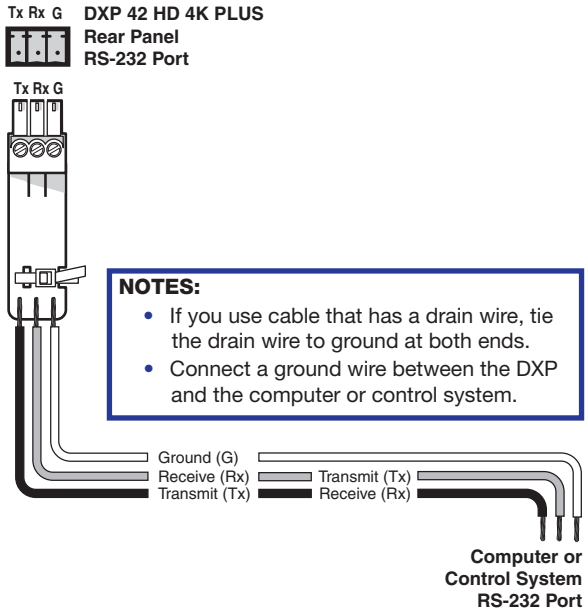
Figure 3. Connecting Analog Audio

ATTENTION:

- For unbalanced audio output, connect the sleeves to the ground contact. **DO NOT** connect the sleeves to the negative (-) contacts.
- Pour l'audio asymétrique, connectez les manchons au contact au sol. **Ne PAS** connecter les manchons aux contacts négatifs (–).

NOTE: The length of exposed wires is important. The ideal length is 3/16 inch (5 mm).

D **Remote RS-232 connector** — Connect an RS-232 capable host device such as a computer or a touch panel control to this 3.5 mm 3-pole captive screw connector to configure and control the switcher via SIS commands. Connect the 9-pin end of the RS-232 cable to the serial port of your computer or control system (see the diagram at right). The default port parameters are 9600 baud, 8 data bits, 1 stop bit, no parity.



E **LAN port** — Connect a computer, a network switch, or a control system to this RJ-45 connector (see figure 4 for wiring information). With the Ethernet connection, you can use a computer to configure and control the networked switcher with SIS commands, the PCS configuration program, or the embedded HTML page.

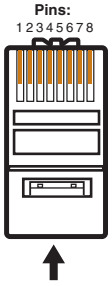
Ethernet connection indicators — The Link and Act LEDs indicate the status of the Ethernet connection.

- **Link** — Indicates that the switcher is properly connected to an Ethernet LAN. This green LED should light steadily.
- **Act (Activity)** — Indicates transmission of data on the RJ-45 connector. This amber LED should flicker as the switcher communicates.

Ethernet links use Category (CAT) 3, 5e, or 6 unshielded twisted pair (UTP) or shielded twisted pair (STP) cables, terminated with RJ-45 connectors. Ethernet cables are limited to 328 feet (100 meters).

NOTES:

- Do not use standard telephone cables. Telephone cables do not support Ethernet or Fast Ethernet.
- Do not stretch or bend the cables because this can cause transmission errors.



Crossover Cable

Pin	End 1 Wire Color	End 2 Wire Color
1	White-green	White-orange
2	Green	Orange
3	White-orange	White-green
4	Blue	Blue
5	White-blue	White-blue
6	Orange	Green
7	White-brown	White-brown
8	Brown	Brown
	T568A	T568B

A cable that is wired as T568A at one end and T568B at the other (Tx and Rx pairs reversed) is a "crossover" cable.

Straight-through Cable

Pin	End 1 Wire Color	End 2 Wire Color
1	White-orange	White-orange
2	Orange	Orange
3	White-green	White-green
4	Blue	Blue
5	White-blue	White-blue
6	Green	Green
7	White-brown	White-brown
8	Brown	Brown
	T568B	T568B

A cable that is wired the same at both ends is called a "straight-through" cable because no pin or pair assignments are swapped. Both ends of the cable can be T568B (as shown) or T568A (not shown).

Default Ethernet settings:

- **IP address** — 192.168.254.254
- **Subnet mask** — 255.255.0.0
- **Gateway address** — 0.0.0.0

Figure 4. RJ-45 Connector and Pinout Tables

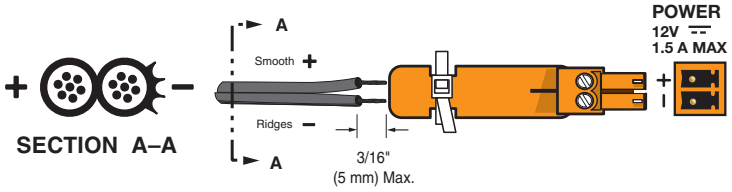
The cable you use depends on your network speed. The switcher supports both 10 Mbps (10Base-T — Ethernet) and 100 Mbps (100Base-T — Fast Ethernet), half-duplex and full-duplex Ethernet connections.

- 10Base-T Ethernet requires CAT 3 or higher UTP or STP cables.
- Fast Ethernet requires CAT 5e or higher UTP or STP cables.

Terminate the Ethernet cable as required:

- **Network connection** — Wire as a patch (straight-through) cable.
- **Computer or control system connection** — Wire as a crossover cable.

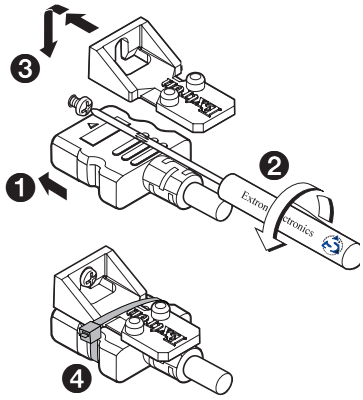
F **Power connector** — Plug the provided external 12 VDC, 1.5 A power supply into this 2-pole, 3.5 mm captive screw connector and into an AC power outlet (see the diagram at right for wiring).



Securing HDMI Cables with the LockIt HDMI Cable Lacing Bracket

Use a LockIt HDMI Cable Lacing Bracket to securely fasten each HDMI cable to the switcher:

1. Plug the HDMI cable into the panel connection (see the illustration at right, ❶).
2. Loosen the HDMI connection mounting screw from the panel enough to allow the LockIt lacing bracket to be placed over it (❷). The screw does not have to be removed.
3. Place the LockIt lacing bracket (❸) on the screw and against the HDMI connector, then tighten the screw to secure the bracket.



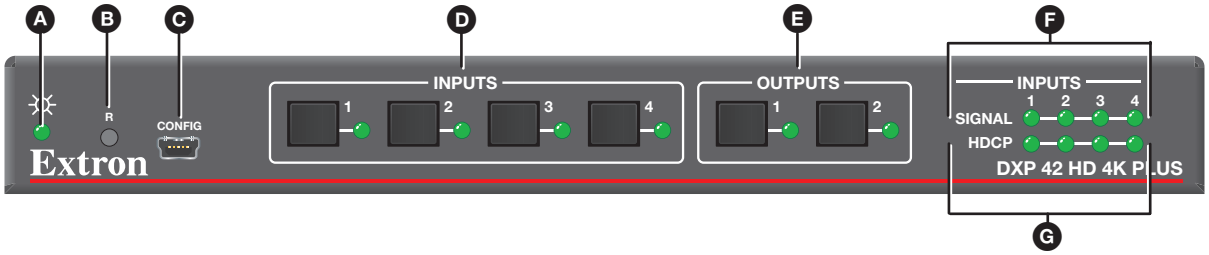
ATTENTION:

- Do not overtighten the HDMI connector mounting screw. The shield it fastens to is very thin and can easily be stripped.
- Ne serrez pas trop la vis de montage du connecteur HDMI. Le blindage auquel elle est attachée est très fin et peut facilement être dénudé.

4. Loosely place the included tie wrap around the HDMI connector and the LockIt lacing bracket as shown (❹).
5. While holding the connector securely against the lacing bracket, use pliers or similar tool to tighten the tie wrap, then remove any excess length.

Front Panel Features

The front panel buttons have primary and secondary functions. The table on the next page contains descriptions of some of the basic functions. For more details, see the *DXP HD 4K PLUS Series User Guide*, available at **www.extron.com**. Each button has an LED beside it. These bicolor LEDs light green when video is selected and red when audio is selected.



A **Power and Reset LED** **C** **Config port** **E** **Output buttons** **G** **HDCP LEDs**

B **Reset button** **D** **Input buttons** **F** **Signal LEDs**

Figure 5. DXP 42 HD 4K PLUS Front Panel

A **Power and Reset LED** — This green LED lights steadily while the switcher has power.

In addition, while you are holding the **Reset** button, the LED blinks every 3 seconds to indicate the level of reset that will occur if the button is released at that point.

B **Reset button** — This recessed button initiates four levels (modes) of reset. Use a pointed object such as a small screwdriver to press and hold the **Reset** button.

- **Factory firmware reset (mode 1)** — Hold the **Reset** button while powering up the switcher to restore the DXP to the factory firmware for a single power cycle. This type of reset maintains all the current user settings, such as audio adjustments, IP settings, and the configuration.
- **IP settings reset (mode 4)** — While the DXP is running, press and hold the **Reset** button until the LED blinks **twice** (approximately 6 seconds). Release the button and press it again momentarily to reset the switcher IP settings.
- **Absolute reset (mode 5)** — While the DXP is running, press and hold the **Reset** button until the LED blinks **three times** (approximately 9 seconds). Release the button and press it again momentarily to restore the switcher to the default factory conditions. This reset, equivalent to the Esc ZQQQ ← SIS command, removes the initial serial number passwords that are set at the factory and resets them to no password.

NOTE: The factory configured passwords for all accounts on this device have been set to the device serial number. In the event of a complete system reset (Mode 5), the passwords convert to the default, which is no password.

C **Config port** — This USB mini-B port serves a similar communications function to the rear panel Remote RS-232 port, but is easier to access than the rear port after the matrix switcher has been installed and cabled. Use a USB type A to mini B cable to connect this port to a USB connector on the computer to enable SIS commands to be sent from the computer, connection to the PCS configuration software, and uploading firmware.

Front Panel Button Functions		
	Primary Function	**Secondary Functions**
D **Input buttons**	Select inputs.	View ties.
E **Output buttons**	Select outputs.	View ties.

F **Signal LEDs** — The DXP has a green Signal LED for each input. Each LED lights when a signal (TMDS clock activity) is present on the input.

G **HDCP LEDs** — The DXP has a green HDCP LED for each input. Each of these LEDs lights if the source connected to its input is HDCP encrypted.

Operation

Creating Ties

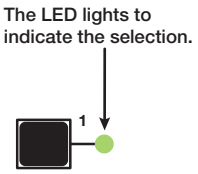
A tie is an input-to-output connection. Ties can be made using the front panel buttons, SIS commands, or PCS. You can tie an input to one or more outputs.

NOTES:

- A "Set of ties" is an input tied to two or more outputs. (An output can never be tied to more than one input.)
- A "Configuration" is one or more ties, one or more sets of ties, or a combination.
- Audio ties can be made only with de-embedded audio.
- Audio ties cannot be made using the front panel buttons. However, they can be created using PCS or SIS commands.

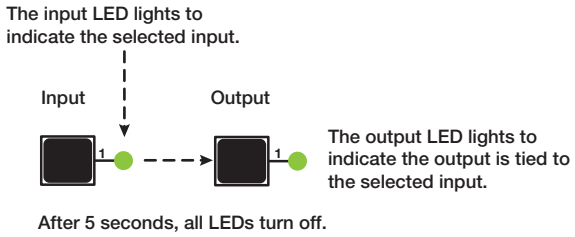
To make ties:

1. Press an input button on the front panel (see the illustration at right). The LED next to it lights.
   - If the selected input is already tied to one or more outputs, the tied output LEDs light.
   - If you press the tied output button, the output is disconnected (untied) from the input.



2. Within 5 seconds, press the output button or buttons to which the input is to be tied. All selected output LEDs light, then turn off after 5 seconds. The illustration at right shows a tie between input 1 and output 1.

   NOTE: If no output is selected within 5 seconds, the input LED turns off and no tie is made to the input.



To break existing ties:

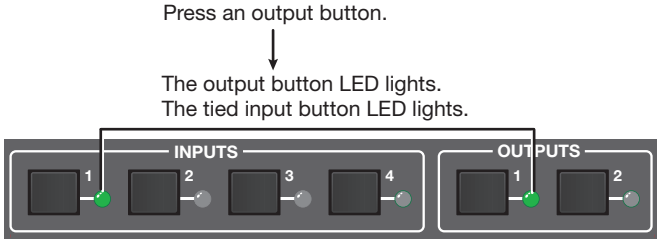
1. Press the button for the input to be untied. The LEDs for the tied outputs light.
2. Press the output button to be untied. The output button LED turns off, indicating that the tie is broken.

Viewing Ties

- **To view ties to an input:** Press the desired input button. The button LEDs light for all outputs that are tied to that input.

  The illustration at right shows a tie between input 1 and output 1. Pressing the input 1 button causes its LED to light. The output 1 button LED also lights, indicating that a tie exists between input 1 and output 1.

- **To view ties to an output:** Press the desired output button. The LED for the selected output button lights. In addition, the button LEDs for the tied input and for all outputs tied to that input light.



Locking and Unlocking the Front Panel (Executive Mode)

Lock mode (executive mode) limits control of the DXP 42 from the front panel, so that functions such as input switching and output muting are not allowed from the front panel. The executive mode selection remains in effect after a power cycle.

The matrix switcher front panel buttons can be locked and unlocked using the following SIS commands (see the **Front Panel Lock (Executive) Modes** commands on page 8 for information on issuing SIS commands to the unit):

- To lock the front panel buttons, enter `1X`.
- To unlock the front panel, enter `0X`.

Remote Configuration and Control

You can send SIS commands over an Ethernet link (rear panel RJ-45 LAN port, see **figure 2**, **E**, on page 2), a serial connection (rear panel Remote RS-232 port, **D**), or USB (front panel Config port, see **figure 5**, **C**, on page 4). The network connection procedure is described below. For information about the serial and USB connections, as well as a complete list of the available SIS commands, see the *DXP HD 4K PLUS Series User Guide*, available at **www.extron.com**.

Establishing a Network (Ethernet) Connection

To establish a network connection:

1. Open a TCP socket to port 23 using the switcher IP address.

   NOTE: The factory default IP address is 192.168.254.254. You can change this address using SIS commands, the PCS configuration software, or the internal web page (see the DXP 42 HD 4K PLUS User Guide, available at **www.extron.com**, for instructions).

   The switcher responds with a message consisting of the copyright date, the name of the product, firmware version, part number, and the current date and time. For example, with an internet connection:

   `(c) Copyright 20nn, Extron Electronics, DXP 42 HD 4K Plus, Vn.nn, 60-1678-01` ↵
   `Ddd, DD Mmm YYYY HH:MM:SS` ↵

   NOTES:
   - If the switcher is not password-protected, the device is now ready to accept SIS commands.
   - If the switcher is password-protected, a password prompt appears.

2. If the switcher is password-protected, enter the password.

   NOTE: The factory configured passwords for all accounts on this device have been set to the device serial number. In the event of a complete system reset (Mode 5), the passwords convert to the default, which is no password.

3. If the password is accepted, the switcher responds with `Login User` or `Login Administrator`.
4. If the password is not accepted, the `Password` prompt reappears (see your network admin for the assigned password).

Connection timeouts

The Ethernet link times out and disconnects after a designated period of no communications. By default, this timeout value is set to 5 minutes but the value can be changed.

NOTE: Extron recommends leaving the default timeout at 5 minutes and periodically issuing the Query (Q) command to keep the connection active or disconnecting the socket and reopening the connection when necessary.

Number of connections

A switcher can have up to 200 simultaneous TCP connections, including all HTTP sockets and Telnet connections. When the connection limit is reached, the switcher accepts no new connections until some have been closed. No error message or indication is given that the connection limit has been reached. To maximize performance of your switcher, keep the number of connections low and close unnecessary open sockets.

SIS Commands

The switchers have SIS commands that you can use for operation and configuration. You can issue these commands from a PC or control system connected to the DXP serial port, USB port, or Ethernet port (see **Rear Panel Connections** on page 2 for connection information).

Host-to-switcher instructions

The switcher accepts SIS commands through the LAN port, the Remote (RS-232) port, or the front panel USB Config port. SIS commands consist of one or more characters per command field. They do not require any special characters to begin or end the command character sequence. Each switcher response to an SIS command ends with a carriage return and a line feed (CR/LF = ↵), which signals the end of the response character string. A string is one or more characters.

NOTE: Input and output numbers in commands can be entered as one-digit, two-digit, or three-digit numbers. All input and output numbers are reported as two-digit numbers in the response.

Verbose mode

Telnet connections to a switcher can be used to monitor for changes that occur on the switcher, such as front panel operations and SIS commands from other Telnet sockets or a serial port. For a Telnet session to receive change notices from the switcher, the Telnet session must be in verbose mode 1 or 3 (see the **Set verbose mode** command on page 9).

NOTE: If tagged responses is enabled (modes 2 and 3), all view commands return the same constant string and the value as the set command does (for example, the view matrix name command Esc CN←, returns Ipn • X30 ↵).

Symbol definitions

↵ = Carriage return and line feed		← or | = Carriage return (no line feed)	
• = Space		Esc or W = <**Escape**> key	
X1	=	Input number	0 through 4 (0 = untied)
X2	=	Output number	0 through 2 (0 = untied) If the audio output number entered is greater than 4, an E12 error code (Invalid output number) is returned.
X3	=	On or off (enable or disable)	0 = Off or disable, 1 = on or enable
X5	=	Analog audio output number	3 or 4.
X8	=	Output format	0 = Auto (default) 1 = DVI RGB 4:4:4 Full 2 = HDMI RGB 4:4:4 Full 3 = HDMI RGB 4:4:4 Limited 4 = HDMI YUV 4:4:4 Full 5 = HDMI YUV 4:4:4 Limited 6 = HDMI YUV 4:2:2 Full 7 = HDMI YUV 4:2:2 Limited
X12	=	Video and sync mute status	0 = Video and sync unmuted 1 = Video muted 2 = Video and sync muted
X13	=	Audio mute status	0 = Audio unmuted 1 = HDMI audio muted 2 = Analog audio muted 3 = HDMI and analog audio muted
X20	=	Front panel lock mode status (executive mode)	0 = Lock mode 0: Front panel unlocked (default) 1 = Lock mode 1: Front panel locked
X23	=	Verbose mode	0 = Clear or none (default for Telnet connection) 1 =Verbose mode (default for RS-232 and USB connections) 2 = Tagged responses for queries 3 = Verbose mode and tagged responses for queries
X25	=	Firmware version (*n.nn*)	Shown to second decimal place
X26	=	Firmware and build version	Example: 1.00.0000-b003
X30	=	IP address	*nnn.nnn.nnn.nnn*
X31	=	Subnet mask	*nnn.nnn.nnn.nnn*
X32	=	Gateway address	*nnn.nnn.nnn.nnn*
X35	=	Port timeout	1 to 65000 in 10-second intervals (30 = default)

NOTES:

- Commands can be entered back-to-back in a string, with no spaces. For example: 1*1!Ø2*Ø2&ØØ3*ØØ3%4*8$.
- The matrix switchers support 1-, 2-, and 3-digit numeric entries (1*1!,Ø2*Ø2&, or ØØ3*ØØ3%).

Command and Response Table for SIS Commands

Command Function	ASCII Command (Host to Switcher)	Response (Switcher to Host)	Additional Description
Output Switching (Ties)			
Tie HDMI input to HDMI output (video and audio).	X1*X2!	OutX2•InX1•All↵	Tie HDMI input X1 to HDMI output X2, video and audio.
Example	1*2!	Out2•In1•All↵	Tie input 1 to output 2, video and audio.
Tie an input to all outputs, audio and video	X1*!	InX1•All↵	Tie input X1 to all outputs, audio and video.
Video Mutes			
Set video mute for an output	X2*X12B	VmtX2*X12↵	Set video mute on output X2 to X12.
Set video mute for all outputs	X12*B	VmtX12↵	Set video mute on all outputs to X12.
View video mute status for an output	X2B	X12↵	View mute status X12 for output X2.
Unmute video and sync for an output	X2*ØB	VmtX2*Ø↵	Unmute video and sync on output X2.
Unmute video for all outputs	Ø*B	VmtØ↵	Unmute HDMI video on all outputs.
Audio Mutes			
NOTE: Audio mute commands affect both HDMI and analog audio, depending on the output from which the audio was de-embedded.			
Mute audio on an output	X2*X13Z	AmtX2*X13↵	Set audio mute for output X2 to X13.
Mute all audio	X13*Z	AmtX13↵	Set audio mute for all outputs to X13.
View audio mute status of an output	X2*Z	X13↵	View mute status X13 for output X2.
Unmute audio on an output	X2*0Z	AmtX2*0↵	Unmute audio for output X2.
Unmute all audio	0*Z	Amt0↵	Unmute audio for all outputs.
Front Panel Lock (Executive) Modes			
NOTE: See **Locking and Unlocking the Front Panel (Executive Mode)** on page 6 for more information on the lock modes.			
Set front panel lock mode	X20X	ExeX20↵	Set the front panel lock mode to X20.
View lock status	X	X20↵	Display current lock mode X20.
KEY: X1 = Input number		Ø through 4 (Ø = untied)	
X2 = Output number		1 or 2 (0 = untied). If the audio output number entered is greater than 2, an E12 error code (Invalid output number) is returned.	
X12 = Video mute status		0 = video and sync unmuted, 1 = HDMI video muted, 2 = video and sync muted, 3 = HDMI and analog audio muted	
X13 = Audio mute status		0 = audio unmuted, 1 = HDMI audio muted, 2 = analog audio muted, 3 = HDMI and analog audio muted	
X20 = Front panel lock mode		0 = unlocked (default), 1 = locked	
Information Requests			
General information request	I	V04X02•AØ4XØ2↵	Show the number of video and audio inputs (04) and outputs (02). On the DXP 42 HD 4K PLUS, the matrix is four video and audio inputs by two video and audio outputs (outputs 3 and 4 are de-embedded analog audio only outputs).
Query part number	N	60-1678-01↵	*In verbose modes 2 and 3:* Pno60-1678-01

Command Function	ASCII Command (Host to Switcher)	Response (Switcher to Host)	Additional Description
Information Requests (continued)			
Query firmware version	Q	X25↵	View the unit firmware version to the second decimal place. *In verbose modes 2 and 3:* Ver01*X25
Query firmware and build version	*Q	X26↵	View unit firmware version and build number X26. *In verbose modes 2 and 3:* Bld01*X26
IP Setup			
Set IP address	Esc X30CI←	IpiX30↵	Set the unit IP address to X30.
View IP address	EscCI←	X30↵	View unit IP address.
Set subnet mask	Esc X31CS←	IpsX31↵	Set the subnet mask for the unit to X31.
View subnet mask	EscCS←	X37↵	View the subnet mask.
Set gateway IP address	Esc X32CG←	IpgX32↵	Set the unit gateway address to X32.
View gateway IP address	Esc*CG*←	X32↵	View the unit gateway address.
Set DHCP on and off	Esc X3DH←	IdhX3↵	Set DHCP to X3.
View DHCP on/off status	EscDH←	X3↵	View the DHCP setting.
Configure current port timeout	EscØ*X58TC←	PtiØ*X58↵	Set the current port timeout to X58.
Read current port timeout	EscØTC←	X58↵	View the current port timeout setting.
Configure global IP port timeout	Esc1*X58TC←	Pti1*X58↵	Set the global IP port timeout to X58.
Read global IP port timeout	Esc1TC←	X58↵	View the global IP port timeout setting.
Set verbose mode	Esc X53CV←	VrbX53↵	Set the verbose mode and tagged responses to X53.
Read verbose mode	EscCV←	X53↵	View the current verbose mode.

KEY:

X3 =	On or off (enable or disable)	0 = DHCP disabled (default), 1 = DHCP enabled
X25 =	Firmware version number	Expressed to the *second* decimal place (*n.nn*)
X26 =	Firmware version and build number	*n.nn.nnnn*
X30 =	IP address	*nnn.nnn.nnn.nnn* (Default = 192.168.254.254)
X31 =	Subnet mask	*nnn.nnn.nnn.nnn* (Default = 255.255.0.0)
X32 =	Gateway IP address	*nnn.nnn.nnn.nnn* (Default = 0.0.0.0)
X53 =	Verbose mode	Ø = clear or none (default for Telnet connection) 1 = verbose mode (default for RS-232 and USB connection) 2 = tagged responses for queries 3 = verbose mode and tagged for queries
X58 =	Port timeout interval	1 (10 seconds) – 65ØØØ (default is 3Ø = 300 seconds = 5 minutes)

Reset			
System reset to factory defaults	EscZXXX←	Zpx↵	Clear all ties and presets and reset unit to factory default settings.

NOTE: This command excludes IP settings such as IP address and subnet mask. It does not remove the file system.

Absolute system reset	EscZQQQ←	Zpq↵	Clear all ties and reset unit to factory default settings.

NOTES:

- This command includes resetting the IP address to 192.168.254.254 and the subnet mask to 255.255.0.0. The firmware version remains the same.
- The factory configured passwords for all accounts on this device have been set to the device serial number. Passwords are case sensitive. In the event of an absolute system reset, the passwords convert to the default, which is no password.

Installing and Starting the Configuration Software

The Extron Product Configuration Software (PCS) is a Windows-based program for the DXP 42 HD 4K PLUS that enables you to configure the input and output, audio, and image settings. It also lets you save and recall presets, select EDID, and perform nearly all the other functions that can be accomplished via the front panel controls or SIS commands.

NOTE: EDID selection is available only through PCS. When the DXP is connected to PCS, the power save mode is reset to 0 (power save off).

Downloading the Software

To use PCS, download the program from **www.extron.com** and install it on the PC that will be connected to the DXP:

1. Open the Extron web page and select the **Download** tab (see figure 6, ❶).

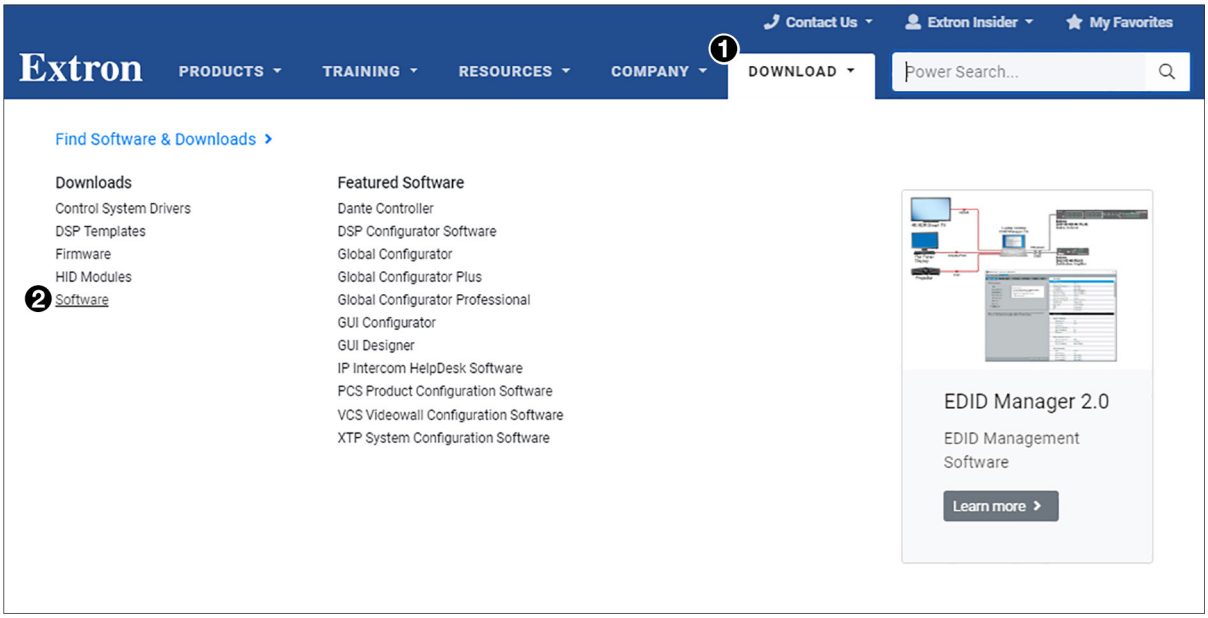


Figure 6. Software Link on the Download Tab

2. Move the mouse pointer to the Software link (❷) in the Downloads column and click it.
3. On the Download Center Software page, click the **P** (see figure 7, ❶).

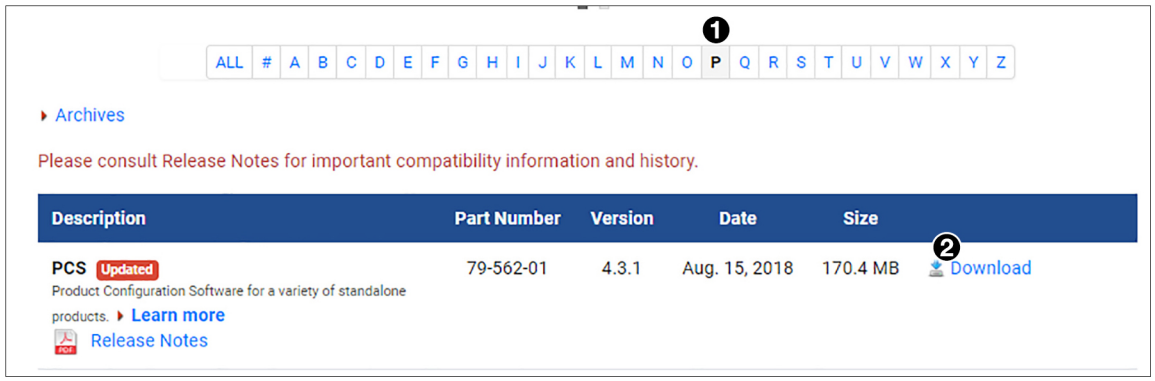


Figure 7. PCS Download Link

4. On the Login page, enter the requested information. If you need an ID number, contact your Extron representative.
5. Follow the instructions on the subsequent screens to download the program. By default the installation creates a folder called "Extron PCS" at c:\Program Files (x86)\Extron\Extron PCS **or** c:\Program Files\Extron\Extron PCS. If there is not already an Extron folder in your Program Files x86 folder, the installation program creates it.

Starting the configuration program

1. Connect the DXP 42 HD 4K PLUS to your computer via USB (front panel Config port) or TCP/IP (rear panel LAN port).

2. To run the PCS configuration program, do either of the following:
   - Double-click on the EAF.exe file on the computer at `c:\Program Files` [or `Program Files(x86)]\Extron\Extron PCS`.
   - Click **Start** on the computer screen and select **All Programs** > **Extron Electronics** > **Extron Product Configuration Software** > **Extron Product Configuration Software**.
3. The PCS main window opens with a `Tutorial` screen that points out significant items on the PCS window. When ready to proceed, click **OK** to close the tutorial. The `Device Discovery` screen opens, with a list of Extron devices connected to your network (see figure 8).

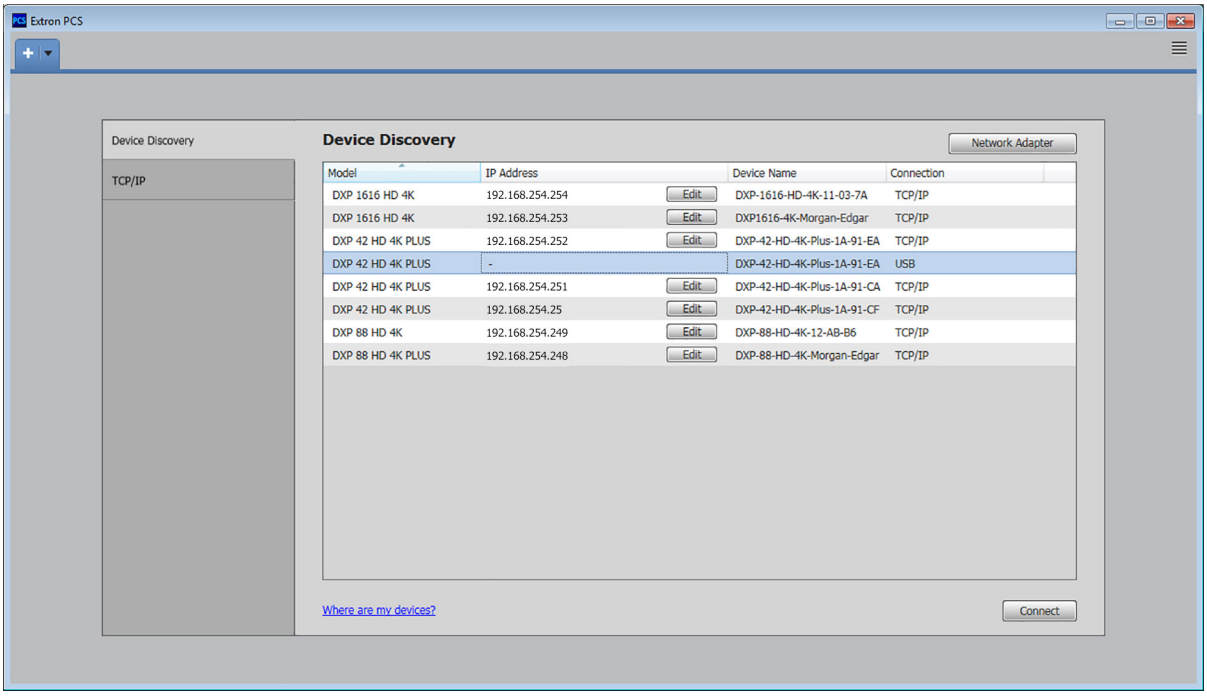
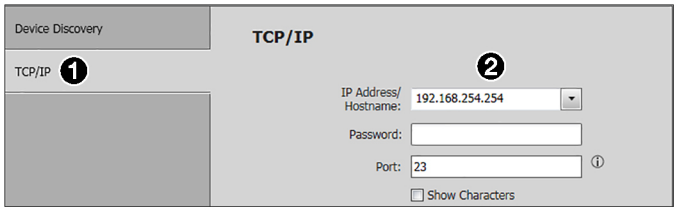


Figure 8. PCS Window

4. If your DXP device name is displayed in the `Device Discovery` panel, select it and click the **Connect** button. If the device name is not listed but the IP address is known:
   a. Click the **TCP/IP** tab in the left panel (see ❶ in the illustration at right).
   b. Enter the IP information on the TCP/IP screen (❷).
   c. Click the **Connect** button at the bottom of the screen.



5. The **DXP 42 HD 4K PLUS** device tab and main screen is displayed in the PCS window. When the screen opens, it displays the `EDID Minder` screen. To display other screens, click the icons on the toolbar.

For more information

For further assistance with using PCS with the DXP, see the *DXP 42 HD 4K PLUS PCS Help* file. To access this file:

1. On the DXP 42 HD 4K PLUS main window, click the down arrow on the device tab for your DXP. The **Device** drop-down menu is displayed.
2. From the drop-down menu select **DXP** <***model number***> **HD 4K PLUS Help**.

Accessing the Web Page

The embedded DXP 42 HD 4K PLUS web page enables you to monitor and adjust certain settings of the DXP through its Ethernet port, connected via a LAN or WAN and using a web browser. This factory-installed web page cannot be erased or overwritten. For details on the DXP 42 HD 4K PLUS web page, see the *DXP HD 4K PLUS Series User Guide*, available at **www.extron.com**.

NOTE: If your Ethernet connection to the DXP is unstable, try turning off the proxy server in your web browser. To do this in Microsoft Internet Explorer, click **Tools** > **Internet Options** > **Connections** > **LAN Settings**, clear the **Use a proxy server...** checkbox, then click **OK**.

1. In the **Address** field of your web browser, enter the IP address of your unit, and press <**Enter**>.

2. If the unit is not password protected, the web page opens. If the `Authentication Required` dialog box opens, enter the user name (**admin**, by default) in the **User Name** field and the password in the **Password** field. Click **Log In**. The DXP 42 HD 4K PLUS web page contains the following panels:

   ❶ **Device Info** — Displays device name, brief product description, and part number. The panel also contains an **Extron** link, which opens **www.extron.com** in a new window. To assign a new name to the device, click the **EDIT** link.

   ❷ **Inputs** — Displays the name and signal type of the active input signal as well as its HDCP status. To view the status and type of all inputs, click the **2 MORE** link in the lower-left corner of the panel to view the Inputs dialog box

   ❸ **RS-232** — (View-only) Displays the RS-232 protocol baud rate, parity bits, data bits, and stop bits.

   ❹ **Device Status** — Displays the current date, time, time zone, the amount of time the device has been running (`Uptime`). Click the **EDIT** link to edit these settings or the **SYNC TO PC** link to sync the settings to those of your PC.

   ❺ **Outputs** — Displays the signal type (HDMI, DTP, or DVI), and the HDCP status of all connected outputs.

   ❻ **Roles and Permissions** — Click the **EDIT** link to enter a new password or change the current one. The factory configured passwords for all accounts on this device have been set to the device serial number.

   ❼ **Network Settings** — Click **EDIT** to set the IP address, DHCP setting, subnet mask, and gateway address for your DXP.

   ❽ **Firmware** — Displays the current firmware version and the date it was last updated. You can also update the firmware on your unit here by clicking the **SELECT FILE** button (firmware files can be downloaded from **www.extron.com**).

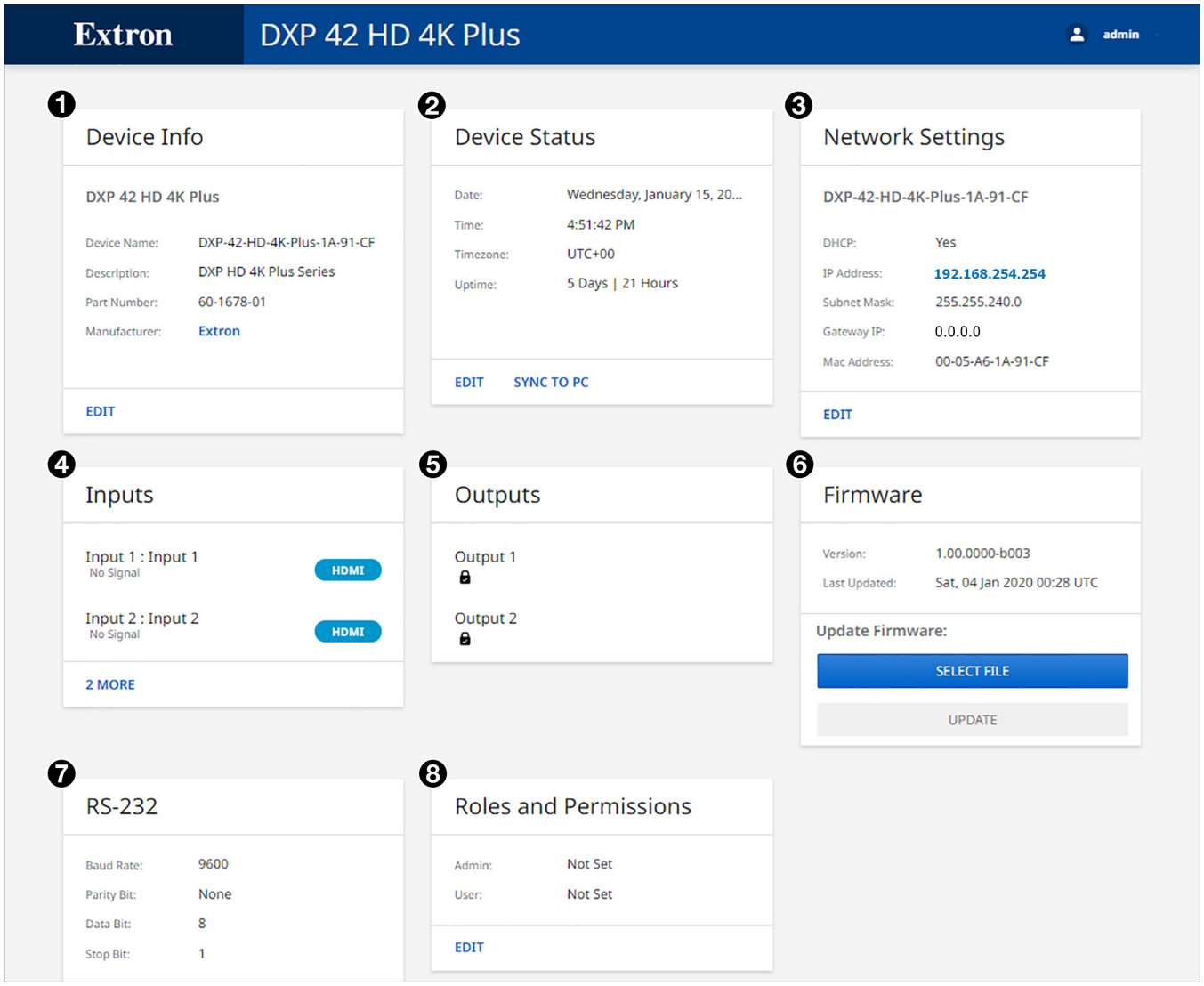


Figure 9. DXP 42 HD 4K Plus Web Page

For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the **Extron Safety and Regulatory Compliance Guide** on the Extron website.