

SECTION 00 91 06

ADDENDUM #6

1. PROJECT INFORMATION

- A. Project Name: 7th Floor Fit-Out
- B. Owner: Administrative Offices of the Courts
- C. Civil Engineer: N/A
- D. Architect: Tevebaugh Architecture
- E. Structural Engineer: MacIntosh Engineering
- F. MPE Engineer: DEDC, LLC
- G. Architect Project Number: #17042
- H. Date of Addendum: May 8, 2019

2. NOTICE TO BIDDERS

- A. This Addendum is issued to all registered plan holders pursuant to the Conditions of the Contract. This Addendum serves to clarify, revise, and supersede information in the Project Manual, Drawings, and previously issued Addenda. Portions of the Addendum affecting the Contract Documents shall be incorporated into the Contract by enumeration of the Addendum in the Owner/Contractor Agreement.
- B. The Bidder shall acknowledge receipt of this Addendum to the Architect / Owner.
- C. The date for receipt of bids is not changed by this Addendum, at the same time and location.

3. ATTACHMENTS

- A. This addendum includes the following attached Documents and Specification Sections:
 - 1. MS-2 Specification Sheets
 - 2. Drawing Sheet SAD100 – Security – New Work – 7th Floor – Diagram
 - 3. Drawing Sheet SAD201 – AV Flow Diagram – New Work – 7th Floor (2 of 4)
 - 4. Drawing Sheet SAD202 – AV Flow Diagram – New Work - 7th Floor (3 of 4)
 - 5. Drawing Sheet SAD203 – AV Flow Diagram – new Work – 7th Floor (4 of 4)
 - 6. Drawing Sheet SAD210 – AV – New Work – 7th Floor

4. REVISIONS TO PREVIOUS ADDENDA

- A. No changes to previous addenda.

5. REVISIONS TO DIVISIONS 00 and 33 OF THE SPECIFICATIONS

- A. Specification Section 27 40 00 – Audio and Video Communication

1. **ADD** attached MS-2 specification sheets (quantity: 3) to the end of specification section 27 40 00 “Audio and Video Communication”. These sheets are referenced on the revised sheet SAD201, attached to this addendum.

6. REVISIONS TO DRAWING SHEETS

- A. General Clarification: Equipment racks shall be as specified in the Delaware State-Wide Information Technology and Architecture Standards (NE-Cabling-002).

- B. Drawing Sheet SAD100 – Security – New Work – 7th Floor – Diagram

1. **REVISE** sheet SAD100 in accordance with attached sheet SAD100. All changes have been clouded.

- C. Drawing Sheet SAD201 – AV Flow Diagram – New Work – 7th Floor (2 of 4)

1. **REVISE** sheet SAD201 in accordance with attached sheet SAD201. All changes have been clouded.

- D. Drawing Sheet SAD202 – AV Flow Diagram – New Work - 7th Floor (3 of 4)

1. **REVISE** sheet SAD202 in accordance with attached sheet SAD202. All changes have been clouded.

- E. Drawing Sheet SAD203 – AV Flow Diagram – new Work – 7th Floor (4 of 4)

1. **REVISE** sheet SAD203 in accordance with attached sheet SAD203. All changes have been clouded.

- F. Drawing Sheet SAD210 – AV – New Work – 7th Floor

1. **REVISE** sheet SAD210 in accordance with attached sheet SAD210. All changes have been clouded.

7. BIDDER'S QUESTIONS: All bidder questions have been answered in previous Addenda.

END OF SECTION

Specifications

DXP HD 4K PLUS Series

MS-2

TRUE 4K specifications

Max. 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max. Bit Depth per Color
4096 x 2160 at 60 Hz	4:4:4	8 bit
3840 x 2160 at 60 Hz		12 bit
4096 x 2160 at 30 Hz		
3840 x 2160 at 30 Hz		
4096 x 2160 at 60 Hz	4:2:0	
3840 x 2160 at 60 Hz		

Frame rate ¹	24, 25, 30, 50, or 60 fps
Chroma sampling ¹	4:4:4, 4:2:2, or 4:2:0
Color bit depth ¹	8, 10, or 12 bits per color
Signal type	HDMI 2.0, HDCP 2.2
Max. video data rate	18 Gbps (6 Gbps per color)

NOTE: ¹Subject to the maximum data rate limit. Use our calculator (<http://www.extron.com/product/videotools.aspx>) to determine video parameters supported by this data rate.

Video

Routing	4x4 to 8x8 matrix
Maximum data rate	18 Gbps (6 Gbps per color)
Maximum pixel clock.....	600 MHz
Resolution range.....	Up to 1920x1200 or 1080p @ 60 Hz, 12 bit color 4K (4096x2160) @ 60 Hz (4:4:4 color space) UHD (3840x2160) @ 60 Hz (4:4:4 color space)
Formats	RGB and YCbCr digital video
Standards	DVI 1.0, HDMI 1.4 and 2.0, HDCP 1.4 and 2.2, CEA-861E

NOTE: *Appropriate DVI-D to HDMI cables or adapters are required for DVI signal input and output.

NOTE: Extron strongly recommends compatibility testing while designing, and before installing, any 3D or HDR (high dynamic range) system. There are several unique 3D and HDR formats in use by source devices and display manufacturers. The level of 3D and HDR product support is governed by pixel clock, signal format, and communication between source and sink devices. Please contact an Extron Application Engineer for more information.

Video input

Number/signal type.....	4 or 8 HDMI digital video (HDCP compliant)
Connectors	4 or 8 female HDMI type A
Mounting	Mountable into select Cable Cubby enclosures
Enclosure dimensions	

Specification • DXP HD 4K PLUS Series (Continued)

Video output

Number/signal type.....	4 or 8 HDMI digital video (HDCP compliant)
Connectors	4 or 8 female HDMI type A
Peripheral device power	250 mA per HDMI output

Audio

Supported formats — Pass through

HDMI connectors	LPCM up to 7.1/24-bit/96 kHz, Dolby ATMOS, Dolby TrueHD, Dolby Digital Plus, Dolby Digital EX, Dolby Digital 5.1, Dolby Digital 2/0 Surround, Dolby Digital 2/0, DTS-HD Master Audio, DTS-HD, DTS ES Discrete 6.1, DTS ES Matrix 6.1, DTS Digital Surround 5.1, DTS 2 Channel
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Supported formats — S/PDIF

LPCM.....	2-channel, 16/20/24 bit depths, 32/44.1/48 kHz sampling
Dolby Digital (AC-3)	6-channel, 640k mbr, 32/44.1/48 kHz sampling
DTS.....	7-channel, 1536k max bit rate, 44.1/48 kHz sampling

Audio — individual audio groups (HDMI)

Gain.....	Unbalanced output: 0 dB; balanced output: +6 dB
Frequency response	20 Hz to 20 kHz, ± 0.2 dB
THD + Noise	0.03% @ 1 kHz at nominal level
S/N	>105 dB at maximum output (unweighted)
Crosstalk	<-90 dB @ 20 Hz to 20 kHz, fully loaded
Stereo channel separation.....	>80 dB @ 20 Hz to 20 kHz

NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV $\approx$ 2 dBu

Audio output

Number/signal type.....	4 or 8 HDMI, embedded 2 stereo, balanced or unbalanced 2 S/PDIF
Connectors	
HDMI.....	4 or 8 female
Stereo	(2) 3.5 mm captive screw, 5 pole
S/PDIF.....	2 female RCA
Impedance	
Stereo audio.....	50 ohms unbalanced, 100 ohms balanced
S/PDIF.....	75 ohms
Gain error.....	± 0.1 dB channel to channel
D/A conversion	24-bit, 192 kHz
Maximum level (Hi-Z).....	>+21 dBu, balanced, or +15 dBu, unbalanced
Output volume range	0 to -100 dB in 1.3 dB steps

Communications

Serial control port.....	1 bidirectional RS-232
Serial control connector	(1) 3.5 mm captive screw, 3 pole (rear panel)
Baud rate and protocol	300 to 115200 baud; 7 or 8 data bits; 1 or 2 stop bits; no parity, even, odd, mark, or space parity Defaults: 9600 baud, 8 data bits, 1 stop bit, no parity
Serial control pin configuration	1 = Tx, 2 = Rx, 3 = Gnd
USB control port	1 front panel female USB mini-B
USB standards	USB 2.0, low speed
Ethernet control port	1 female RJ-45 connector
Ethernet data rate	10/100Base-T, half/full duplex with autodetect
Ethernet protocol	DHCP, DNS, HTTP, HTTPS, ICMP, NTP, SFTP, SMTP, SNMP, SSH, TCP/IP, UDP/IP, ARP, Telnet

Specification • DXP HD 4K PLUS Series (Continued)

Ethernet default settings	Link speed and duplex level: autodetected IP address: 192.168.254.254 Subnet mask: 255.255.0.0 Gateway: 0.0.0.0 DHCP: Off
Web server	Up to 200 simultaneous sessions 40.0 MB nonvolatile user memory
Program control	Extron Product Control Software (PCS) Extron Simple Instruction Set™ (SIS™) Microsoft® Internet Explorer®, Telnet

General

Power supply	Internal Input: 100-240 VAC, 50-60 Hz
Power consumption (full load)	
DXP 44 HD 4K PLUS	20.4 watts
DXP 88 HD 4K PLUS	30.8 watts
Power consumption (power save) ..	10.8 watts
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling	Fans, air flows from right to left (as viewed from front panel)
Thermal dissipation (full load)	
DXP 44 HD 4K PLUS	
115 VAC, 60 Hz.....	64.9 BTU/hr
240 VAC, 50 Hz.....	65.8 BTU/hr
DXP 88 HD 4K PLUS	
115 VAC, 60 Hz.....	96.8 BTU/hr
240 VAC, 50 Hz.....	97.3 BTU/hr
Mounting	
Rack mount.....	Yes, with included brackets
Enclosure type	Metal
Enclosure dimensions	1.75" H x 17.5" W x 9.5" D (1U high, full rack wide) (4.4 cm H x 44.5 cm W x 24.1 cm D) (Depth excludes connectors and knobs. Width excludes rack ears.)
Product weight	
DXP 44 HD 4K PLUS	5.2 lbs (2.3 kg)
DXP 84 HD 4K PLUS	5.3 lbs (2.4 kg)
DXP 88 HD 4K PLUS	5.5 lbs (2.5 kg)
Regulatory compliance.....	CE, c-UL, UL, RoHs, and WEEE
Product warranty	3 years parts and labor
Everlast power supply warranty.....	7 years parts and labor

NOTE: Specifications are subject to change without notice.

NOTE: Shipping weights and dimensions are available at www.extron.com.

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