

STATEMENT OF WORK (SOW) Flint District Judge Courtroom 127 - Courtroom Technology Upgrade

BACKGROUND INFORMATION

The U.S. District Court – Michigan Eastern District has been upgrading the AV technology in its courtrooms over the past few years. We have installed a few systems in Detroit and one in each in our divisional courthouses in Ann Arbor, Bay City and Flint. The Courts standard system utilizes Crestron for control, Biamp for sound and Extron for annotation. Our Flint District Judge Courtroom 127 located at 600 Church Street, Flint, Michigan, 48502, is next on our list for an AV technology upgrade.

OBJECTIVE

The purpose of this Statement of Work (SOW) is to provide the District Court with proposals on upgrading the courtroom technology equipment, control system, sound system, installation and programming. The Court will conduct a walkthrough of the courtroom on **August 30, 2016** @11:00 AM and is asking contractors to attend. The Court will discuss the equipment and services requested on attachment A.

SCOPE OF WORK

The U.S. District Court – Michigan Eastern District's standard for courtroom AV equipment has been to use Crestron, Biamp and Extron. Equivalent equipment can be quoted and will be considered. Equivalent equipment quotes must be submitted with documentation and specifications on how the equipment conforms to existing installs and programming.

With this courtroom the Court wants to eliminate the V-Panel and DGE control for the judge. We want to go with a ten inch tabletop touchscreen and have a viewing output that any size display can used for the judge and their preference. The existing speakers will be used. We want to upgrade the existing Biamp Audiaflex with the Biamp Tesira model and add a Shure dual wireless microphone to allow for a handheld and lapel to be used at the same time. We will be installing five or six monitors on pedestal mounts in the jury box in this courtroom for jury viewing.

This courtroom has floor boxes but will need electrical installed in the jury box and the box will be extended. The courtroom technology installation will be coordinated with this construction. The award winner for this project will be required to have staff available to meet with the construction contractor for various infrastructure locations and requirements. The rack will be remain in the same location.

Flint District Judge Courtroom 127 Technology Upgrade:

- 1. Contractor walkthrough on August 30, 2016 @11:00 AM in Port Huron Michigan.
- 2. Equipment, Installation and Design Quote due on September 7,, 2016 @5:00 PM EDT
- 3. Quotes must include amount of time needed to complete the project and length of lead time needed for start of project.
- 4. Review of Quotes and Awarding of contract (Subject to the Availability of Funds)
- 5. Installation and programming of equipment (to be approved by COTR)
- 6. Testing of Equipment and control system (to be approved by COTR)
- 7. Training IT and chambers personnel on the use of the equipment.
- 8. Power Point or equivalent presentation on courtroom operation.
- 9. Project sign off on completion of courtroom by COTR

SECURITY REQUIRMENTS

The contractor shall provide competent personnel to perform services under this contract. Work shall be performed in accordance with the best commercial practices, without unnecessary delays or interference with the Court's mission or functions. The Contracting Officer (CO) and the Contracting Officer's Technical Representative (COTR) reserves the right to judge the adequacy of the services provided, and may require the contractor to replace the support resource(s), if deemed inadequate. Formal U.S. Marshal Service security clearances are required prior to the start of any work. Personnel contracted by the Courthouse to provide services covered under this contract will be subjected to security background checks and U.S. Marshal daily inspections when entering the Courthouse. The contractor shall be responsible for completing a contractor clearance document for the contractor's employees performing said services. Upon completion, the document should be returned via fax or email to the Contracting Officer, Bill Truskowski, at 313-202-5843. This document enables the Court to complete a background check on the worker(s) provided by the contractor. The document MUST be completed prior to the contract work start date. Under no circumstances shall any court data and/or property be taken or removed from the court.

DOCUMENTATION REQUIREMENTS

The Contracting Officer (CO) will issue the winning bidder a purchase order based on the Statement of Work. The Court's purchase order will be the ONLY governing document for the procurement of goods and services from the contractor. The contractor shall be responsible for providing an invoice billed to the Court with net 30 day payment terms. The Court does not pay for services prior to them being rendered. Upon receipt of the invoice by the Court, and verification that work has been completed by the Court's Technical Representative, payment will be rendered to the contractor for the specified amount.

CONTRACT CLAUSES

Once the Award has been made, the Court reserves the right to cancel the contract with the contractor for failure to complete the work as specified in this agreement. The person(s) assigned by the contractor to perform the specified work shall not be deemed a U.S. District Court Employee, but shall be an employee of the contractor. The contractor warrants that its employees are adequately covered by workers compensation insurance and that it assumes total responsibility to pay all applicable federal, state and local withholding taxes and unemployment taxes, as well as social security, state disability insurance and all other payroll charges. The contract further warrants that the person(s) performing the work are certified and knowledgeable enough complete the work as specified in the statement of work. Other pertinent information will be provided to the contractor upon acceptance of the winning bid proposal. This information will include the following: 1) exact start and end time of daily work hours, 2) miscellaneous information (example: driving directions, and parking information).

CONTRACT MANAGEMENT

The administration of this contract will require coordination between the contracting officer, the COTR, and the contractor. The individuals cited below will be the court's primary points of contact during the performance period. In no event shall any understanding or agreement, modification, change order, or other matter in deviation from the terms of this contract between the contractor and a person other than the contracting officer be effective or binding upon the Court. All such actions must be formalized by a proper contractual document and signed by all parties.

CONTRACTING OFFICER: All administration of this contract will be effected by the contracting officer:

Bill Truskowski – Procurement Officer United States District Court 231 West Lafayette Blvd – Room 827 Detroit, MI 48226

Phone: 313-234-5362 Fax: 313-202-5843

Email: william truskowski@mied.uscourts.gov

Written communications shall make reference to the contract title and shall be mailed to the above address. The contracting officer is authorized to certify invoices for payment in accordance with the terms of this contract.

CONTRACTING OFFICER TECHNICAL REPRESENTATIVE (COTR):

The COTR for this contract is:

Jay Theisen - Systems Manager

United States District Court 231 West Lafayette Blvd. Detroit, MI 48226

Phone: 313-234-2618

Email: james theisen@mied.uscourts.gov

Upon award, the COTR will be responsible for coordinating the installation and performance of services with regards to this contract. *However, the COTR shall not be authorized to change any terms and conditions of the resultant contract, including, but not limited to, price.*

Responsibilities of the COTR include:

- 1. Monitoring the performance of the contractor's employee(s) under the contract to ensure compliance with the contract requirements.
- 2. Ensuring that changes in work under the contract are not initiated before written authorization or modification is issues by the contracting officer.
- 3. Providing interpretation of the meaning of project specifications.
- 4. Accepting the contractor's equipment and services.

LIMITED USE OF DATA

Performance of this contract may require the contractor's employee(s) to access and use data and information proprietary to the government, which is of such a nature that its dissemination or use, other than in performance of this contract, would be adverse to the interest of the government and/or others. The contractor and/or contactor personnel shall not divulge or release data or information developed or obtained in performance of this contract. The contractor and its employees shall not use, disclose, or reproduce proprietary data other than as required in the performance of this contract.

PLACE OF PERFORMANCE

Delivery of equipment/services reflected on this contract shall be performed at the U.S. District Court, 600 Church Street, Flint, MI 48502. Work will be performed during hours that do not impact the activities of the Court or adjacent courtrooms. Performance may take place during normal work hours (8:00 am to 5:00 pm). However, installation must be restricted to dates that will not interfere with the Judge's schedule. Dates will be provided to the contractor upon successful award of contract.

TYPE OF CONTRACT

This contract shall be awarded on a **Technically Sound/Best Price and Past Performance Basis**. The awarding of this contract is subject to the availability of funds and approval from our Chief Judge. Winning contracting must be available for millwork contractor to review and discuss any and all AV equipment needs for the modification and construction of witness box, lectern and attorney tables.

PROPOSAL DUE DATE

Proposals are due no later than **September 7, 2016 @5:00 PM**. Offers will be subject to FAR 52.214-7, "Late Submissions, Modifications, and Withdrawal of Bids".

Submit a copy of the proposal, via email or fax to:

Bill Truskowski – Contracting Officer United States District Court 231 West Lafayette Blvd – Room 827

Detroit, MI 48226

Phone: 313-234-5362 Fax: 313-202-5843 Email: william truskowski@mied.uscourts.gov



ATTACHMENT A Flint District Judge - Courtroom 127 Technology Upgrade

The U.S. District Court – Michigan Eastern District's standard for courtroom AV equipment has been to use Crestron, Biamp and Extron. Equivalent equipment can be quoted and will be considered. Equivalent equipment quotes must be submitted with documentation and specifications on how the equipment conforms to existing installs and programming.

Award winning contractor for this project must be able to attend construction meetings as necessary to coordinate installation and to provide requirements to construction contractor.

Spare AUDIO cable to be pulled to each floor box location and judge and clerks bench and witness box.

Spare CAT cable to be pulled to each floor box location and judge and clerks bench and terminate.

Pull Court supplied CAT cable from rack to network switch and terminate.

Pull string to be pulled to each floor box location and judge and clerks bench from rack.

System to be thoroughly tested and vetted by AV contractor before handoff to court.

Court to receive ALL source code and must approve ALL programming code

Presentation (PPS or equivalent) with updated images and instruction that can be provided to chambers to give to attorney's for operational purposes.

An Xpanel.exe of the control panel needs to be provided by contractor.

Sign off on courtroom completion by COTR.

AUDIO:

1 each - Biamp Tesira to replace existing Audiaflex. With VOIP card and max I/O cards (same amount of I/O as previous Tesira systems) or equivalent.

1 each - New Amplifier.

1 each - wireless microphone with handheld and lavalier microphone that can be utilized at the same time

Replace or add courtroom speakers?. To be discussed.

CONTROL:

Crestron Control System or Equivalent with 8x8 or 16x16 as necessary for all inputs/outputs.

RACK:

1 each – New Rack With: Smoked Glass Door, Wood Top and Sides, Back, Casters and UPS. Rack mounted power as necessary. - Long enough wire whips to pull rack out for service.

1 each - 24 Port Switch

2 each - 24 port patch panel or 1 each - 48 port patch panel

ANNOTATION:

Extron or equivalent HDMI annotation controller (latest release) with necessary USB extenders and hubs.

Attorney Tables - Prosecution & Defense

2 each - Planar 22" Touchscreen or Equivalent(mounted on fliptop).

2 each - DM201c input or equivalent to be mounted under each attorney table

2 each - Crestron Fliptop Control with Electrical Power, HDMI, VGA and Audio Retractors or Equivalent

6 each - XLR Microphone jacks. Mounted in bottom row of floor box. To be programmed as

Prosecution 1. 2&3 and Defense 1.2&3

4 each – Shure 18" Gooseneck microphones or equivalent

Judge Bench:

1 each - Crestron TSW-1050-B-S 10" Tabletop Touch Panel or Equivalent

1 each – 22" widescreen Video display - VX2252mh or Equivalent for viewing and wiring.

1 each – Use existing bench speaker?

2 each - XLR Microphone jack (Gooseneck & Boundary)

1 each - Shure 18" Gooseneck microphones or equivalent

1 each – Shure boundary microphone or equivalent

Clerk Bench:

1 each - 22" widescreen Video display - VX2252mh or Equivalent for viewing and wiring.

1 each – Crestron DM201c input or Equivalent

1 each - XLR Microphone jack

1 each – Shure 18" Gooseneck microphones or equivalent

Add bench speaker?

Court Reporter:

1 each - Crestron TSW-1050-B-S 10" Tabletop Touch Panel or Equivalent

1 each - 22" widescreen Video display - VX2252mh or Equivalent for viewing

1 each - FTR Audio Wiring for digital recordings (4 audio lines)

1 each – Audio line for Practical Devices XM4 Headphone amp.

1 each - Audio line for laptop recording

1 each – Practical Devices XM4 Headphone Amp or equivalent. Or better solution.

Lectern/Podium: May be replaced with new

1 each - DM201c input (or equivalent to fit in floor box)

1 each - Spare CAT cable pulled

1 each - XLR Microphone jack

1 each - Shure 18" Shock Mount Microphone or equivalent

Witness Box:

1 each – Planar 22" Touchscreen or Equivalent with tabletop mount.

1 each – Crestron DM201c input or Equivalent

1 each - XLR Microphone jack

1 each – Shure 18" Shock Mount Microphone or equivalent

Portable VTC wiring to be located in witness box - 1 each - Crestron Scaler/Receiver and DM201c input or Equivalent for VTC portable display

Jury Box:

5 or 6 each – 22" Monitors or Equivalent

5 or 6 each = Pedestal Mounts with tilt arm. See pics.

1 each - XLR Microphone jack to be mounted on outside of jury box with cable to rack.

Probation Table:

FSR box to be installed

1 each – Shure 18" Gooseneck microphones or equivalent

Gallery Display:

1 each – Crestron Scaler/Receiver or Equivalent and wiring for portable TV on cart

Misc:

Cleanup and remove any unnecessary existing cabling under judge and clerk bench. Install blank plates over unused XLR plates.

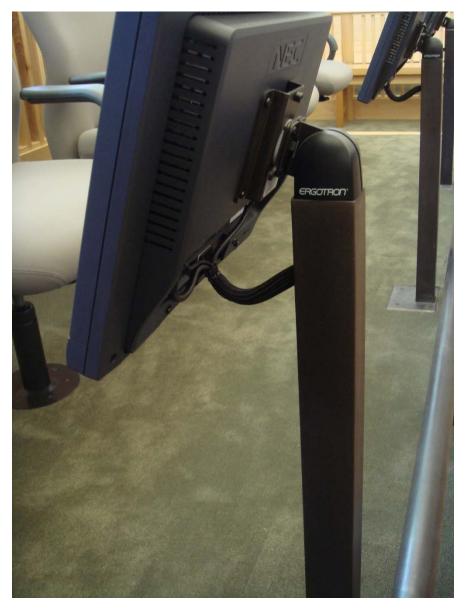
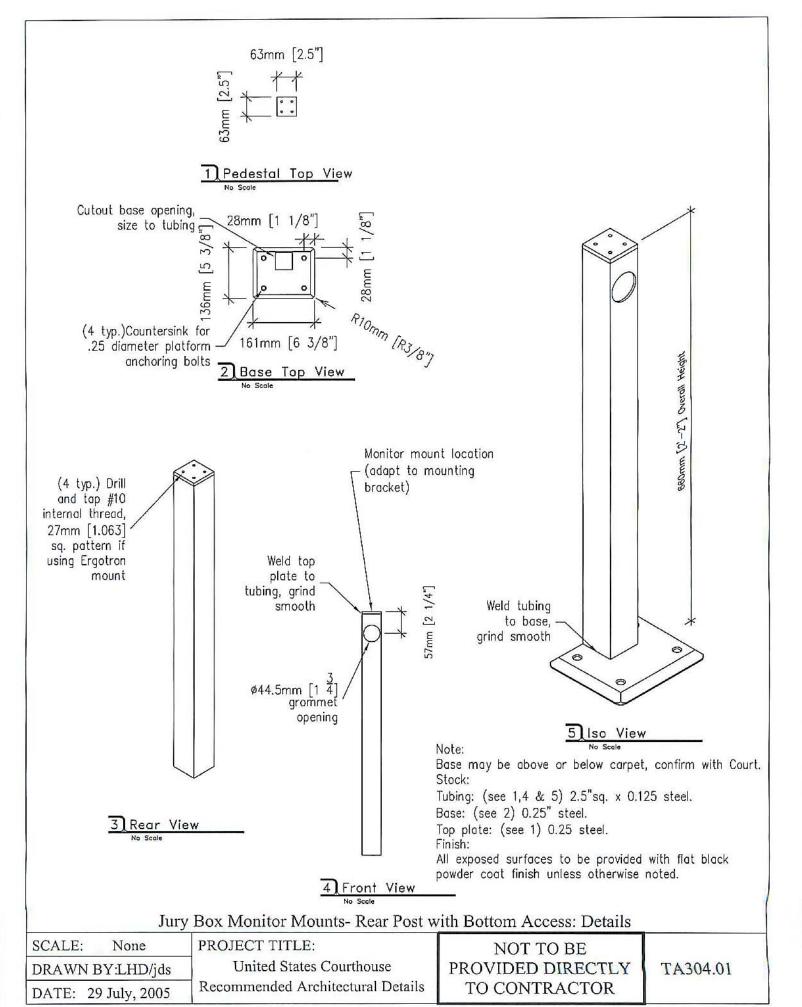
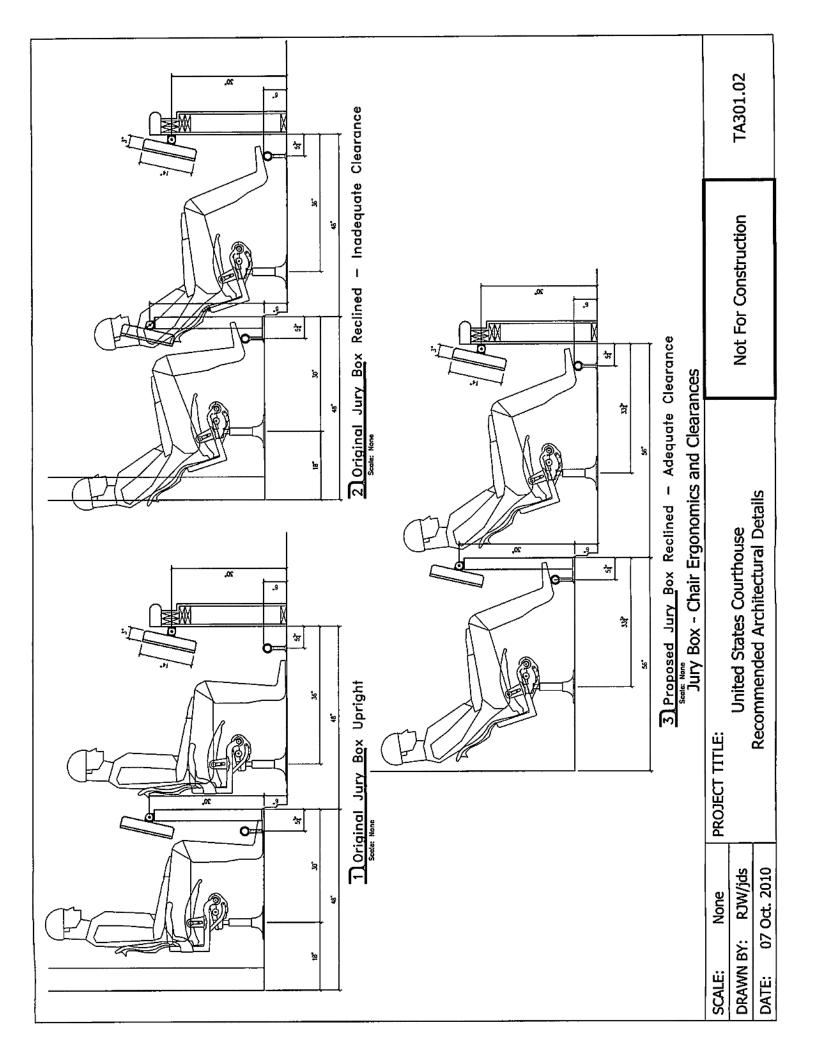


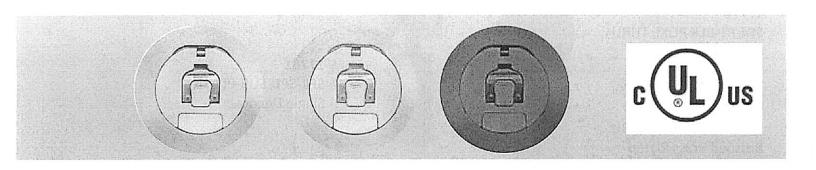
Figure 9 Typical 23" wide screen on post mount in jury box

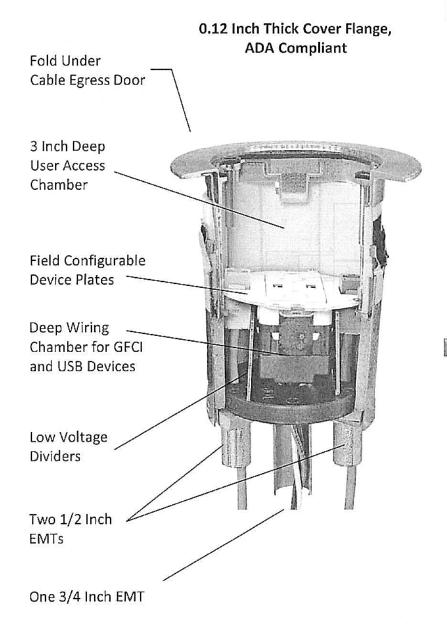




SmartFit 4" Fire-Rated Poke-Thru







Description:

FSR's new Fire-Rated "Poke-Thru" floor boxes provide aesthetics and installation ease. These sturdy core hole products combine flexibility via recessed mounting bracketry to accommodate a wide assortment of power, data and audio video connection options. Covers are available in three architectural finishes: Brushed Aluminum, Brushed Brass and Black providing an attractive appearance with superior durability. The entire cover door swings open 180° and the smaller cable access doors fold down for cable egress while the cover door is secure.

Features:

- Step down installation
- Maintains concrete floor fire rating up to two hours
- Junction box standard, 27 cubic inches
- (1) ¾ inch conduit for power and (2) ½ inch conduits for low voltage
- 0.12 Inch Thick Cover Flange, ADA Compliant

FSR Inc.

244 Bergen Boulevard, Woodland Park, NJ 07424 Phone: 973.785.4347 Fax: 973.785.4207 Web: www.fsrinc.com E-mail: sales@fsrinc.com

4" Fitting Includes Junction Box and Dividers

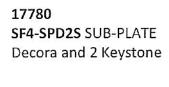
Sub Plates for 4" Fittings

17777

17779

SF4-PT-ALM POKE THRU Brushed Aluminum



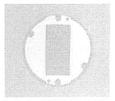




17778 SF4-PT-BLK POKE THRU Black Powder Coat



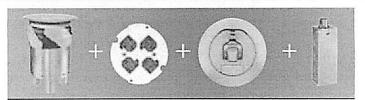
17781 SF4-SPD SUB-PLATE Single Decora

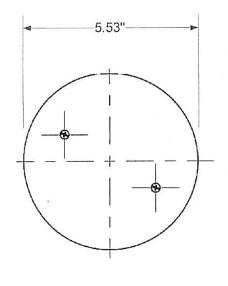


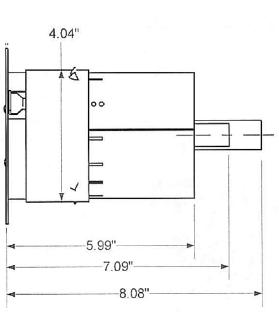
SF4-PT-BRS POKE THRU Brushed Brass Plated

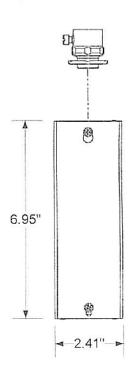
One-Piece Pre-Wired, Quad Receptacle, Recessed Connectivity, Fire-Rated Poke-Through for Power Only

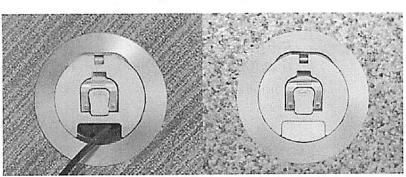
17774 SF4-CPT-QAC-ALM Brushed Aluminum
 17775 SF4-CPT-QAC-BLK Black Powder Coat
 17776 SF4-CPT-QAC-BRS Brushed Brass Plated









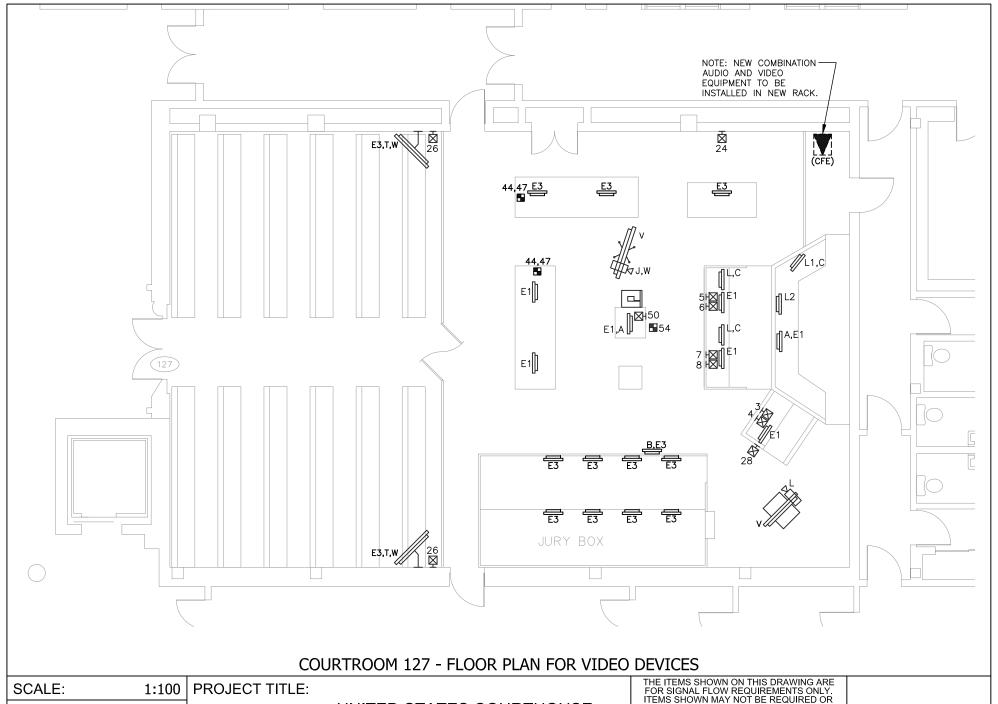


Carpet

Terrazzo

FSR Inc.

244 Bergen Boulevard, Woodland Park, NJ 07424 Phone: 973.785.4347 Fax: 973.785.4207 Web: www.fsrinc.com E-mail: sales@fsrinc.com

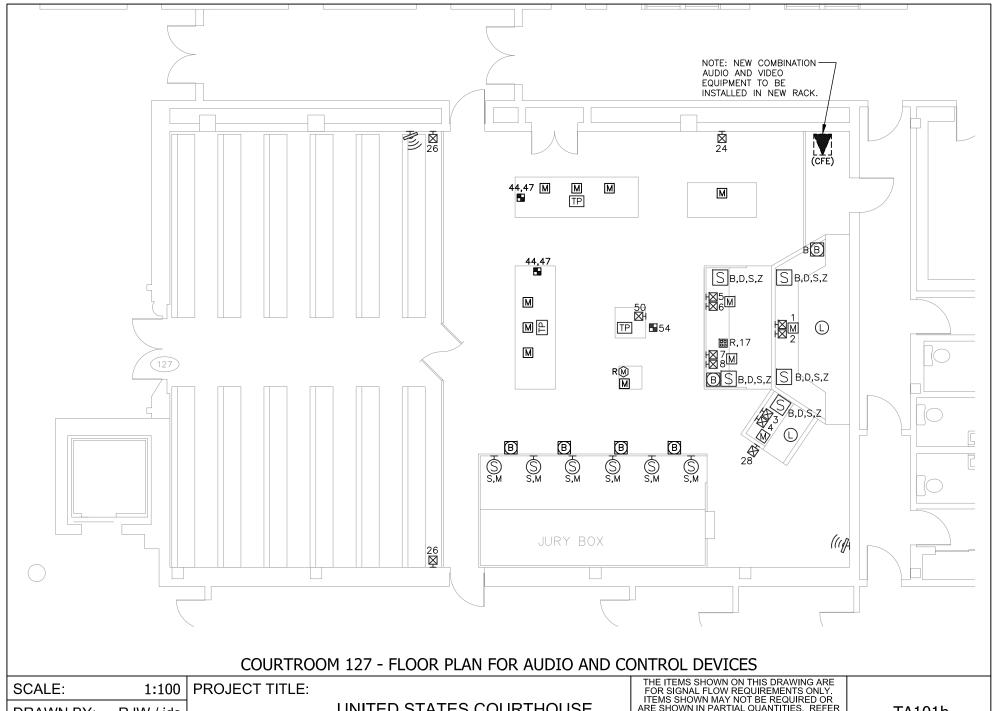


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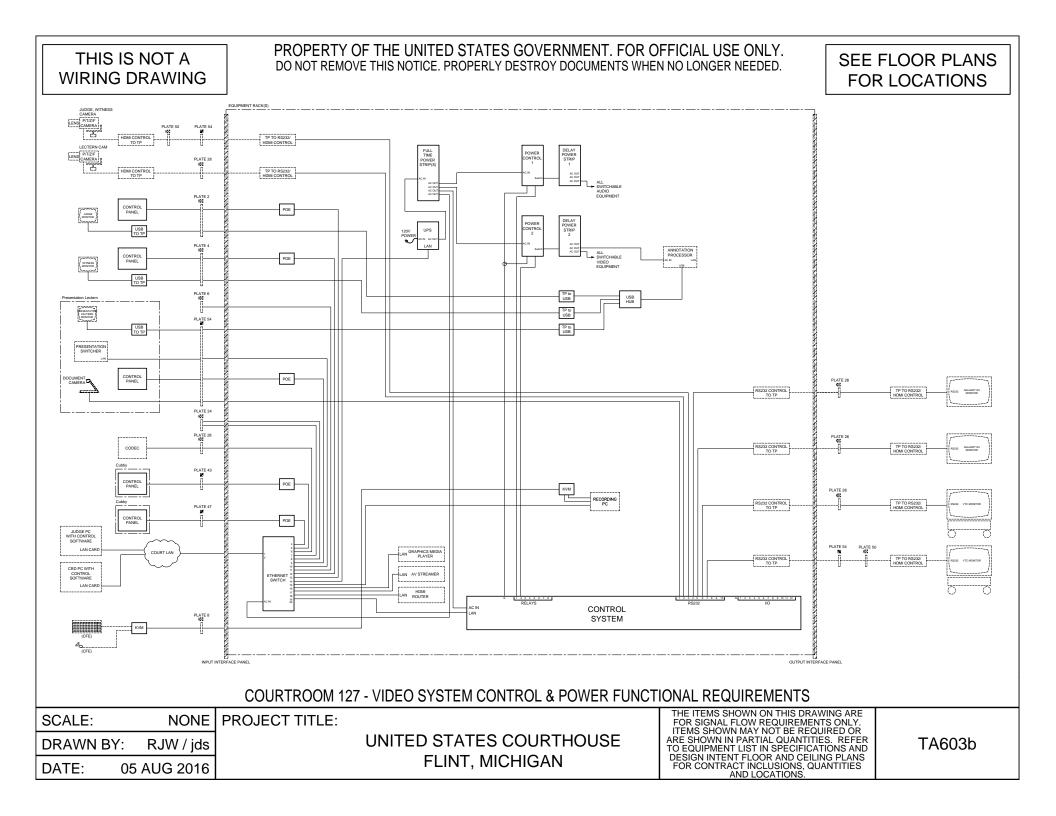


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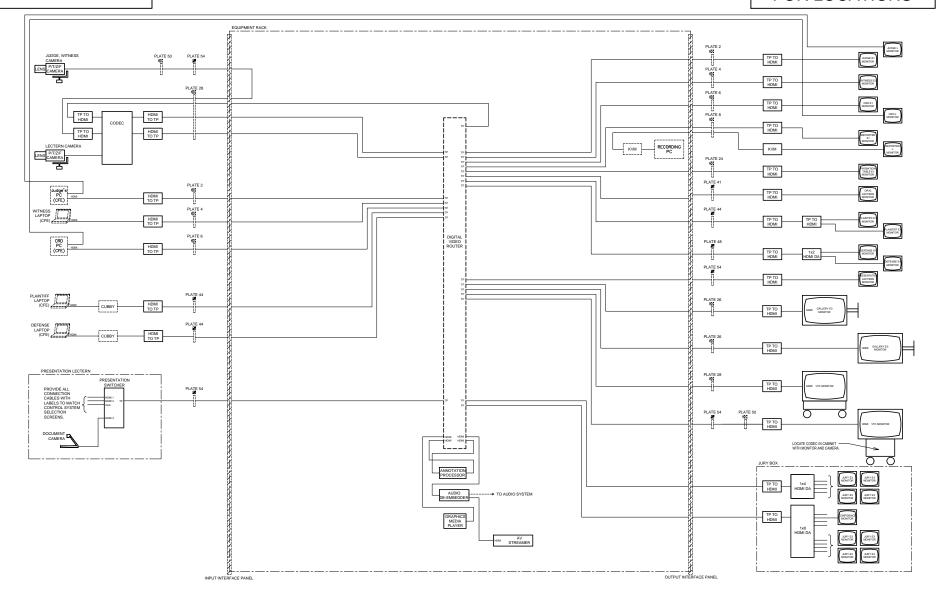
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COURTROOM 127 - VIDEO ARGUMENT PRESENTATION SYSTEM FUNCTIONAL REQUIREMENTS

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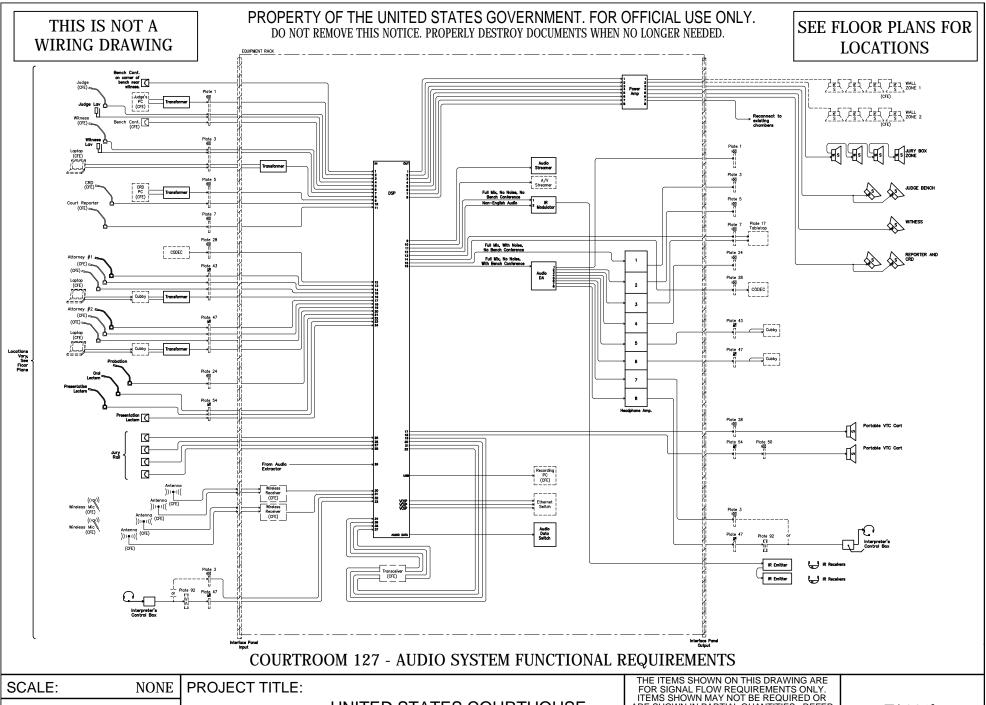
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PROJECT TITLE:

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05 AUG 2016

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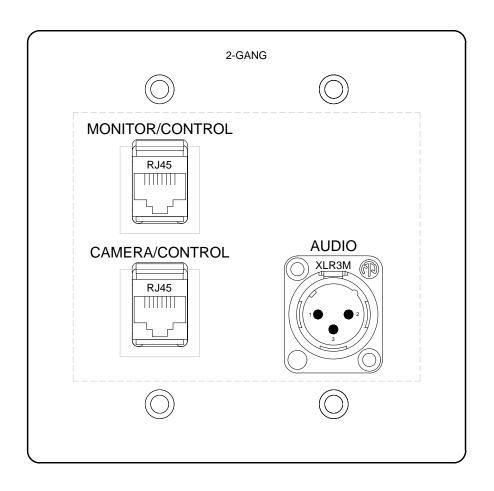
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SCHE	DULE B-1				
CLIN	ltem	Make/Model or Equivalent	Qty	Unit Price	Total Price
Courtre	oom 127				
	oom Audio Systems Functional Requireme	·			
1062	Amplifier, 1:1x10 or 2:1x5 balanced audio distribution	Kramer Electronics Ltd. VM- 1610	1		
1063	Amplifier, 100 watt 8 channel 70V audio power	QSC Audio CX108V	1		
1064	Amplifier, 8-channel high-power headphone distribution	Behringer (Music Group) Powerplay PRO-8 HA8000	1		
1065	Bracket, TX series surface mounting	RDL - Radio Design Labs MB-1	5		
1066	Cabling, All expendables, misc materials, connectors and	Custom Cabling and Connectors	1		
1067	Card, 4 channel mic/line input with acoustic echo cancellation per channel input card	Biamp Systems SEC-4	7		
1068	Card, 4 channel server I/O output	Biamp Systems SOC-4	2		
1069	Expander, 4 channel mic/line output	Biamp Systems EX-OUT	2		
1070	Headset, Single ear with boom mic	Telex Communications, Inc. PH-150R	1		
1071	Interface, SIP compliant VoIP Audia frame	Biamp Systems VoIP-2	3		
1072	Loudspeaker, 2"x2"x24" miniature line array 70V	Innovox Audio, LLC MLA-16 BLK- 70V	5		
1073	Loudspeaker, 2-way black small format 80W powered	Behringer (Music Group) CE500A-BK	2		
1074	Loudspeaker, Custom backplate and a pair of low profile 8 ohm 4" automotive	JL Audio TR400-Cxi	3		
1075	Microphone, Black boundary mountable cardiod	Shure Incorporated CVB-B/C	4		
1076	Microphone, Black omnidirectional boundary	Shure Incorporated MX391B/O	2		
1077	Microphone, Cardiod switched 18" gooseneck desk stand	Shure Incorporated MX418D/C	4		
1078	Microphone, Super cardiod wired lavaliere	Shure Incorporated MX184	2		
1079	Microphone, Wireless with RF shielding lapel	Revolabs 01-EXEMICEX-BLK-11	4		
1080	Panel, Interpreter box and control	Quantum 1952 Interpreter Control (P/N 001952)	1		
1081	Server, 48 channels of I/O and 1 DSP card with AVB interface	Biamp Systems SERVER-IO AVB	1		
1082	Server, Fixed AEC 12x8 with USB	Biamp Systems TesiraFORTÉ AVB CI	1		

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COURTROOM 127 - PLATE #50 - FUNCTIONAL REQUIREMENTS

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PROJECT TITLE:

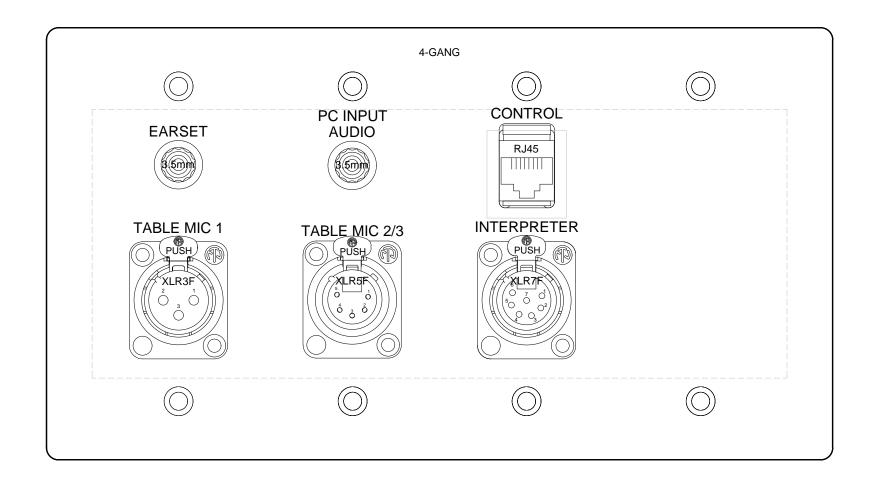
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COURTROOM 127 - PLATE #47 - FUNCTIONAL REQUIREMENTS

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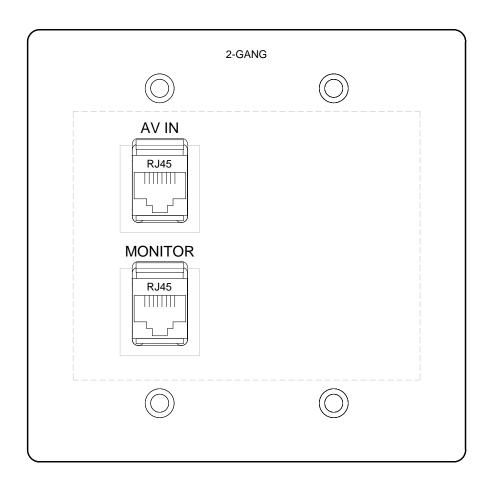
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COURTROOM 127 - PLATE #44 - FUNCTIONAL REQUIREMENTS

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PROJECT TITLE:

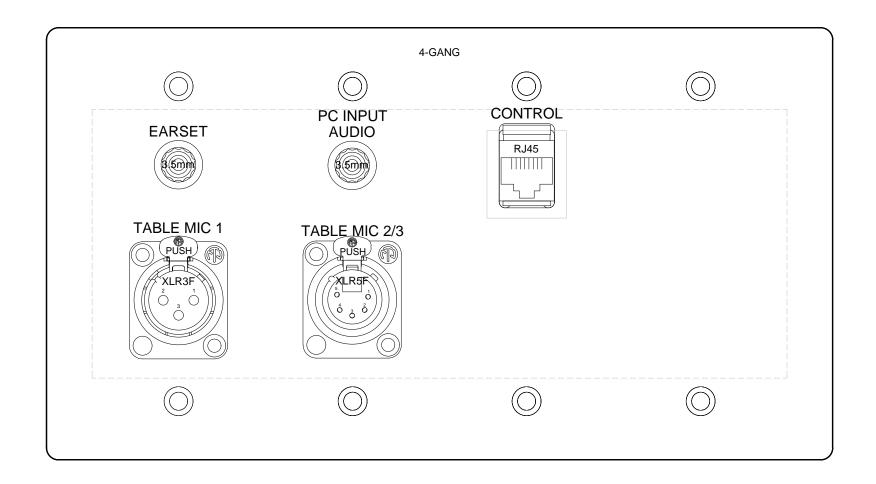
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COURTROOM 127 - PLATE #43 - FUNCTIONAL REQUIREMENTS

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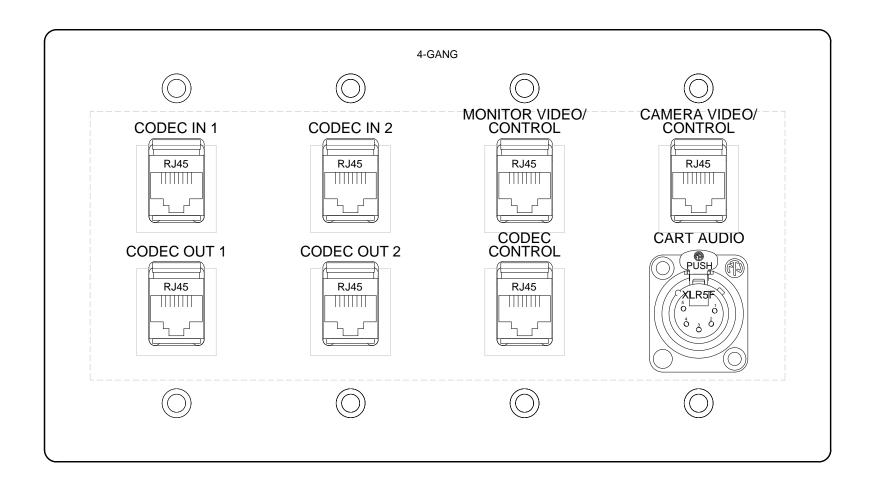
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COURTROOM 127 - PLATE #28 - FUNCTIONAL REQUIREMENTS

SCALE: NONE

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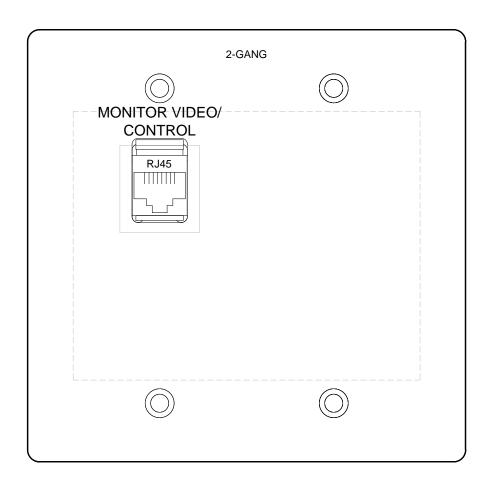
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SEE FLOOR PLANS FOR LOCATIONS



COURTROOM 127 - PLATE #26 - FUNCTIONAL REQUIREMENTS

SCALE: NONE

DRAWN BY: RJW / jds

DATE: 05 AUG 2016

PROJECT TITLE:

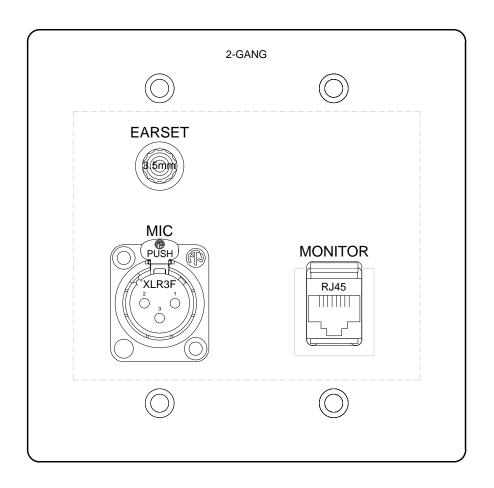
UNITED STATES COURTHOUSE FLINT, MICHIGAN

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SEE FLOOR PLANS FOR LOCATIONS



COURTROOM 127 - PLATE #24 - FUNCTIONAL REQUIREMENTS

SCALE: NONE

DRAWN BY: RJW / jds

DATE: 05 AUG 2016

PROJECT TITLE:

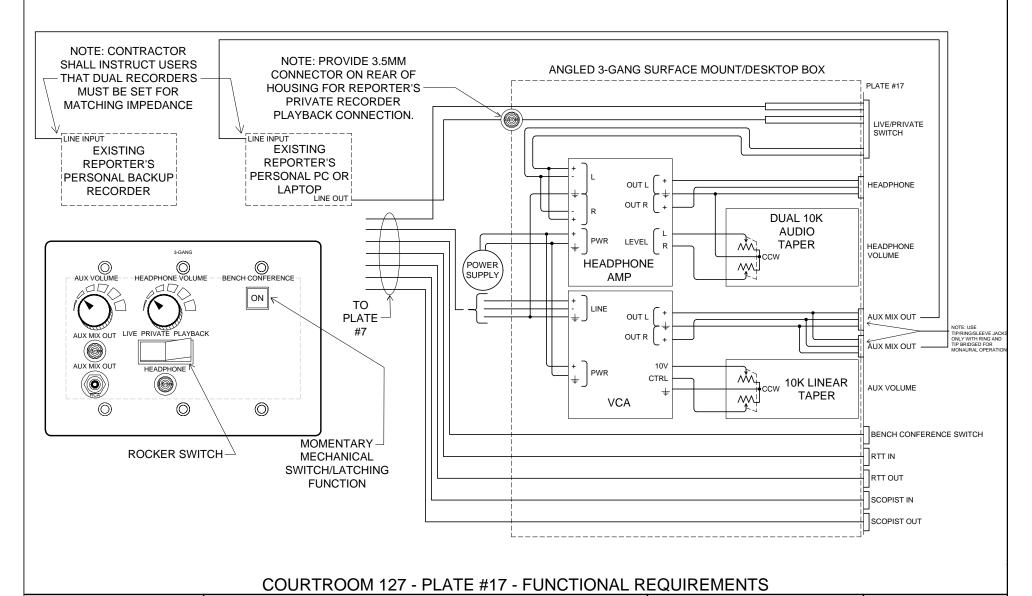
UNITED STATES COURTHOUSE FLINT, MICHIGAN

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TA724b

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SEE FLOOR PLANS FOR LOCATIONS



SCALE: NONE

DRAWN BY: RJW / jds

DATE: 05 AUG 2016

PROJECT TITLE:

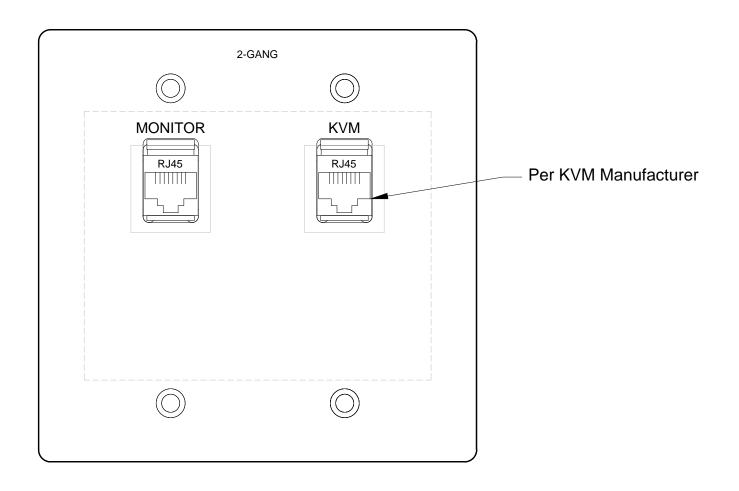
UNITED STATES COURTHOUSE FLINT, MICHIGAN

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TA717b

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SEE FLOOR PLANS FOR LOCATIONS



COURTROOM 127 - PLATE #8 - FUNCTIONAL REQUIREMENTS

SCALE: NONE

DRAWN BY: RJW / jds

DATE: 05 AUG 2016

PROJECT TITLE:

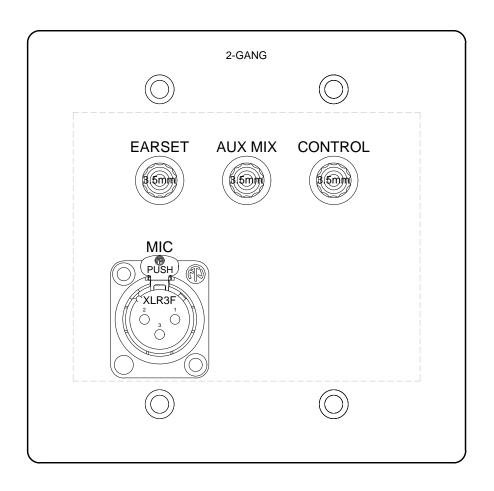
UNITED STATES COURTHOUSE FLINT, MICHIGAN

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TA708b

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SEE FLOOR PLANS FOR LOCATIONS



COURTROOM 127 - PLATE #7 - FUNCTIONAL REQUIREMENTS

SCALE: NONE

DRAWN BY: RJW / jds

DATE: 05 AUG 2016

PROJECT TITLE:

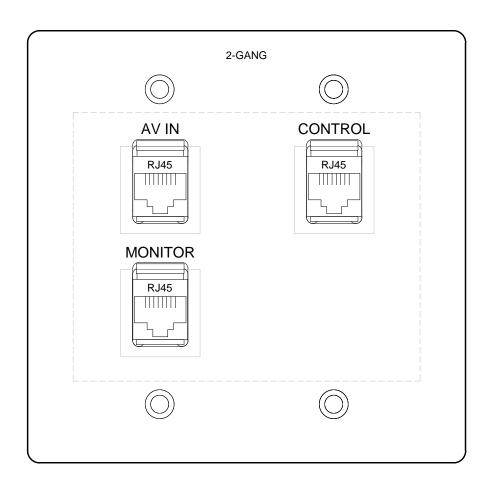
UNITED STATES COURTHOUSE FLINT, MICHIGAN

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TA707b

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SEE FLOOR PLANS FOR LOCATIONS



COURTROOM 127 - PLATE #6 - FUNCTIONAL REQUIREMENTS

SCALE: NONE

DRAWN BY: RJW / jds

DATE: 05 AUG 2016

PROJECT TITLE:

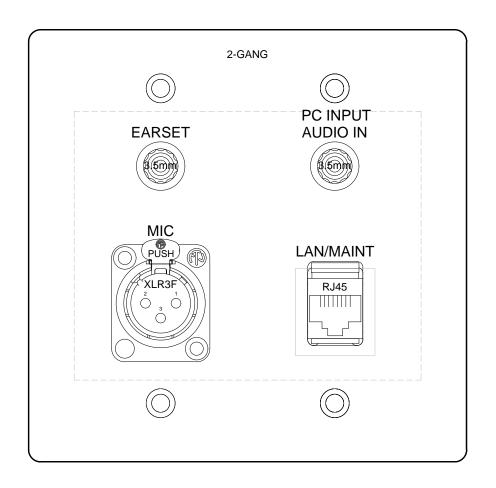
UNITED STATES COURTHOUSE FLINT, MICHIGAN

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SEE FLOOR PLANS FOR LOCATIONS



COURTROOM 127 - PLATE #5 - FUNCTIONAL REQUIREMENTS

SCALE: NONE

DRAWN BY: RJW / jds

DATE: 05 AUG 2016

PROJECT TITLE:

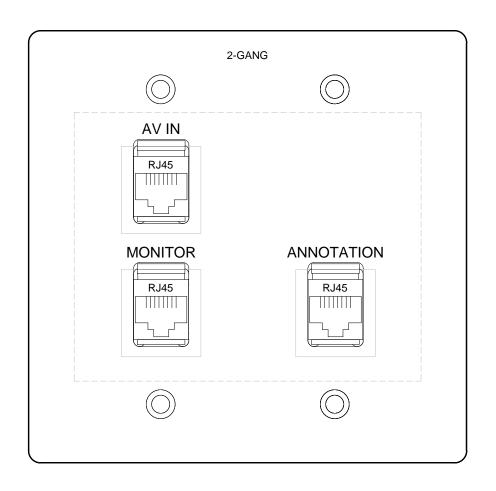
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SEE FLOOR PLANS FOR LOCATIONS



COURTROOM 127 - PLATE #4 - FUNCTIONAL REQUIREMENTS

SCALE: NONE

DRAWN BY: RJW / jds

DATE: 05 AUG 2016

PROJECT TITLE:

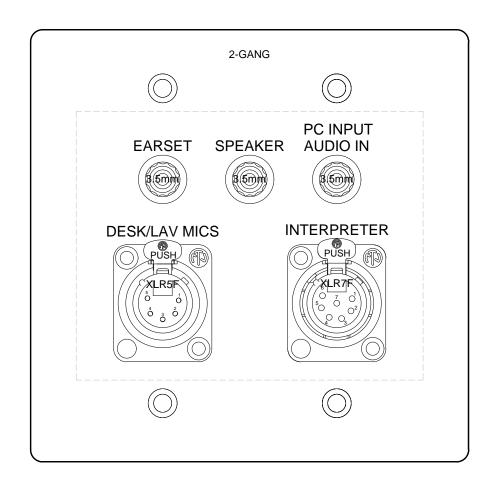
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SEE FLOOR PLANS FOR LOCATIONS



COURTROOM 127 - PLATE #3 - FUNCTIONAL REQUIREMENTS

SCALE: NONE

DRAWN BY: RJW / jds

DATE: 05 AUG 2016

PROJECT TITLE:

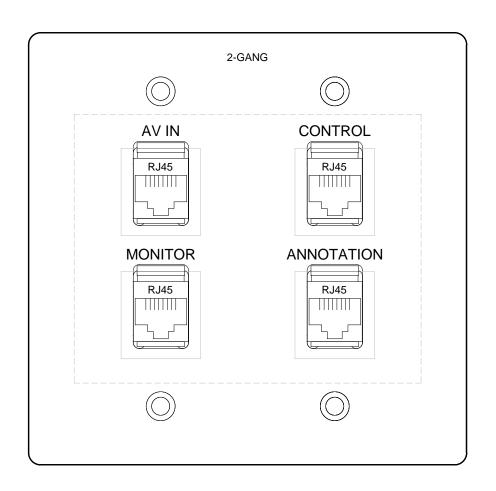
UNITED STATES COURTHOUSE FLINT, MICHIGAN

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TA703b

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SEE FLOOR PLANS FOR LOCATIONS



COURTROOM 127 - PLATE #2 - FUNCTIONAL REQUIREMENTS

SCALE: NONE

DRAWN BY: RJW / jds

DATE: 05 AUG 2016

PROJECT TITLE:

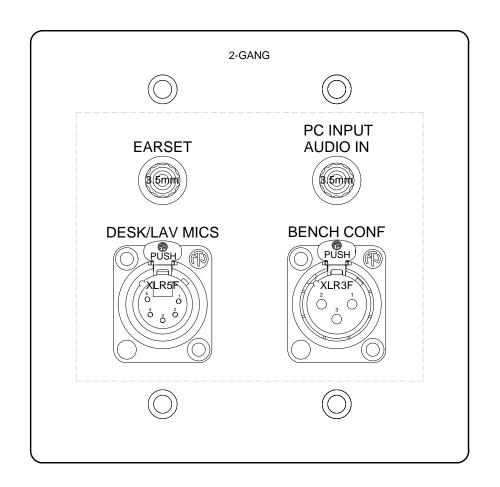
UNITED STATES COURTHOUSE FLINT, MICHIGAN

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TA702b

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SEE FLOOR PLANS FOR LOCATIONS



COURTROOM 127 - PLATE #1 - FUNCTIONAL REQUIREMENTS

SCALE: NONE

DRAWN BY: RJW / jds

DATE: 05 AUG 2016

PROJECT TITLE:

UNITED STATES COURTHOUSE FLINT, MICHIGAN

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TA701b

SCHE	DULE B-1				
CLIN	Item	Make/Model or Equivalent	Qty	Unit Price	Total Price
Plate #	44 * Refer to drawing TA744				
1191	Plate - See Drawings for Details	Custom N/A	2		
Plate #	50 * Refer to drawing TA750		·		
1192	Plate - See Drawings for Details	Custom N/A	1		
Plate #	54 * Refer to drawing TA754		·		
1193	Plate - See Drawings for Details	Custom N/A	1		
	Base Bid Video Systems Materials Subtotal (Base Bid)				
	Base Bid Video Systems Misc. Materials, Freight, Tax Subtotal (Base Bid)				
	Base Bid Video Systems Programming, Wiring, Installation, and Misc. Labor Subtotal (Base Bid)				
	Base Bid Video Systems System Subtotal (Base Bid)				
Base E	Bid Video Systems Summary (Base Bid)				
	Total Equipment/Material				
2000	Total Programming, Wiring, Installation, and Misc. Labor				
3000	OPTIONAL MAINTENANCE				
3001	Year 1			Warranty	
3002	Year 2				
3003	Year 3				
3004	Year 4				
	Total Optional Maintenance				
4000	Fixed Price Line Item for Travel				
4001	Number of Trips x Cost per trip				
	TOTAL PRICE FOR SYSTEM				

SCHE	DULE B-1				
CLIN	Item	Make/Model or Equivalent	Qty	Unit Price	Total Price
1174	Router, Cage for 16 slot by 16 slot	Crestron Electronics DM- MD16X16	1		
1175	Stand, 100x100 low profile VESA monitor table	Ergomart EGT SL102-100	5		
1176	Streamer, Rich media HDMI Content and HD-SDI camera recorder and	Crestron Electronics CAPTURE-HD-PRO	1		
1177	Switcher, Multi-format by DM and HDMI with audio	Crestron Electronics DMPS3- 100-C	1		
1178	Transmitter, DigitalMedia 8G STP	Crestron Electronics DM-TX-4K-202-C	8		
Plate #	2 * Refer to drawing TA702				
1179	Box, 2-Gang black surface mount wall back	Extron Electronics EWB 102 (60-1162-02)	1		
1180	Plate - See Drawings for Details	Custom N/A	1		
Plate #	4 * Refer to drawing TA704		1		1
1181	Box, 2-Gang black surface mount wall back	Extron Electronics EWB 102 (60-1162-02)	1		
1182	Plate - See Drawings for Details	Custom N/A	1		
Plate #	6 * Refer to drawing TA706				
1183	Box, 2-Gang black surface mount wall back	Extron Electronics EWB 102 (60-1162-02)	1		
1184	Plate - See Drawings for Details	Custom N/A	1		
Plate #	8 * Refer to drawing TA708				
1185	Box, 2-Gang black surface mount wall back	Extron Electronics EWB 102 (60-1162-02)	1		
1186	Plate - See Drawings for Details	Custom N/A	1		
Plate #	24 * Refer to drawing TA724				
1187	Plate - See Drawings for Details	Custom N/A	1		
Plate #	26 * Refer to drawing TA726			1	<u> </u>
1188	Plate - See Drawings for Details	Custom N/A	2		
Plate #	28 * Refer to drawing TA728		1	1	1
1189	Box, 4-Gang black surface mount wall back	Extron Electronics EWB 104 (60-1164-02)	1		
1190	Plate - See Drawings for Details	Custom N/A	2		

SCHE	DULE B-1			
CLIN	Item	Make/Model or Equivalent	Qty Unit Price	Total Price
Courtre	oom 127			
Courtre	oom Video Argument Presentation Systems	s Functional Requirements * Re	fer to drawing	ГА602
1153	Amplifier, 1x2 HDMI 4K distribution	Crestron Electronics HD-DA2- 4K-E	2	
1154	Amplifier, 1x4 HDMI 4K distribution	Crestron Electronics HD-DA4- 4K-E	1	
1155	Amplifier, 1x8 HDMI 4K distribution	Crestron Electronics HD-DA8- 4K-E	1	
1156	Annotator, HDCP compliant with DTP	Extron Electronics Annotator 300 (60-1316-01)	1	
1157	Camera, 1080p HDMI PTZ video conferencing	LifeSize Communications Camera 10x	2	
1158	Camera, 1-CCD Hi-Res evidence	WolfVision, Inc. VZ-8 Plus (4)	1	
1159	Card, 1 Channel HDBT input	Crestron Electronics DMC-4K-C-HDCP2	8	
1160	Card, 1-channel HDMI input	Crestron Electronics DMC-4K-HD-HDCP2	2	
1161	Card, 2-Channel HDMI output	Crestron Electronics DMC-4K-HDO	1	
1162	Card, 2-Channel scaling HDBT output	Crestron Electronics DMC-4K-CO-HD-HDCP2	7	
1163	Cart, Metal shelf and black 32"-60" flat panel portable	Peerless Industries, Inc SR560M	1	
1164	Cart, Presentation/Videoconferencing Black	Video Furniture International C2736-42	1	
1165	Codec, Dual camera and dual display rack mount VTC	LifeSize Communications ICON 800	1	
1166	Display, 55" 1920x1080 RS-232 controlled LED flat panel	Samsung DB55E	4	
1167	Extractor, HDMI audio	Extron Electronics HAE 100 (60-1075-01)	1	
1168	Filter, 20 1/16" W x 11 5/16" H 23.0" 16:9 Display privacy	3M Visual Systems Division PF23.0W9	2	
1169	Monitor, 22" 16:9 USB interface optical touch screen video	Planar PXL2230MW	3	
1170	Monitor, 23" 16:9 1920x1080 LED black	Hewlett-Packard E232-BLK	19	
1171	Mount, Single arm swing out black universal large flat panel wall	Chief Manufacturing Inc. PWRUB	2	
1172	Player, HD real-time media	BrightSign BrightSign HD1022	1	
1173	Receiver, DigitalMedia 4K/8G and room controller 100	Crestron Electronics DM-RMC- 4K-100-C	16	

SCHE	DULE B-1				
CLIN	ltem	Make/Model or Equivalent	Qty	Unit Price	Total Price
1147	Plate - See Drawings for Details	Custom N/A	1		
Plate #	15 * Refer to drawing TA715		I		
1148	Box, 2-Gang black surface mount wall back	Extron Electronics EWB 102 (60-1162-02)	1		
1149	Plate - See Drawings for Details	Custom N/A	1		
Plate #	444 * Refer to drawing TA744		I		
1150	Plate - See Drawings for Details	Custom N/A	2		
Plate #	50 * Refer to drawing TA750				
1151	Plate - See Drawings for Details	Custom N/A	1		
Plate #	54 * Refer to drawing TA754				
1152	Plate - See Drawings for Details	Custom N/A	1		
	Base Bid Video Systems Materials Subtotal (Base Bid)				
	Base Bid Video Systems Misc. Materials, Freight, Tax Subtotal (Base Bid)				
	Base Bid Video Systems Programming, Wiring, Installation, and Misc. Labor Subtotal (Base Bid)				
	Base Bid Video Systems System Subtotal (Base Bid)				

CLIN	Item	Make/Model or Equivalent	Qty Unit Price	Total Price
	Systems		acy omer noo	1014111100
	room 114			
Courtr	oom Video Argument Presentation Systems	s Functional Requirements * Re	efer to drawing	ГА602
1128	Camera, 1080p HDMI PTZ video conferencing	LifeSize Communications Camera 10x	3	
1129	Card, 1 Channel HDBT input	Crestron Electronics DMC-4K-C-HDCP2	8	
1130	Card, 1-channel HDMI input	Crestron Electronics DMC-4K-HD-HDCP2	2	
1131	Card, 2-Channel HDMI output	Crestron Electronics DMC-4K-HDO	2	
1132	Card, 2-Channel scaling HDBT output	Crestron Electronics DMC-4K-CO-HD-HDCP2	3	
1133	Cart, Metal shelf and black 32"-60" flat panel portable	Peerless Industries, Inc SR560M	2	
1134	Codec, Dual camera and dual display rack mount VTC	LifeSize Communications ICON 800	1	
1135	Display, 55" 1920x1080 RS-232 controlled LED flat panel	Samsung DB55E	3	
1136	Extractor, HDMI audio	Extron Electronics HAE 100 (60-1075-01)	1	
1137	Monitor, 23" 16:9 1920x1080 LED black	Hewlett-Packard E232-BLK	3	
1138	Mount, Tilt only large flat panel wall	Chief Manufacturing Inc. LTMU	2	
1139	Player, HD real-time media	BrightSign BrightSign HD1022	1	
1140	Receiver, DigitalMedia 4K/8G and room controller 100	Crestron Electronics DM-RMC- 4K-100-C	5	
1141	Router, Cage for 16 slot by 16 slot	Crestron Electronics DM- MD16X16	1	
1142	Switcher, HDMI and VGA x DM out presentation	Crestron Electronics DM-TX-4K-302-C	1	
1143	Transmitter, DigitalMedia 8G STP	Crestron Electronics DM-TX-4K-202-C	7	
Plate #	[‡] 2 * Refer to drawing TA702	1		
1144	Box, 2-Gang black surface mount wall back	Extron Electronics EWB 102 (60-1162-02)	1	
1145	Plate - See Drawings for Details	Custom N/A	1	
Plate #	t6 * Refer to drawing TA706			1
1146	Box, 2-Gang black surface mount wall back	Extron Electronics EWB 102 (60-1162-02)	1	

SCHE	DULE B-1				
CLIN	ltem	Make/Model or Equivalent	Qty	Unit Price	Total Price
1124	Switch, DPDT rocker selector	Wiring Products 7700024	1		
1125	Switch, SPST momentary with amber lens and 24 VDC square low voltage push button	Various See drawing	1		
Plate #	43 * Refer to drawing TA743				
1126	Plate - See Drawings for Details	Custom N/A	1		
Plate #	47 * Refer to drawing TA747				<u> </u>
1127	Plate - See Drawings for Details	Custom N/A	1		
	Base Bid Audio Systems Materials Subtotal (Base Bid)				
	Base Bid Audio Systems Misc. Materials, Freight, Tax Subtotal (Base Bid)				
	Base Bid Audio Systems Programming, Wiring, Installation, and Misc. Labor Subtotal (Base Bid)				
	Base Bid Audio Systems System Subtotal (Base Bid)				
Base E	Bid Audio Systems Summary (Base Bid)				
	Total Equipment/Material				
2000	Total Programming, Wiring, Installation, and Misc. Labor				
3000	OPTIONAL MAINTENANCE				_
3001	Year 1			Warranty	
3002	Year 2				
3003	Year 3				
3004	Year 4				
	Total Optional Maintenance				
4000	Fixed Price Line Item for Travel				
4001	Number of Trips x Cost per trip				
	TOTAL PRICE FOR SYSTEM			•	

	EDULE B-1	<u> </u>	-		
	ltem	Make/Model or Equivalent	Qty	Unit Price	Total Price
1104	Switch, 24 port 10/100/1000 network	Cisco Systems, Inc. Catalyst 2960G-24TC-L	1		
1105	Transmitter, USB to TP	Extron Electronics USB Extender Plus T (60-1471-12)	3		
1106	UPS, 1000 VA 8 15A outlet IP enabled with battery backup rack mountable	Middle Atlantic Products UPS- 1000R-8IP	1		
Plate #	3 * Refer to drawing TA703				
1107	Box, 2-Gang black surface mount wall back	Extron Electronics EWB 102 (60-1162-02)	1		
1108	Plate - See Drawings for Details	Custom N/A	1		
Plate #	5 * Refer to drawing TA705				
	Box, 2-Gang black surface mount wall back	Extron Electronics EWB 102 (60-1162-02)	1		
1110	Plate - See Drawings for Details	Custom N/A	1		
Plate #	7 * Refer to drawing TA707				
	Box, 2-Gang black surface mount wall back	Extron Electronics EWB 102 (60-1162-02)	1		
1112	Plate - See Drawings for Details	Custom N/A	1		
Plate #	t17 * Refer to drawing TA717				
	Amplifier, 0 to 10 VDC remote line or microphone voltage controlled	RDL - Radio Design Labs ST- VCA3	1		
1114	Amplifier, stereo headphone	RDL - Radio Design Labs ST- SH2	1		
1115	Cable, 1 foot RJ45 blue data patch	Belkin A3L791-01-BLU-S	1		
1116	Cable, 1 foot RJ45 green data patch	Belkin A3L791-01-GRN-S	1		
1117	Cable, 6' 3.5mm to 3.5mm headphone extension	Radio Shack 42-2482	1		
1118	Headphones, No inline volume control portable 3.5mm stereo	Koss UR20	1		
1119	Housing, Black metal 3G table top angled equipment	FSR Inc. DSKB-3G with accessories	1		
1120	Plate - See Drawings for Details	Custom N/A	1		
1121	Potentiometer,10k 24mm dual audio taper	Various Alpha RV24B-10-15R1- A	1		
1121		Dini Kan Oamandian 450D400	1		
	Potentiometer,10k linear taper	Digi-Key Corporation 450D103- 3-ND	'		

1084 S 1085 S 1086 T 1087 T 1088 T 1089 T n Courtroc	Supply, 24 VDC 500mA power wall wart type Switch, AVB ready 16-port managed System, Dual emitter stereo IR assistive istening Fransceiver, 4 channel duplex wireless base only Fransformer, 70V 15 Watt, 2.5/5/10/15 Fransformer, Unbalanced dual line level to mono balanced line level Fransmitter, RoHS compliant audio monitoring distribution streaming Fransmitter Company of the Compa	Make/Model or Equivalent RDL - Radio Design Labs PS- 24AS Netgear GS716Tv3 Sennheiser SI1015-4000 Dual Revolabs 01-EXESYS4EX-BLK- NM AMK Innovations Inc. T70V15W RDL - Radio Design Labs TX-J2 Barix Instreamer 100 (P/N 2006.9059) ntrol & Power Functional Require Crestron Electronics CAGE3	5 1 1 5 5 1 reme	ents * Refe	r to drawing
1085 Si Ii 1086 T b 1087 T 1088 T n 1089 T n 1089 T	System, Dual emitter stereo IR assistive istening Fransceiver, 4 channel duplex wireless base only Fransformer, 70V 15 Watt, 2.5/5/10/15 Fransformer, Unbalanced dual line level to mono balanced line level Fransmitter, RoHS compliant audio monitoring distribution streaming Tom AV Argument Presentation System Compliant System System System System Compliant System S	Sennheiser SI1015-4000 Dual Revolabs 01-EXESYS4EX-BLK- NM AMK Innovations Inc. T70V15W RDL - Radio Design Labs TX-J2 Barix Instreamer 100 (P/N 2006.9059) ntrol & Power Functional Requirements	1 1 5 5 1 reme	ents * Refe	r to drawing
1086 T b 1087 T 1088 T n 1089 T n n Courtroo	istening Fransceiver, 4 channel duplex wireless base only Fransformer, 70V 15 Watt, 2.5/5/10/15 Fransformer, Unbalanced dual line level to mono balanced line level Fransmitter, RoHS compliant audio monitoring distribution streaming Fransmitter of the compliant audio monitoring distribution streaming Fransmitter of the compliant audio monitoring distribution streaming	Revolabs 01-EXESYS4EX-BLK-NM AMK Innovations Inc. T70V15W RDL - Radio Design Labs TX-J2 Barix Instreamer 100 (P/N 2006.9059) ntrol & Power Functional Requirements	1 5 5 1 reme	ents * Refe	r to drawing
1087 T 1088 T n 1089 T n Courtroc	Transformer, 70V 15 Watt, 2.5/5/10/15 Transformer, Unbalanced dual line level to mono balanced line level Transmitter, RoHS compliant audio monitoring distribution streaming Transmitter Presentation System Compliant System	NM AMK Innovations Inc. T70V15W RDL - Radio Design Labs TX-J2 Barix Instreamer 100 (P/N 2006.9059) ntrol & Power Functional Requirements	5 5 1 reme	ents * Refe	r to drawing
1088 T n 1089 T n	Fransformer, Unbalanced dual line level to mono balanced line level Fransmitter, RoHS compliant audio monitoring distribution streaming	RDL - Radio Design Labs TX-J2 Barix Instreamer 100 (P/N 2006.9059) ntrol & Power Functional Requirements	5 1	ents * Refe	r to drawing
1089 T n Courtroc	mono balanced line level Fransmitter, RoHS compliant audio monitoring distribution streaming om AV Argument Presentation System Col	Barix Instreamer 100 (P/N 2006.9059) ntrol & Power Functional Requi	1 reme	ents * Refe	r to drawing
n Courtro	monitoring distribution streaming om AV Argument Presentation System Co	2006.9059) ntrol & Power Functional Requi	reme	ents * Refe	to drawing
				ents * Refe	r to drawing
	Cage, Inboard expansion card	Crestron Electronics CAGE3	1		
1090 C					
	Card, 3 Port 3-Series RS-232/422;485 expansion slot	Crestron Electronics C3COM-3	1		
1092 C	Casters, Set of 4	Middle Atlantic Products CBS- ERK-25	1		
1093 E	Engine, Blank front panel 6 Com port control	Crestron Electronics AV3	1		
	Extender, DVI monitor and USB on 1 TP 100M	Gefen Inc. EXT-DVIKVM-ELR	1		
1095 lı	njector, Universal 100-250 Volts AC PoE	Crestron Electronics PWE- 4803RU	5		
1096 N	Mount. 10.1" Touch panel tabletop	Crestron Electronics TSW- 1050-TTK	2		
1097 C	Outlet, Cubby integrated duplex power	Crestron Electronics FTA-PWR-102	3		
1098 F	Panel, 10.1" Adaptable mount touch control	Crestron Electronics TSW- 1050-B-S	2		
	Panel, Cubby and integrated flip top 5" plack touch	Crestron Electronics FT-TS600-B	3		
	PDU, 8 outlet rear with 1 outlet front and no power switch 15A	Middle Atlantic Products PD- 915R-PL	1		
	Rack, 40RU (70") fully configured Audio/Video 25" deep	Middle Atlantic Products ERK- 4025-AV	1		
1102 F	Receiver, TP to USB	Extron Electronics USB Extender RX (60-1471-13)	4		
	Relay, 15A controlled stand alone 2 outlet 120VAC power	Middle Atlantic Products RLM- 15-1CA	2		