

U.S. District Court-District of South Dakota

Aberdeen Courtroom 1 Audio/Video System Replacement

Statement of Work

Project Location

US District Court
Courtroom 1
102 4th Avenue SE
Aberdeen SD 57401

Start date: Design due prior to September 30, 2017

Site pre-bid inspection date: September 13, 2017 at 1pm CST

Bid Submission date: September 20, 2017

All questions MUST be in writing to Jan_Marlette@sdp.uscourts.gov.

Objectives

Summary: We currently have a sound system and analog video distribution system in the courtroom for evidence presentation. We would like to replace the entire Audio and Video systems.

Scope of Bid

The bid will include all expenses associated with this project including but not limited to: Installation, equipment, travel, misc. parts and cables. All vendor provided equipment must be new.

Hours of Work

Hours of work will be 8:00am – 5:00 pm Monday through Friday unless otherwise arranged with the court staff.

Install Schedule

The schedule will be arranged with the selected upon award of the contract. We expect the project to take 2-3 weeks.

Audio System Design

We are replacing the current audio system with the following requirements.

Main Mixer Requirements:

Ability to process all of the input and output needs listed below.

Audio Inputs:

We are requesting that all desk mics are Shure MX418D/S or equivalent.

9 Desktop Mic Locations - vendor provided: Judge, Witness, Evidence Cart, Probation Table, Defense Table A, Defense Table B, Prosecution Table A, Prosecution Table B, Clerk Bench

1 Boundary Mic Location - Vendor provided: Judge Bench, this mic is only on during bench conferences, and only provides audio to the court reporter and FTR.

3 Wireless Mics: We currently have 3 existing wireless mics that will be used. 2-Shure QLXD14/85, 1- Shure QLXD24/SM58.

1 Lectern Mounted Mic: - vendor provided. One input can be plugged into **2 locations in the room.** Prosecution floor box and front of clerk's desk.

1 Evidence Presentation inputs: Audio from whichever video system input is selected. I.e. laptops, blue ray, wireless or any other device listed below.

1 Video Conference input: Input audio from video conference connections

2 Telephone Inputs: We require the system to have 2 separate POTS lines that are separate inputs

Audio Outputs:

We are asking the vendor to install news amps, room speakers and associated equipment to meet the following minimum design specifications. Speaker location and amps used must be adequate for the room size and function.

4 zone- Ceiling Speakers - vendor provided – number and location to be determined by design

2 - channel Infra-Red assisted listening system - vendor provided

Court Reporter headset

4 – FTR recording channels (use current FTR machine)

Jury Masking noise

Video Conference unit - vendor provided

Chamber Office Speakers (can use existing cable run)

Marshals Office Speakers (can use existing cable run)

Barrix Instreamer Device (existing)

3 - personal speaker outputs: Judge personal speaker, Witness personal speaker, Clerk personal speaker – Bose Companion 2 series 3 or equivalent speakers to be used.

The personal speakers and the Barrix Instreamer can be combined into a single output since their signals are always the same and have adjustment at the device.

Ceiling Audio Zones:

The ceiling speakers need to be divided into 4 zones. These zones will be the speakers located over these areas: Jury, Probation/Defense, Prosecution, and Audience. These zones are set up to allow the appropriate mix-minus settings as well as to accommodate Jury masking noise and volume requirements.

FTR Recording channels:

Channel 1 – Judge, Clerk, and Witness, Handheld wireless, sidebar

Channel 2 – Prosecution, Prosecution lapel Wireless

Channel 3 – Defense, Defense lapel wireless

Channel 4 – VTC, phone, evidence, lectern

Infra-Red Emitters:

We require a 2 channel IR emitter system that transmits on the 2.3 and 2.8 MHz bands. The radiator should be a minimum of 2 watts.

Channel One - will be for assisted listening, and will contain all audio except during bench conferences, when the Jury receives white noise

Channel Two – will contain only the audio from the second telephone hybrid used for simultaneous translation.

Telephone Hybrids/ POTS Line Connections:

The 2 telephone POTS lines are currently in the courtroom. These lines will be connected in the following manner:

Line 1 – connected to the general output system to be heard by all, excluding IR channel B, and during bench conferences.

Line 2 – connected to channel B on the IR emitter system only

Existing Equipment to be reused:

3 Wireless microphones. 2-Shure QLXD14/85, 1- Shure QLXD24/SM58
Barrix Instreamer
IR Headsets
FTR system

Video System Design

We need to provide 1080p video resolution at display locations, and HDMI and VGA input capabilities to meet the below specifications. This system will have multiple inputs and outputs (see below) and must be fully controlled by the control system. Use of POE\POH devices is required for use at table locations to avoid power cables.

Video Inputs:

Wolfvision VZ9plus Document camera (existing equipment)
Blu-ray player - vendor provided
Evidence Cart VGA/HDMI -vendor provided
Attorney 1 VGA/HDMI - vendor provided
Attorney 2 VGA/HDMI - vendor provided
Video Conference System - vendor Provided
Wireless Video Input (i.e. Wepresent WiPG-1000 or similar solution) - vendor provided

Video Conference system

Polycom HDX 8000 HD or equivalent video unit. Rack Mounted. Minimum requirements: video resolution of 720p, 60fps at 1.2 Kbps to 6 Mbps and a content resolution up to 720p and 4CIF (704 x 480)/4CIF (704 x 576) at 256 Kbps to 784 Kbps. Supports the H.264, H.263++, H.261 and H.239 protocols.

Cameras: We require 2 wall mounted PTZ cameras. One camera to be located on the front wall, and one on the back wall. Vaddio Clearview HD-20SE HD equal or better specifications. PTZ, Native 1080p, 20X optical zoom.

Video Outputs:

Judge Monitor - vendor provided 20" HDMI monitor black
Witness Monitor - vendor provided 20" HDMI monitor black
Clerk Monitor - vendor provided 20" HDMI monitor black
Law Clerk Monitor - vendor provided 20" HDMI monitor black
Court Reporter Monitor - vendor provided 20" HDMI monitor black
Attorney 1 Monitor - vendor provided 20" HDMI monitor black

Attorney 2 Monitor - vendor provided 20" HDMI monitor black

Video Conference System - vendor provided

Jury Monitor - vendor provided 80" HDMI monitor black on mobile cart. Cart must be rated to support the 80" monitor and easy to move in the carpeted courtroom. Cart color: black

Witness floor box cabled for video output.

Video Control:

During Courtroom presentations it is important to display evidence to particular video zones at particular times. These zones will consist of Judge/Attorney/Clerk only, Judge/Attorney/Witness/Clerk only, All output on, All outputs off. Any time a new video source is selected the system must reset back to Judge/Attorney/Clerk only. Evidence Audio will only be played when "All outputs on" is selected.

We also require the system to display Video Conferences, and the ability to send either live video or evidence presentation to the videoconference.

Existing Video Equipment to be reused:

Wolfvision VZ9plus document camera

Future additions:

This system should be designed to accommodate the addition of 8 monitors on the Jury monitor feed in the future. These monitors would mirror the function of the large Jury monitor. This is a design feature only, no current hardware needed.

Control System

We would like a fully automated control system operated at the clerk's bench via a small touch screen 9"-14".

Controls will include gain and mute settings for all audio input and outputs, white noise/bench conference button, video conference controls, video presentation controls (customized for courtroom presentation). Controls for 2 telephone hybrids. Controls for the document camera and Blu-ray player. On/off controls for large jury monitor. System on/off and reset.

See the attached example of the screen layouts of the systems that our staff is currently familiar with.

We request that the control system can be remotely monitored and/or controlled over our data network.

Cabling and Infrastructure

We are requiring that all current audio and video cable be removed and replaced.

Use of industry standards for all audio cable.

We are requiring that the vendor would install CAT6A non-shielded wire for video runs. This is the current industry standard for reliable video performance.

We currently have Internet access in the courtroom at the needed locations. If the vendor requires more connections to our Ethernet network, we would ask the vendor to pull the cables to our server room and we will connect them.

Floor Box Locations and Function:

There are currently 4 floor boxes located in the courtroom.

- 1 - Prosecution Table – existing power, 3 mics(Prosecution 1-2, lectern mic), video in/out
- 2 - Defense Table – existing power, 2 mics(Defense 1-2), one phone jack to phone hybrid #2 handset port, video in\out
- 3 - Probation Table – existing power, existing network, mic, connections for Jury Monitor
- 4 - Front of the witness box- Video out connection

Current Racks

We currently have 2 – 24” equipment racks under the Judges bench that house the majority of our systems. We also have a 24” rack that we call the evidence presentation cart location. We do not have space outside of the courtroom for equipment racks so we are requiring that the existing locations be utilized.

Removal of old equipment and cables

The vendor is responsible for the disposal of all old cables and components from the old systems that the court POC determines.

Programming:

The vender is responsible for all programming in the system. This will include any programming in the Audio\video systems and the control system. All programming code will become the property of the courts.

As Built Documents:

The vender will provide a complete set of as built documents including system block diagrams and system wiring diagrams with a cable identification system.

Bid Pricing

When submitting a bid, provide a cost breakdown for each task into the following categories: materials, equipment, labor hours and travel (if required).

Experience Required

5 years of experience of Courtroom or similar AV installation and support is required. Contractors should list any prior experience in Courtroom or similar AV installation and any certifications that are applicable. Contractors who do not meet this requirement will not be considered.

Training

The vendor will provide training for court personnel after the installation is complete. This will include both hands on training and written instructions. Electronic copies of the system instructions will be given to the court.

Job site and Cleaning

All efforts must be made to protect existing finishes and equipment. All trash is the responsibility of the vendor and must be removed from the site. The vendor is expected to clean and vacuum the courtroom. The courtroom must be brought back to existing or better condition than when the project started.

Excess cabling and equipment needs to be taken from the premises.

Acceptance

Upon completion, the vendor will align, balance and completely pretest the entire system under full operating conditions. The final product will be deemed acceptable at the end of the project after testing by court staff. Sound levels must be at an acceptable level to the court staff. The video system must function as specified. The control system must be complete and functioning.

Warranty

The vendor shall warrant all work executed under the contract, including all in shop and on-site material, parts and labor, for a period of 12 months.

The vendor will respond and correct trouble calls within one working day of the report. On-site trouble calls may be necessary in case of system failure.

Maintenance and repair service shall not include the performance of any work due to improper use; accidents; other vendor; or owner tampering with or damaging the system.