

02/12/2013

Jason Dale
City Of Rochester Hills
1000 Rochester Hills Dr.
Rochester Hills, MI 48309

Subject: Auditorium AV Report

Mr. Dale;

This letter is to provide you with information that has been compiled from the on site evaluation I performed per the AV Consultant Contract for the auditorium.

Site Conditions:

Monday, December 10th, 2012 3:00 – 8:00pm. Auditorium
Empty Room, HVAC both On/Off, and Regular Meeting

Test Equipment:

Minirator Audio Generator, Audio Control RTA, Terrasonde Audio Toolbox, Ipad, Macbook Pro

OBJECTIVES:

To review current AV systems in the auditorium as well as horizontally attached systems and to determine problem and anticipated problems areas. They are as follows:

Problem #1-

The existing audio system has many variables in it, this causes unpredictable performance instead of the system's intended performance. Examples of this would be different volume levels(too low or too high), feedback and undesirable tonal qualities.

Problem #2-

The existing audio system has very harsh tonal characteristics in which can be unpleasing to the listening audience.

Problem #3-

The existing audio system has clicks and pops when council microphones are turned on and off.

Problem #4-

The existing video system as well as document camera is projecting a low resolution video signal which is also cumbersome to control.

Problem #5-

All cameras are providing a 4x3 standard definition signal which is now being shown on modern 16x9 displays and therefore causing stretching and poor video quality.

Problem #6-

The system is incapable of providing Digital Video inputs (DVI, HDMI, Displayport, etc.) into the system without some form of conversion, which leads to less than desirable results as well as set up time.

Problem #7-

The A/B switches underneath the desk for monitoring are not practical to the application being performed.

Problem #8-

The existing production switcher is old and has many bad inputs. It also does not have provisions for Digital Video inputs. Production studio is outdated and not up to today's technology.

Problem #9-

The editing systems are antiquated and it does not support High Resolution and Digital formats and is very inefficient at file sharing.

EVALUATION:

To provide conceptual solutions for the most suitable AV practices which will alleviate the previously stated problem areas, as well as provide maximum priced budgets for those solutions (see attached).

Solution #1-

Recommend changing out council monitor speakers to a commercial grade type of speaker in which would be mounted in a fixed position and also set system volume levels in a preset fashion to keep consistent levels.

Solution #2-

Recommend replacing audience speakers and evenly distributing new speakers in which have a smoother frequency pattern. Provide fill speakers and remove high ceiling speakers as well as changing out the Audio DSP with a better quality DSP.

Solution #3-

Recommend changing out all microphones to a microphone with soft touch control and LED activity light.

Solution #4-

Recommend changing out the video projector to either a higher resolution digital 16x9 projector or multiple 16x9 digital displays and change out the document camera with a higher resolution camera. Reprogram for easy operation.

Solution #5-

Recommend replacing all the cameras to 16x9 higher resolution cameras with remote control and quiet operation.

Solution #6-

Recommend changing out switching system with a system capable of Digital Video Inputs inputs as well as legacy standard definition type inputs for full system integration. Reprogramming for ease of use.

Solution #7-

Recommend a main monitor for all the council to mirror audience viewing. Also, a switcher to display any council members PC on this monitor controlled by the system operator.

Solution #8-

Recommend changing out production studio and ancillary equipment to one that can accommodate both Digital and Analog signal types in order to comply with today's technologies.

Solution #9-

Recommend changing out editing computers to newer computers for software applications that handle higher resolution editing as well as new digital storage facilities for providing efficient work and backup.

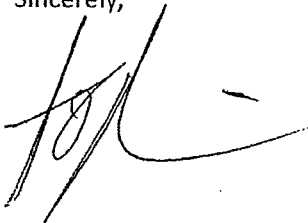
Overview and Conclusion:

The system that is currently being used in the auditorium shows a life of about 9 years with, from what I can see, as many unsuccessful remediation's during that time. Since this is the end of a typical AV system lifespan of 10 years, this seems to be an opportune time to meet today's technological demands by replacing your existing system and putting in a system that not only will provide you for the next 10 years but will also accommodate the last 20 years of technology. I am seeing more and more people using many different devices (i.e., Ipads, iPhones, tablets, MAC's, etc.) to make presentations, perform work sharing as well as other media communications in which your new system will be able to accommodate.

Another point I would like to make is on today's technology, with all displays being sold now in a 16x9 format and obsoleting the 4x3 aspect ratio, I feel this is the biggest change in today's technology and will be for decades to come. Resolutions in a 16x9 ratio can be different as long as they are 16x9 and will work even with the new 2K stuff coming out down the road, however, we need to get your facility to a native 16x9 system without using add on devices which make TV pictures look either squashed or stretched.

I hope this information is useful to you and please feel free to contact me if you have any further questions or comments. Thank you for your time.

Sincerely,



Steve Robinson, CTS RCDD DMC-D, E
Principal- Operation's and Engineering