

UNIVERSITY OF LOUISIANA AT LAFAYETTE

STEP Committee

Technology Fee Application

Sound Effects, Automated Dialogue
Replacement, and Music Scoring Sound Booth
and Mixing Station for Moving Image
Arts/Music Media

Title

Assistant Prof. Geoffrey Marschall

Name of Submitter
(Faculty or Staff Only)

College of Liberal Arts

Organization

Title: Sound Effects, Automated Dialogue Replacement, Music Scoring Sound Booth and Mixing Station for Moving Image Arts/ Music Media Date: January 15, 2019

Name (Contact Person): Geoffrey Marschall, Assistant Professor

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Department/College/Org: English, College of Liberal Arts

ABSTRACT (250 words or less):

This grant proposal requests funds for a sound-proof recording booth, microphones, wires, monitors, speakers, Pro Tools software, mixing hardware, sound processing hardware, and a desktop computer to provide students with industry standard equipment and experience. This will be used by both the Moving Image Arts Students who will add project-specific sound effects and replace poor quality dialogue in their films as well as the Music Media students who score films for their projects. The improved quality of their work will help them apply to festivals and provide them with experience they can put on their resumes when applying for jobs after graduation.

A. Purpose of Grant

The purpose of this grant is to establish a sound recording and mixing studio where students can design and complete engrossing soundscapes for their films. With the recording booth and software they can create specific and unique sound effects to match their images. They will be able to record music that matches the emotion and timing of the scene exactly without awkward starts or stops or having to worry about copyright infringement which is a major problem when they have to use already recorded music and want to screen their works at film festivals or outside of school. They will also use this equipment to fix sound problems, re-record any dialogue necessary, and mix surround-sound sound designs. The Music students would benefit from this system by having a professional studio for their class on film scoring. They would not be limited to synths and electronic instruments for their scorings but could record a wide range of instrumentation and arrangements.

This request supports the goal of the Moving Image Arts concentration by creating a workspace where students learn about the major components of filmic storytelling. One of the major aspects that differentiates student films when submitting to festivals is a thoughtful and high quality sound design. This equipment allows the students to improve their sound designs and stand out when submitting to festivals which will open up possibilities for more projects and networking in the media industry.

This equipment will also increase the job opportunities for students after graduation. Pro Tools is an industry standard for sound post-production recording and mixing. By learning the process of sound re-recording and mixing and how to use Pro Tools they will be able to confidently apply for positions in post-production companies and have the skills these businesses want. This software is used by most major post facilities including Skywalker Sound which is responsible for the sound post-production of films like *Ralph Breaks the Internet*(2018), *Star Wars: The Last Jedi*(2018), and *Black Panther*(2018).

The students will not only learn the artistic importance of sound design and the technical skills they can use to apply for jobs after graduation but it will also foster collaboration and improve their abilities to work together. It will be used immediately by these classes:

MIA 320 Film Development and Distribution
MIA 352 Digital Video Production
MIA 354 Digital Video Editing II
MIA 356 Digital Video Production II
MIA 360 Directing the Narrative Film
MIA 462 Documentary Production in the Arts and Entertainment
MIA 465 Capstone
MIA 466 Capstone
MUS 438 Film Scoring I
MUS 439 Film Scoring II

But in the future we hope to develop a course that focuses specifically on sound design and will collaborate with MUS 438 and MUS 439 to create music and sound effects that are project specific. When these sound effects are used from an online database or DVD they are often out of place, don't match the time, or don't match the source of the sound faithfully. Students will learn to work in small groups to create these sound effects and then after collaborating with MUS 438 and 439 the partnerships there will grow and help students in the MIA 466 and MIA 465 capstone classes to create music for films they plan to submit to major festivals.

B. Projected Lifetime and Enhancement

The students will receive proper training to make sure the use of this equipment doesn't put unnecessary stress on the equipment but the lifetime of the system varies.

Dell Inspiron i3650-11561	5-8 years
Microphones, Cables, speakers	10+ years
Sound booth	10+ years
Pro tools and included software updates	8+ years

C. Persons Responsible for Implementation, Installation, Maintenance

The requested equipment will be installed in room 143 in Griffin Hall. The room is locked and will be accessible during working hours. Assistant Professor Geoffrey Marschall and Assistant Professor Virgile Beddock will oversee the equipment.

D. Equipment Justification

-Dell Inspiron i3650-11561

A workstation capable of processing the large amount of data and intense workload of editing and recording sound.

-Pro Tools

Industry standard software for sound editing and recording. This software can record, edit and mix sound down to units smaller than a second.

-Avid Omni HD and HD Native PCIe Card

Preamp and processing card necessary for recording sound and allowing communication between the performers in the booth and the person operating the computer. It helps the computer process the digital signals.

-Avid artist mix Touch-sensitive Fader x 2

Mixing panels that allow faster and easier control when editing, mixing and recording sounds. These are industry standard and will provide the students with more experience that they can include when applying for positions in major post-production businesses.

-Onkyo TX 7.2 Ch Receiver

Receiver is necessary for outputting to the speakers and TV monitor for mixing and editing the sound.

-Waves 360 Surround Tools

Plug-ins for Pro tools software to improve handling of surround-sound editing. This includes filters that are commonly used but have to be adjusted due to the nature of sound in a surround-sound design.

-MDL7296S Whisper Room

This is a sound-proof recording room. This provides enough room for the addition of a sound effects floor for recording sounds such as footsteps with enough room for recording instruments. It also provides enough space for the necessary additions to make this wheelchair accessible and useable by all students.

-ADA Package

Special installations for the sound-proof recording room which will make it accessible for all students such as a no lip entry way, ramp, and handles that can be operated with a closed fist.

-Ventilation Silencing

Attachment for the sound-proof recording room which reduces the noise created from the ventilation. Air conditioner noise is a common problem with recording sound and often has to be turned off which makes the space unbearably hot. With this attachment, the sound from the ventilation will be reduced so it can be left on while recording.

-Multi-jack panel

Attachment for the sound-proof recording room which allows for all the necessary microphone, instrument, and control cables to be plugged in and controlled from outside the booth.

-Toshiba 43LF621U19 43 in. 4K LED TV

This will be used as a second screen that will be visible for the recording student in the booth and the student operating the computer outside the booth.

-TV cart Peerless-AV SR560M

This wheeled cart will support the TV and make it easily adjustable to improve visibility by the student in the booth or the student operating the computer.

-LG 27UK850-W 27" 16:9 4K HDR FreeSync IPS Monitor

This monitor is necessary for the desktop. Many festivals and businesses require 4K footage due to the wide spread of 4K displays. The students need to get used to working with ultra high definition footage and need a monitor that can handle that.

-Rode NTG-3 Condenser Shotgun Mic

This shotgun microphone is used for recording instruments and sound effects. Due to its recording pattern and sensitivity it isolates the sound and can target the source easily.

- Senal SCM-660 Large-Diaphragm Multi-Pattern Condenser Mic

This large-diaphragm microphone is used for recording voices. Due to its recording pattern and sensitivity it records the many frequencies of the human voice to get a rich and complete sound.

-Behringer u-phoria umc404HD Audio/Midi Interface

This preamp and processor will be placed inside the recording booth and provide the power and send the signal from the microphones in the booth to the computer.

-JBL Arena 130 7" 2-Way Passive Bookshelf Speakers (5 speakers needed)

These speakers will create a small surround sound system for the student to use to mix their sound with. This includes a front speaker, front left speaker, front right speaker, rear left speaker, rear right speaker. While smaller in scale the program will record the percentage of output and the larger systems will be able to adjust.

-Auray LMS-335 speaker stands pairs (3 pairs needed)

These stands will support the speakers and make them easy to arrange in the proper positions for a surround sound system.

-JBL STAGE A100P 10" 300W Subwoofer

This subwoofer will emit the bass and low frequency sounds that are essential in a sound design and music.

-High quality 16 guage speaker wire 100'

This wire will connect all the speakers to the receiver. This much length is needed to ensure that we can connect all the speakers in the correct position and also have any extra for minor maintenance.

-Microphone Stand (2 needed)

These will be used to support the shotgun and large-diaphragm microphones in the sound booth. With two the students can quickly switch from one microphone to the other when necessary or record both instruments and vocals simultaneously.

-Audio-Technica AT8407 Mic clip

This mic clip is needed to attach the shotgun mic to the mic stand in the recording booth.

-Auray Nylon Pop Filter

This screen will be attached in front of the large-diaphragm microphone to reduce the noise distortion of fast moving air which occurs when people say words with “p” or “b” in them.

-Shure SM58-LC Vocal Microphone

This microphone will be used by the student operating the computer to talk to the student inside the booth since the booth is sound-proof from inside and out. In between recordings they can give direction and advice. This is the standard professional setup.

-Auray Table Top Mic Stand

This will support the Shure Vocal Mic so the student operating the computer doesn't have to hold it and prevents the microphone from getting in the way, rolling around, or falling on the floor.

-Universal Mic Clip

This will attach the Shure vocal microphone to the table top mic stand.

-Kopul Studio Elite 3' XLR Cable

This cable is necessary to connect the Shure microphone to the HD Omni processor so it can send a signal from the student operating the computer to the student in the sound booth.

-Kopul Studio Elite 10' XLR Cable (8 Needed)

These cables will be used to connect the HD Omni to the outputs on the recording booth and the microphones and the Behringer uphoria to the output jacks in the recording booth.

-Pearstone HDA-110 High Speed 10' HDMI Cable

This cable will connect the Onkyo Receiver to the 4K LED TV so the signal from the computer can be seen by both students using the system.

-Pearstone HDA-110 High Speed 6' HDMI Cable

This cable will output the sound and image from the computer to the Onkyo Receiver so it can be seen on the TV and heard on the surround sound speakers.

Budget Proposal

1. Equipment \$27,225.93

	Price/Item	Cost
Avid Omni HD and HD Native PCIe Card	\$3,999.00	\$3,999.00
Avid artist mix Touch-sensitive Fader x2	\$995.00	\$1,990.00
Onkyo TX 7.2 ch Receiver	\$249.00	\$249.00
Dell Inspiron i3650-11561	\$1,199.11	\$1,199.11
Toshiba 43LF621U19 43in LED 4k TV x 1	\$330.00	\$330.00
TV cart Peerless-AV SR560M x 1	\$447.95	\$447.95
LG 27UK850-W 27" 16:9 4K HDR FreeSync IPS Monitor	\$649.00	\$649.00
Rode NTG 3 Condenser Shotgun Mic	\$654.45	\$654.45
Senal SCM-660 Large-Diaphragm Multi-Pattern Condenser Mic	\$379.00	\$379.00
Behringer u-phoria umc404HD	\$159.99	\$159.99
JBL Arena 130 7" 2-Way Passive Bookshelf Speakers x5	\$249.95	\$1,249.75
Auray LMS-335 speaker stands pairs x3	\$79.99	\$399.95
JBL STAGE A100P 10" 300W Subwoofer	\$349.95	\$349.95
Microphone stand x2	\$69.00	\$138.00
Audio-Technica AT8407 Mic clip	\$13.99	\$13.99
Auray nylon pop filter	\$18.99	\$18.99
Auray Table top mic stand	\$12.00	\$12.00
Universal Mic Clip	\$4.00	\$4.00
XLR cable Kopul Studio Elite 3'	\$15.99	\$15.99
XLR cable 10' x8 Kopul studio elite	\$17.49	\$139.92
Pearstone HDA-106 High Speed 6' HDMI Cable	\$8.95	\$8.95
Pearstone HDA-110 High Speed 10' HDMI Cable	\$10.95	\$10.95
Shure SM58-LC Vocal Microphone	\$89.00	\$89.00
MDL 9696S	\$10,855.00	\$10,855.00
ADA package	\$2,160.00	\$2,160.00
Ventilation silencing	\$1,070.00	\$1,070.00
Multi-jack panel	\$650.00	\$650.00

2. Software \$748.00

	Price/Item	Cost
Pro tools	\$299.00	\$299.00
Waves 360 Surround Tools	\$449.00	\$449.00

3. Supplies \$11.99

	Price/Item	Cost
High quality 16 guage speaker wire 100'	11.99	11.99

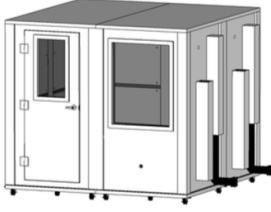
4. Maintenance \$0.00


5. Personnel \$0.00

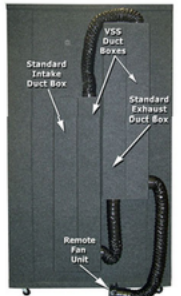
6. Other \$0.00

TOTAL: \$28,003.93

Additional Information

MDL 9696	Model	Approximate Exterior Size	Approximate Interior Size	Weight (lbs)	USD Price
	S	8' x 8' x 6' 11"	7' 10" x 7' 10" x 6' 8"	1541	\$10,855
	SNV	8' x 8' x 6' 11"	7' 10" x 7' 10" x 6' 8"	1392	\$9,040
	E	8' x 8' x 7' 1"	7' 5" x 7' 5" x 6' 8"	2635	\$19,045
	ENV	8' x 8' x 7' 1"	7' 5" x 7' 5" x 6' 8"	2489	\$17,230
Basic Features Included in Price:					
<ul style="list-style-type: none"> • Door Window – 16" x 30" • 3 Ventilation Systems (S/E models) • 9 Acoustical Foam Sheets – 2' x 4' x 2" • 2 LED Lights - 18" • 6 Cable Passages • Wireless Switch (S/E models) 					

MJP - Multi Jack Panel		
	Multi Jack Panel \$650	Additional XLR to 1/4" Adapter \$30
<p>The Multi Jack Panel is a standalone optional feature that can be installed on your WhisperRoom after it is assembled. It is a prewired, jack-panel insert consisting of 2 USB jacks, 4 XLR jacks and 6 - 1/4" stereo phono jacks. Simply just thread the cables through a cable passage to reach the interior box. If your need requires additional 1/4" stereo phono jacks, we can add an XLR to 1/4" stereo phono jack adapter for a small charge. This feature is great for audiometric applications.</p> <p>NOTE: May be ordered and installed at any time.</p>		

VSS – Ventilation Silencing System	
	<p>Standard WhisperRoom ventilation systems are quiet. However, the air-flow noise is still slightly audible inside the WhisperRoom. This noise can be eliminated by the installation of a VSS. The number of VSS units needed depends on the size of the WhisperRoom and the prices listed are for the specific model noted. One VSS is required for each standard ventilation system. Each VSS consists of two additional baffled exhaust ducts, with hoses and adapters, linked in-line between the standard exhaust duct and the remote fan unit (RFU).</p> <p>NOTE: May be ordered and installed at any time. Roof-mount ventilation systems and VSS systems available for most models.</p>

ADA PACKAGE



*Shown with Optional Features

STANDARD PRICING

ENHANCED PRICING

ADA7272 S	\$1,700	ADA7272 E	\$2,170
ADA7296 S	\$1,895	ADA7296 E	\$2,345
ADA9696 S	\$2,160	ADA9696 E	\$2,575
ADA96120 S	\$2,425	ADA92120 E	\$2,800
ADA96144 S	\$2,690	ADA96144 E	\$3,035
ADA96168 S	\$2,960	ADA96168 E	\$3,265
ADA96192 S	\$3,220	ADA92192 E	\$3,500

The ADA Package includes the following components needed to allow easy accessibility for people with disabilities: a 32" wide door opening, a 1:12 ratio ramp, a door handle operable with a closed fist, a raised floor, our new "no threshold" door design, and each of the seven available sizes has at least a five-foot interior space for wheelchair maneuverability. All ADA Package sizes will be available in both our single-wall (Standard) and double-wall (Enhanced) versions, and will provide comparable noise reduction.

Note: The 2010 Americans with Disabilities Act standards which apply to state & local governments, public accommodations, and commercial facilities state that "the 2010 Standards apply to fixed or built-in elements of buildings, structures, site improvements, and pedestrian routes or vehicular ways located on site." Because the WhisperRoom is neither built-in or a fixed element/structure, there is no technical requirement for the WhisperRoom to comply with the 2010 ADA standards.

NOTE: Must be specified at initial order.