Student Technology Fee

Grant Proposal



2007-08

Network?

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Dr. Jim McCrory		
Approved	Denied	
Comment:		
Diana Hamilton		
Approved	Denied	
Comment:	1 11.41	
Gary Gatch		
Approved	Denied	
Comment:		
Mike McDonald		
Approved	Denied	
Comment:		
Dale Martin		
Approved	Denied	
Comment:		

Student Technology Fee
Grant Proposal Request Form
Fiscal Year 2007-08



Northwestern State University of Louisiana

ALL BLANKS MUST BE FILLED COMPLETELY

Prepared by: Shawn Parr & Scott Burrell For: Priority 3 65
Department/Unit: Theatre/CAPA College: Liberal Arts Campus: Natchitoches
Which NSTEP Goals/Objectives does this project meet? 1, 2, 6, 7, and 8
Requested equipment will be located/installed/housed? Building 025 Room 100
Are department property policies and procedures in place for requested equipment? Yes
Which individual will be responsible for property control of the requested equipment? Robert Graham
Signature: 21 12 Scott/6 Date: 10/29107
Grant Proposal Requested Amount: \$19,076.46 Budget Attached (circle one): YES/NO
Grant delivered to Student Technology located in Watson Library, Room 113. Date
The grant proposal must include all specifications, description, model number, quotation, cost, state contract number, and vendor for each item. If the proposal does not include all requested information, it will be returned to requester.

1. Describe target audience.

This projection system will be available to, and utilized by, the faculty and student body of the Theatre Department. Technical/Design Concentration students and faculty will have the majority of hands on use with the system. Dance and Acting Directing students and faculty will have the ability to expand their creative visions through use of the system.

2. Describe project/initiative for which you are requesting funds.

The project is to assemble a fully functional video projection and audio playback system. The system centers around a computer system with specialized cue playback software that can handle multichannel audio, multichannel video, and system control of other devices via standard protocols.

The system will initially be configured to handle up to four projectors, and two such projectors are part of the system as specified. Included is an audio interface capable of providing up to eight channel output and MIDI control which is compatible with our Lighting Consoles as well as various other equipment.

The projectors specified for this system where chosen for their ability to project an image of sufficient size and with adequate brightness to be used during a dance concert or theatrical performance with stage lighting still in effect. Most projectors commonly found on campus do not allow for either the sizes needed or the brightness to overcome stage lighting.

3. State measurable objectives that will be used to determine the impact/effectiveness of the project.

- A. Improve the Theatre Curriculum and improve the technology available for student learning and research work.
- B. Improve our students educational experience and skill set in order to enable them to compete in the modern Graduate School and workplace environments.
- C. Increase the recruitment and retainment abilities of the department through availability of resources found in the current workplace.

4. Indicate how each project objective will be evaluated.

- A. We shall evaluate how the system is used in productions and as part of classroom projects. We will also get feedback from the general student body and general population that attend productions and events in which the system is used.
- B. Design and Technology students go through a regular portfolio review process where experience with the technology shall be evaluated through their presentations. In addition recently graduated students often return feedback on their ability to successfully gain employment or graduate student positions.
- C. The system can be utilized for workshops for recruitment drives on campus such as the Louisiana Thespians Conference which is hosted annually here in Natchitoches. During any recruitment drive our faculty and students take a Department portfolio showcasing work that has been accomplished on our campus, in which this system can be a highlight.
- 5. If funded, which NSTEP http://www.nsula.edu/nstep/NSTEP.pdf objective(s) will this funding of this project advance. How will funding of the project advance the University and College/unit

technology plan?

- 1. To improve access to technology by students, faculty, and staff at Northwestern State University. This system will give students and faculty access to equipment specialized for their educational and research needs.
- 2. To provide classrooms with updated technology and multimedia. Classes in the Department of Theatre are not contained in a standard classroom, but bridge outwards to incorporate our performance and rehearsal spaces. This system will give those spaces access to multimedia capabilities that are not currently available due to either lack of equipment or inadequate equipment.
- 3. To provide a system for maintenance, upgrade, user training, and support of technology that will extend into the future.

All Design/Technical staff, faculty, and students will be trained on how the system operates, what functions require maintenance, and how to plan for maintenance to ensure continuous effective use throughout the life of the system. These concepts shall prove valuable to any future systems that replace this system at the end of its useful life span.

- 4. To establish processes that encourage technology initiatives by faculty, staff, and students. With this system in place student and faculty members will be able to experiment with bridging the live performance experience with multimedia elements in a way they have not been able to on this campus before. In order to fully utilize this system some student and staff members shall challenge themselves to learn other new technologies to create the multimedia that is controlled by this system.
- 5. To encourage innovation and research.

As with #7 above, this system will allow a new level of creativity in design, direction, and choreography. Directors and Choreographers shall be capable of experimenting with a combination of static and dynamic elements, both of live and rich media experience natures.

6. Provide a justification for funding of this project. Estimate the number of student that will be served per academic year and in what ways. Please indicate also any unique needs of the target group.

This project will have a visible and remarkable impact upon the Department, the University, and the surrounding region in many ways:

- A. Teaching the student body to use modern technology in existing and experiemental ways
- B. Improving the quality of productions available on campus for both the student body and citizens of the surrounding regions
- C. Improving the quality and scope of student portfolios that are vital to their success after graduation
- D. Improves upon our ability to recruit and retain students

Approximate number of students served per academic year, with the assumption that 3 production shall utilize the system in a single academic year:

Students working on a production - 80 per production, 240 per year

Students attending a production - 1000 per production, 3000 per year

7. List those individuals who will be responsible for the implementation of the project/initiative and indicate their demonstrated abilities to accomplish the objectives of the project.

Robert Graham - MFA Lighting Design - Facilities Manager/Production Manager/Lighting Designer Shawn Parr - BFA Theatre Technology - Adjunct Professor/Sound Designer/Technology Consultant

Both faculty members have degrees and professional experience with configuring and utilizing cue playback and multimedia control systems. In addition both are active in their respective design fields and maintain communication with other schools and technology companies in order to keep up with current trends in technology.

8. Describe any personnel (technical or otherwise) required to support the project/initiative.

Alfred Ehlers from Student Technologies will need to configure the computer system as is typical of a Student Technology project.

No other staff or faculty is required for this project to succeed.

9. Provide a schedule for implementation and evaluation.

March 2008 - order equipment

May 2008 - all equipment received and configured

June 2008 - Equipment ready to be field tested and evaluated. Any software configuration changes necessary shall be reported to Student Technology

July 2008 - If necessary confirm that any changes were successful

10. Estimate the expected life of hardware and software. Explain any anticipated equipment/software upgrades during the next five years.

No hardware upgrades shall be necessary within five years, with the exception of expendable items such as lamps for the projectors. Expendable items shall be covered by the Department of Theatre's annual budgetting.

Software upgrades will only be necessary if bugs are found in the system. The developer of the cue playback software has thus far released all such upgrades for free. Depending on system configuration these upgrades may be capable of being handled without any impact outside of the Department of Theatre.

11. Explain in detail a plan and policy that will be in place to ensure property security/controls for any equipment received through a Student Technology Fee.

If you are requesting equipment that will be either/or checkout to students or moved within the department, you must provide a checkout/loan policy.

The computer components of the system shall be located in a secure control booth location in one of our existing Theatres. This system shall be protected by a UPS (uninterruptible power supply) that will protect the system from power surge and sag, and provides voltage regulation. In the rare occasion that the system is

required in one of our other theatre spaces Movable Properties paperwork shall be utilized to document and control the movement of the equipment. The equipment shall be in a locked control booth in any of our three theatre spaces.

The projectors and camera shall be stored in a heavy duty locked cabinet located in our Department Chair's office. They will be made available to be checked out for the use of production work on a production by production basis. Existing Movable Properties systems shall be utilized as with the computer portion of the system. While used in the theatre spaces the projectors will typically be hung within a rig that will make them difficult to access and more difficult to remove.

Appendix A: Budget

The following items comprise the total of equipment needed for a fully functioning system. Specifications for each item are available in Appendix C. Pricing quotes from preferred vendors are available in Appendix B.

Quantity	Item	Description	Vendor	Price	Subtotal
1	Mac Pro	Computer system	Apple	\$4,473.00	\$4,473.00
2	ProDowser	Projector Dowser	Bakerwood Lite Industries	\$225.00	\$450.00
1	Echo AudioFire 8	Firewire Audio interface	Full Compass	\$461.25	\$461.25
2	Panasonic PT-D5700U	Projectors	Full Compass	\$5,425.15	\$10,850.30
2	DVIAJ-HD15P	DVI to VGA adaptor	Full Compass	\$17.99	\$35.98
2	Panasonic	Lamp kits	Full Compass	\$0.00	\$0.00
1	Canon GL2	MiniDV Camcorder	Full Compass	\$2,203.52	\$2,203.52
1	Canon HC4100	GL2 storage/carry case	Full Compass	\$302.41	\$302.41
1	ProMIDI License	Qlab License	Figure53	\$150.00	\$150.00
	ProVideo License	Qlab License	Figure53	\$150.00	\$150.00
					\$19,076.46

Appendix B: Vendor Pricing

Q Search Store

Questions? Need Advice? Call 1-800-800-2775

Customize your Mac.
Use the options below to build the

system of your dreams.





Processor

Get 8-core power from two 3.0GHz Quad-Core Intel Xeon "Clovertown" processors, or enjoy quad-core performance with two Dual-Core Intel Xeon "Woodcrest" processors, available in speeds up to 3.0GHz.

Learn more

\circ	Two 2.	OGHz Dual-	-Core Intel	Xeon	[Subtract	\$269
~	1 110 2.	OGIIZ Duai	COI C IIICCI	ACOII	Lanninger	440

- Two 2.66GHz Dual-Core Intel Xeon
- Two 3.0GHz Dual-Core Intel Xeon [Add \$719]
- Two 3.0GHz Quad-Core Intel Xeon [Add \$1348]



Memory

Mac Pro systems support up to 16GB of 667MHz DDR2 fully buffered ECC RAM in eight FB-DIMM slots. Choose among a variety of memory amounts and configurations.

Learn more

1GB (2 x 512MB) [Subtract \$629]

- O 2GB (4 x 512MB) [Subtract \$360]
- (4GB (4 x 1GB)
- 8GB (8 x 1GB) [Add \$900]
- 8GB (4 x 2GB) [Add \$1260]
- () 16GB (8 x 2GB) [Add \$3420]



RAID Card

Enhance storage performance and data protection by configuring your system with the Mac Pro RAID card and multiple hard drives.

► Learn more

- None
- Mac Pro RAID Card [Add \$899]



Hard Drive - Bay 1

Your Mac Pro includes four Serial ATA 3Gb/s hard drive bays, offering up to 3 terabytes of data storage. Configure each drive bay separately.

Learn more

- 250GB 7200-rpm Serial ATA 3Gb/s
- 500GB 7200-rpm Serial ATA 3Gb/s [Add \$116]
- 750GB 7200-rpm Serial ATA 3Gb/s [Add \$269]

Subtotal \$4,473.00 Estimated Ship:

3-5 business days Free Shipping

Add to cart

Specifications

- Two 2.66GHz Dual-Core Intel Xeon
- 4GB (4 x 1GB)
- 250GB 7200-rpm Serial ATA 3Gb/s
- 500GB 7200-rpm Serial ATA 3Gb/s
- 500GB 7200-rpm Serial ATA 3Gb/s
- 2 x NVIDIA GeForce 7300 GT 256MB
- Apple Cinema Display (20" flat panel)
- One 16x SuperDrive
- Both Bluetooth 2.0+EDR and AirPort Extreme
- Apple Keyboard and Mighty Mouse – U.S. English
- Mac OS X U.S. English
- AppleCare Protection Plan for Mac Pro (with Display)
 Auto Enroll



Account

Cart



Hard Drive - Bay 2

Configure the second hard drive bay with a 500GB or 750GB drive.

- None [Subtract \$296]
- 500GB 7200-rpm Serial ATA 3Gb/s
- 750GB 7200-rpm Serial ATA 3Gb/s [Add \$153]



Hard Drive - Bay 3

Configure the third hard drive bay with a 500GB or 750GB drive.

- O None [Subtract \$296]
- 500GB 7200±rpm Serial ATA 3Gb/s
- 750GB 7200-rpm Serial ATA 3Gb/s [Add \$153]



Hard Drive - Bay 4

Configure the fourth hard drive bay with a 500GB or 750GB drive.

- None
- 500GB 7200-rpm Serial ATA 3Gb/s [Add \$296]
- 750GB 7200-rpm Serial ATA 3Gb/s [Add \$449]



Graphics

Choose from a selection of PCI Express graphics cards from both NVIDIA and ATI, each able to support up to two displays including at least one 30-inch Apple Cinema HD Display. Select a higher-performance card for more advanced graphics work, or add more than one card to power an array of displays simultaneously for visualization projects and large display walls.

Please note: The Mac Pro provides a total of four PCI Express expansion slots. If both the Mac Pro RAID card and Fibre Channel card options are selected, up to two graphics cards may be installed.

Learn more

- NVIDIA GeForce 7300 GT 256MB (single-link DVI/dual-link DVI)
 [Subtract \$134]
- 2 x NVIDIA GeForce 7300 GT 256MB
- ATI Radeon X1900 XT 512MB (2 x dual-link DVI) [Add \$90]
- 3 x NVIDIA GeForce 7300 GT 256MB [Add \$135]
- 4 x NVIDIA GeForce 7300 GT 256MB [Add \$270]
- NVIDIA Quadro FX 4500 512MB, Stereo 3D (2 x dual-link DVI) [Add \$1350]



Display

Visualize your creations on a beautiful Apple LCD display, featuring an anodized aluminum enclosure, FireWire and USB 2.0 ports, and an industry-standard DVI connector for a direct pure-digital connection.

Learn more

- None [Subtract \$549]
- Apple Cinema Display (20" flat panel)
- Apple Cinema HD Display (23" flat panel) [Add \$250]
- Apple Cinema HD Display (30" flat panel) [Add \$1050]



Second display

All Mac Pro graphics cards support two Apple displays: a 30-inch and either a 20inch or 23-inch Apple Cinema Display. To power two 30-inch Apple Cinema HD displays from a single card, you must select the ATI Radeon X1900 XT or NVIDIA Quadro FX 4500.

Learn more

- None
- Apple Cinema Display (20" flat panel) [Add \$549]
- Apple Cinema HD Display (23" flat panel) [Add \$799]

The Apple Store	U.S.)	
*/	O Apple Cinema HD Display (30" flat panel) [Add \$1599]	
	Optical Drive Your Mac Pro comes standard with one 16x double-layer SuperDrive that burns plays both CDs and DVDs. Add a second SuperDrive to streamline disc burning Learn more	
	One 16x SuperDrive Two 16x SuperDrives [Add \$89]	
00	Wireless Options Configure your Mac Prowith Bluetooth 2.0+EDR and AirPort Extreme wireless to connect to peripherals and networks without wires.	0
	Please note: Selecting an AirPort Extreme card may delay the shipment of your Pro. Learn more	Мас
	None [Subtract \$71] Bluetooth 2.0+EDR module [Subtract \$45] AirPort Extreme card (Wi-fi) [Subtract \$27] Both Bluetooth 2.0+EDR and AirPort Extreme	
A	Fibre Channel Card To connect to an Xserve RAID, you will need a Fibre Channel PCI Express card (bus adapter). Learn more	host
	None Dual-channel 4Gb Fibre Channel PCI Express card [Add \$539] Quad-channel 4Gb Fibre Channel PCI Express card [Add \$899]	
J	Modem Choose the Apple USB Modem to access the Internet using your dial-up service and light, it connects to the USB port on your Mac Pro. Learn more	. Sm
	None Apple USB Modem [Add \$44]	
	Apple Keyboard and Mouse The wired Apple Keyboard and Mighty Mouse come standard with your Mac Pro you can choose an Apple Wireless Keyboard and Apple wireless Mighty Mouse, we require the Bluetooth 2.0+EDR module. Learn more	
	Apple Keyboard and Mighty Mouse – U.S. English	
	Apple Keyboard and Mighty Mouse – Western Spanish	
	Apple Wireless Keyboard and Apple wireless Mighty Mouse – U.S. Eng. [Add \$53] Apple Wireless Keyboard and Apple wireless Mighty Mouse – Western	
	Spanish [Add \$53]	
	Mac OS X language Your Mac Pro typically ships with an operating system that matches the official language of the country in which you purchased it. However, you can also choo operating system that displays information in a different language, if available icountry.	

- Mac OS X U.S. EnglishMac OS X Western Spanish



Mac OS X Server v10.4

Apple now offers 100% native mac OS X Server V10.4 as a preinstalled option	1,
updating the Mac OS X v10.4 "Tiger" client to a full, server operating system.	With
Mac OS X Server v10.4, Apple has integrated popular open source software	
technologies and created innovative management tools to make it easy to pr powerful standards-based server solutions. Choose either the 10-Client lices Unlimited license of Apple's award-winning UNIX-based server operating sys	ise or
» Learn more	
⊙ None	



Apple Software

You can choose to have one of the following Apple software titles preinstalled and available for immediate use. You'll receive backup media with all the application data and an electronic version of the user's guide.

Learn more

\odot	None
0	iWork '08 preinstalled [Add \$39]
0	Logic Express preinstalled [Add \$69]
0	Aperture 1.5 preinstalled [Add \$99]
0	Final Cut Express HD preinstalled [Add \$99]



AppleCare Protection Plan (APP)

Mac OS X Server (10-Client) [Add \$249] Mac OS X Server (Unlimited-Client) [Add \$499]

The AppleCare Protection Plan extends your computer's 90 days of complimentary support and one-year warranty to up to three years of world-class support.

Learn more

O	None [Subtract \$199]
0	AppleCare Protection Plan for Mac Pro (w/o Display) - Auto Enroll
(•)	AppleCare Protection Plan for Mac Pro (with Display) - Auto Enroll

 $\begin{tabular}{ll} \textbf{Subtotal} & \textbf{Please note that your subtotal does not include sales tax or} \\ & \textbf{rebates}. \\ \end{tabular}$

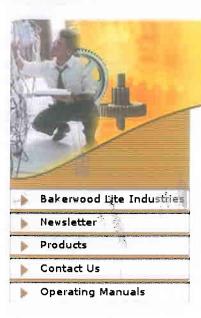
\$4,473.00

Add to cart

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Sales and Refunds

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Bakerwood Lite Industries

Show Solutions with budgets in mind

ProDowser_{v2.3}

A DMX Controlled Projector and Light Source Shutter System



Pro-Dowser, DMX Projector Dowsing System

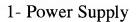
\$225.00 + Shipping

Features

- Allows DMX512 protocol control of flag-type lens shutters.
- 200 millisecond close time through 45 degrees of travel.
- Mini DIP address switches address a full 512 channels.
- AC power adapter or battery operation.
- 3 pin Male and Female DMX signal connectors for daisy chain through connection.
- All black design virtually disappears in the dark
- Optional Add-On units for multiple projectors on adjacent channels.
- Optional DMX Termination switch onboard device.

Ships With:

1- Dowser Unit



1- Flat Black Aluminum Flag

1- Hook & Loop/PSA Mounting Kit

1- #0 Phillips Screwdriver (for flag adjustments)

Easy payment methods include PayPal or checks via Mail



From: Full Compass Systems, LTD

8001 Terrace Avenue

QUOTE #: 313955 Print Date: 10/24/2007 09:45:37

Middleton

WI 53562-3194

LA 71497

Quote Date: 10/24/2007

608-831-7330

Fax # 608-831-6330

Operator: damon

Bill: Customer # 71810

COMPTROLLERS OFFICE

Ship To: Cus/Adr # 71810 01

NORTHWESTERN STATE UNV/LA

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NATCHITOCHES LA

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2. 17.990 35.980 DVI to VGA adaptor DVIAJ-HD15P 1. 461.250 AUDIOFIRE8 461.250 Firewire Recording Interface 2203.520 2203.520 DVC Camera 7920A001 1. 302.410 302.410 HC4100 Carry Case GL2 8031A001

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Open the door to new possibilities.

The basic version of QLab packs a big punch—and it doesn't cost a dime. But for those who need more we offer a series of powerful upgrades. You can customize QLab simply by selecting the appropriate licenses for your needs.

Each license unlocks a separate set of features. When you purchase a license, a personalized license file will be instantly generated and sent to the email address you provide during checkout. Simply double-click the file to activate the license. There are no USB dongles, no serial numbers to enter, no muss, and no fuss.

Tips Before You Buy:

- Try before you buy!
 You can install and try any cue using the integrated Update Manager.
- Make sure your spam software is set to allow emails from "support@figure53.com"

hanced	-Audio \$49 BuyNo
	ed Audio license adds new capabilities to your existing Sound Cues and Fade Cues, and unlocks the Sound Group- tence offers:-
4-	Support for 16 independent output channels per Sound Cue, routed to as many as 32 physical output channels per device.
Water -	Global channel patching for each output device.
V.	Global volume adjustments for each output device.
V-	Live Fade Cue previews, to hear end volume levels immediately when setting fades.
**	Aggregate audio device support allows you to combine multiple physical-devices into a single logical device.
18 m	Custom channel names for each output device.
1	Support for 16 output channels for each Fade Cue.
V'-	Copy and paste Sound Cue volume levels to other Sound Cues.
V	Copy and paste Fade Cue volume levels to other Fade Cues.
V-	Fasily manipulate several Sound Cues as if they were a single multi-channel audio file, using the Sound Group Gue.
V	Brag and drop rearrangement of audio input channels in Sound Group Cues.

Pro Video \$149 Buy Now

The Pro Video license unlocks the Video Cue and the Video Fade Cue, giving you access to all the following features:

- Play full-screen video or still images on any attached display. (Up to eight separate displays.)
- Display video or still images in a resizable window on any attached display.
- Overlap multiple videos and still images, create picture-in-picture displays, and create custom backdrops.
- Adjust rotation, scale, translation, and aspect ratio.
- Control volume, transparency, start and end times, and looping properties.
- Play back any media file that Quicktime supports, including video files, still image files, and even MIDI music
- Adjust the transparency of videos and still images with the Video Fade Cue.

Pro MIDI

\$149

BuyNow

The Pro MIDI license unlocks the MIDI Voice Cue, the MIDI Show Control Cue, and the remote MIDI control functionality, giving you access to all the following features:

- Send all MIDI Voice messages.
- Adjustable fades for Control Change, Key Pressure, Channel Pressure, and Pitch Bend MIDI messages.
- Send all General MIDI Show Control Commands.
- Send all Sound MIDI Show Control Commands.
- Support for all MIDI Show Control timecode formats.
- Control QLab remotely with MIDI Show Control messages or MIDI Voice messages.
- Assign a MIDI Voice message to trigger any cue or cue list.
- Support for 8 independent MIDI destination devices per workspace.

Pro-Control

\$19

BuyNow

The Pro Control license unlocks the control cues, giving you access to all the following features:

- The Target Cue, for easy vamping and flow control.
- The Pause Cue, to hause any running cue
- The Reset Cue, to reset any cue or cue list.
- Fire any cue at a specific time of day, with the wall clock trigger.

Company · Help · Buy Copyright © 2005–2007 Figure 53, LLC Appendix C: Technical Specifications

ECHO

echo digital audio

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Product Description | Product Comparison | Larger Picture

Product Specifications

Echo Digital Audio is proud to use only specifications of production units. While other companies quote specs of their converters alone in laboratory settings, the numbers you see on this page represent the actual unit in your hands. Since people often rely heavily on specs when deciding what gear to buy, we like to bring you numbers that really mean something.

Analog Input

- 2 Neutrik Universal connectors for balanced TRS or XLR
- 6 Balanced TRS connectors
- Accepts unbalanced signals
- Frequency Response: 20Hz-20kHz, ±0.1dB
- Dynamic Range: 113dB A-weighted
- THD+n: <0.002% Aweighted

MIDI

- MIDI input
- MIDI output

Digital Sync

- Word Clock in/out
- S/PDIF in/out

Headphone Output

- High quality ¼" headphone jack
- Volume control on front panel

General

- Nominal Input Level: +4dBu or -10dBV (software configurable)
- 48V Phantom power on XLR inputs

Analog Output

- 8 Balanced TRS connectors
- Frequency Response: 10Hz-20kHz, ±0.1dB
- Dynamic Range: 114dB A-weighted
- THD+n: <0.002% Aweighted
- Nominal Output Level: +4dBu or -10dBV (software configurable)

General Converter Specs

- 128x Oversampling converters
- 24 bit data resolution maintained throughout signal path
- Multiple standard sampling rates supported: 32k, 44.1k, 48k, 88.2k, 96k

S/PDIF Digital Input/Output

- Up to 24 bit resolution
- Coaxial connector
- Consumer/Professional Switch
- Sample rates from 32kHz
 - 96kHz supported

- On-board 32-bit / 1.6 gigaflop DSP:
 - Digital mixing
 - Near zero latency hardware monitoring

Dimensions

- 14 1/2"(w) x 5 1/2"(d) x 1 1/2"(h)
- Fits in a single rack mount space
- Includes rack mounting brackets

Host Interface

• 2 1394a (FireWire) ports

Mic Preamps

 We spec our "studio quality" mic pres at -128 dBu EIN (equivalent input noise) and spec the A/D inputs at 112 dB dynamic range and a THDN of less than .002%, both A-weighted.

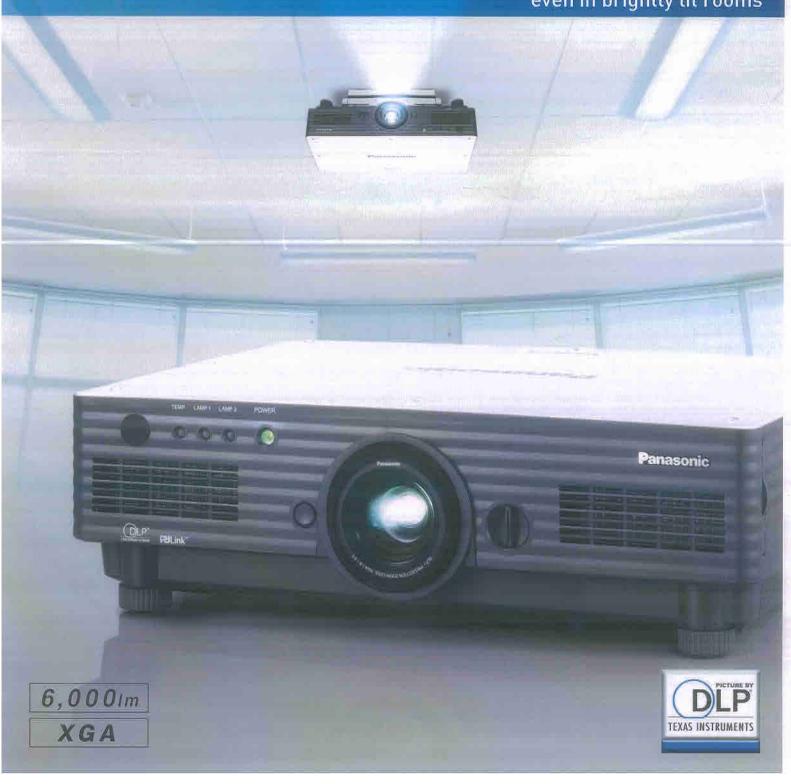
Specifications subject to change without notice.

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Panasonic ideas for life

PT-**D5700U** PT-**D5700UL**

The 6,000-Im projector that's easy to see even in brightly lit rooms



Further expanding reliability and picture quality

Panasonic's DLP® system projectors have taken another step forward. Now they produce even better images while maintaining all of their highly reliable functions.

Their 6,000-lm brightness delivers crisp, easy-to-see images even in brightly lit classrooms and meeting rooms, to make presentations easier to understand.



High power brightness

DLP® Projector PT-**D5700U** PT-**D5700UL**



High brightness and high picture quality

High-power 6,000-lm brightness



The PT-D5700U/D5700UL offer full 6,000 lumens of brightness, thanks to the newly developed AC lamp and more efficient reflectors and synthetic mirror. This enables crisp, sharp images even when projecting in a classroom, meeting room, or other location with ordinary daytime lighting.



System daylight view (NEW)



The system daylight view function uses an image processing circuit to compensate for the loss of color saturation that occurs when light reflects onto the screen from bright surroundings. It is especially effective for producing crisp, sharp images in dark portions containing gradation. The function can be adjusted in three steps.







Vivid color control

A unique control technology is used to maximize the color segment areas of the color wheel. Compared to conventional projectors, the brightness of each color is increased by an average of about 15%. This results in sharper, clearer color reproduction.

Progressive cinema scan (3/2 Pulldown)

This interlace/progressive conversion technology automatically detects when the input signal is derived from filmed material and selects the optimum progressive processing method to assure faithful reproduction of the original image.

Full 10-bit (NEW picture processing

The use of a full 10-bit image processing system provides. smooth tonal expression. For example, skin tones appear natural and true to life.

3D color management system

Compensation provides optimal levels of color saturation, hue, and brightness that were not possible with conventional projectors. Colors approach those of the original image, even on largescreen displays.

New IP conversion circuit

The PT-D5700U/D5700UL feature a new IP conversion circuit that produces more detailed images than our previous models.

Dynamic sharpness control

The dynamic sharpness control circuit adjusts the video signal waveforms based on the difference in brightness of adjacent pixels for a sharp, clear picture that is relatively unaffected by signal

More effective NEW noise reduction

Images are noticeably clearer, thanks to higher-performance frame noise reduction, which lowers image graininess, and improved MPEG noise reduction, which suppresses the block noise and mosquito noise that are common in fast-action scenes.

Excellent reliability



Dual lamp system

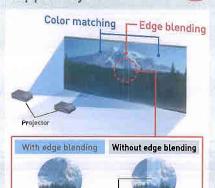
The use of two tamp systems increases brightness and eliminates the need to interrupt a presentation if a tamp burns out (in dual tamp operation mode).



Flexible system installation

Built-in multi-screen support system





•Edge blending function

This function controls luminance at the edges where screens overlap. By eliminating unnatural screen joints, it produces uniformly attractive multi-screen displays.

Overlapping image edges

•Color matching function

The Color Matching function corrects the subtle variations in color reproduction between projectors. Originally developed "adjustment assist" software quickly and precisely optimizes images, so the colors on each screen are uniformly reproduced.

*Digital image enlarging

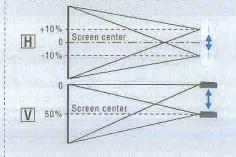
Images are enlarged up to 10 times (horizontally and vertically) without having to use any additional devices.

Lens-centered design

A lens-centered, symmetrical design provides flexible system layout, eliminating the need for any special considerations when planning the installation site.

Horizontal/Vertical lens shift

A wide adjustment range of the horizontal/ vertical lens shift assures distortion free images and adds convenience and versatility. (Horizontal smanual, Vertical spowered)



Optional lenses for various venues

Five optional lenses with different throw distances are available in addition to the supplied lens. These powered zoom/focus lenses enable the projectors to perform superbly in an array of projection environments.

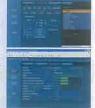
Web browser control/ monitoring and e-mail message alert

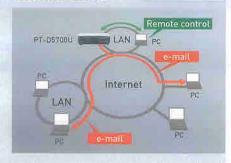
Anybody can operate the PT-D5700U/D5700UL by remote control or monitor its status over a

LAN network, because it is all done using the computer's familiar Web browser. Furthermore, the PT-D5700U/D5700UL sends an E-mail message to notify the operator when an error

has occurred or a lamp

needs to be replaced.





Multiple terminals

The PT-D5700U/D5700UL has an array of terminals-two R6B inputs including a 5-BNC connector, serial in/out, one S-video inputs, two remote in, one remote out, DVI-D and control capability-to support a broad range of projection needs HDCP. [High-Bandwidth Digital Content Protection] compliant. Using the serial terminal(RS232C), it is also possible to connect and operate AMX and Crestron control systems with ease.







AC lamp

Newly developed AC lamps with full 300 watts of power offer excellent brightness and greater reliability than other types. A new lamp drive system also lowers the stress on the lamp electrodes while the lamps are lit. The new lamps have a lifetime of approximately 3,000 hours*, which is reassuring for applications where the projector is frequently used. The AC tamps also minimize color irregularities.

*with lamp mode; low

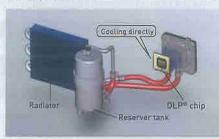


Liquid-cooling system

Panasonic's original liquid-cooling system directly cools the DLP on chip, which extends PT-D5700U/D5700UL performance and attains a high level of reliability. It also enables operation in temperatures up to 113"F/45"C for use in a wider variety of environments, and maintains a more stable performance even in harsh conditions while keeping the operating sound down to a quiet 29 dB*.

with lamp mode: low

NEW



Micro cut filter

A filter in the air intake section traps dust particles that are 10 microns* or larger. By capturing approximately 7 times as much dust as conventional filters, it quards against optical blocks and reduces the penetration of dust into to the interior to provide

stable operation by, for example, preventing drops in brightness.

*10-micron dust = lint, pollen, etc

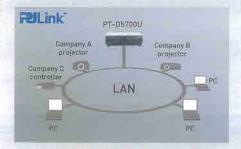


Dustproof design with sealed optical block

The effect of dust has been minimized by completely sealing the optical block. The dustfree design helps ensure that this DLP® projector witl continue to deliver crisp, sharp, high-resolution images over an extended

PJLink™ compatibility

The LAN terminals support PJLinkTM class 1 connection. Control with the same specifications is also possible when used in a multi-projector system with projectors of another brand.



Easy lens replacement

system, so lenses altach and detach with one-touch

ease



Control panel and wireless remote control

The rear control panel allows for easy operation when the PT-D5700U/ D5700UL is set on a desk or floor. New wireless remate control with longer transmission capacity of 98 feet [30 m].



Other valuable features

Mechanical lens shutter

A mechanical lens shutter minimizes annoying light leakage when the PT-D5700U/D5700UL is on standby or temporarily not in use, such as during a meeting.

Direct power off

Built-in capacitor provides power to cool the internal parts. This means that you can switch off the room's main power as soon as the presentation ends. PT-D5700U/D5700UL doesn't make you wait around and helps minimize lamp damage.

Flexible angle setting

The PT-05700U/ D5700UL can be rotated vertically. This means you can install it at any upand-downangle you wish to accommodate different installation conditions.



Easy replacement of dust filter and lamp

Dust filter is replaced from the side and lamps are replaced from the back panel. Both of them are replaced very easily even when PT-D5700U/D5700UL is installed.

Others

- •ID assignment for up to 65 units
- . Coordinated group control for up to 26 groups (A-Z)
- Digital vertical keystone correction
- ·Built-in test pattern
- ·Selectable 9-language on-screen menu (English, German, French, Spanish, Italian, Russian, Japanese, Chinese, Korean)
- . Anti-theft features with chain opening

The PT-D5700UL delivers the same performance as the PT-D5700U, but comes without lens. Combine it with an optional lens to get the exact performance you need according to usage and operating conditions

Ecology-conscious design

Panasonic works from every angle to minimize environmental impact in the product design. production and delivery processes, and in the performance of the product during its life cycle. The PT-D5700U/D5700UL reflects the following ecological considerations.

- No halogenated flame retardants are used in the cabinet.
- . The packing case and operating manual are made from recycled paper
- · Lamp power switching further reduces power consumption
- Auto Power Save activates standby mode when no signal is input.

Pixels Lamp

Brightness (normal lamp) Contrast ratio

Resolution RGB Video Lens

PT-D5700U

PT-D5700UL Screen size Lens shift RGB input scanning frequency

Component signal

Video signal Terminals VIDEO IN S-VIDEO IN RGB1/YPsPa IN RGB2 IN

DVI-D IN RS-232C IN RS-232C DUT REMOTE 1 IN REMOTE 1 OUT REMOTE 2 IN LAN

Keystone correction range

Installation Power cord length Power supply Power consumption Dimensions (W x H x D) Weight

PT-D5700U PT-D5700UL Operating temperature Operating humidity Supplied accessories

Screen size (4:3)

DLP® Projection system 0.7" (diagonal) DLP® chip 4:3 786.432 (1.024 x 768) x 1 total of 786.432 pixels 300 W UHM** Ismp x.2 (Dual Lamp System) 6,000 lumens (dual lamp, high power mode) 2,000:1 (full on/full off, contrast mode: high)

1,024 x 768 pixels 560 TV lines

Powered zoom/focus lens. Supplied lens: (1.8-2.4:1) F = 1.7-2.0, I = 25.6-33.8 mm Optional powered zoom/focus lenses 50 - 600 inches Vertical (powered), horizontal (manual)

th 15-91 kHz, IV 50-85 Hz Dot clock 150 MHz or lower

480i, 480p, 576i, 576p, 720/60p, 720/50p, 1080/60i, 1080/60p 1080/50i, 1080/50p

NTSC, NTSC4.43, PAL, PAL60, PAL-N, PAL-M, SECAM

Mini DIN 4-pin BNC x 5 D-sub HD 15-pin

24pin DVI 1.0 compliant, HDCP compatible, for single link D-sub 9-pin female D-sub 9-pin male

M3 Jack M3 jack

D-sub 9-pin ternale (parallel) RJ-45x1, compliant with PJLink™ (class 1), 10Base-T/100Base-TX

±30° (with standard lens) Front/rear, celling/floor 9.9' (3.0m) 120 V AC, 60 Hz

770 W (770 VA) (10 W during standby mode with (an stopped) 20-7/8' x 6-9/16' x 16-7/8' (530 x 167 x 429 mm) (without lens)

30.6 lbs (13.9 kg) with supplied lens 28.9 lbs (13.1 kg) without lens 32 -113 F (0 -45 °C) 20-80% (no condensation)

Power cord, Wireless/wired remote control unit,

Throw distance

AA Batteries (x 2) for remote control

Projection distance [molers]

7/4	With ET-DLE050	0 With ET-BLE100		With supplied lens'		With ET-DLE260		With ET-DLE300		With ET-DLE400	
	0.8:1	1,3-1,8:1		1,8-2.4.1		2.4-4,0:1		3.8-6.0.1		5,8-8.1:1	
	L	min, max		min. max.		min, max.		min max.		min. max.	
50'	2.6	4.3	5.9	5.8	7.7	8.0	13.2	12.5	19,7	19.3	27.2
	0.7m	1.3m	1.8m	1.7m	2.3m	2.4m	4.0m	3.8m	6.0m	5.9m	8.3m
80"	4.2	7.0	9.6	9.5	12.6	13,0	21.3	20.4	31.9	30.9	43:4
	1.2m	2.1m	2.9m	2.9m	3.8m	3.9m	6.5m	6.2m	9.7m	9.4m	13:2n
1091	5.3	8.9	12.0	11.9	15.8	18.3	26.7	25,6	39,9	38.6	54.2
	1.6m	2.7m	3.6m	3.6m	4.8m	4.9m	8.1m	7.8m	12,1m	11.7m	16.5
150°	8.0	13.4	18.1	17.9	23.8	24.5	40.2	38.6	60.1	57.9	81.2
	2.4m	4.0m	5.5m	5.4m	7.2m	7.4m	12.2m	11.7m	18.3m	17.6m	24.7n
200'	10.7	17.9	24.2	24.0	31.8	32.8	53.8	51.7	80,3	.77,2	108.1
	3.2m	5.4m	7.3m	7.3m	9.7m	10.0m	16.4m	15.7m	24.5m	23.5m	32.9n
300*		27.0 8.2m	36.4 11.1m	36.1 11.0m	47.8 14.5m	49.3 15.0m	80.8 24.6m	77.7 23.7m	120.8 36.8m	115.8 35.3m	162.1 49.4n
408"		36.0 10.9m	48,6 14.8m	48.3 14.7m	63.8 19.4m	65.9 20.0m	107.8 32.8m	103.8 31.6m	161,2 49.1m	154,3 47.0m	216.1 65.9n
500*		45.1 13.7m	60.8 18.5m	60.4 18.4m	.79.8 24.3m	- 82.4 25.1 m	134.8 41,1m	129.9 39.6m	201.6 61.4m	192.9 58.8m	270,1 82.3n
600)"		54.1 16.5m	73.0 22.2m	72.5 22.1m	95.8 29.2m	98.9 30.1m	161.9 49.3m	156.0 47.5m	242.0 73.7m	231.5 70.5m	324.1 98.8n

The supplied lens is used only for PT-D5799U

nasonic

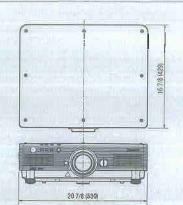
Panasonic Projector Systems Company, Unit of Panasonic Corporation of North America www.panasonic.com/projectors

Headquarters

3 Panasonic Way, 4B-9 Secaucus, NJ 07094 888-411-1996

Panasonic Canada Inc. 5770 Ambler Drive Mississauga, Ontario Canada L4W 2T3 905 624 5010

Dimensions



Optional accessories

ET-LAD57 ET-LAD57W (twin pack



Zoom Lens (1.3-1.8:1) ET-DLE100 Zoom Lens (2.4-4.0:1) ET-DLE200 Zoom Lens (3.8-6.0:1) ET-DLE300 Zoom Lens (5.8-8.1:1) FT-DI F400 Fixed Focus Lans (0.8:1) ET-DLE050





NOTES ON USE

Notes on Projector Placement and Operation:

- The projector uses a high-wattage lamp that becomes very hot during operation. Please observe the following
- Never place objects on top of the projector while it is operating.
- 2. Make sure there is an unobstructed space of 500 mm or more around the projector's exhaust openings.
- 3. Do not stack projector units directly on top of one another. If two units must be stacked for backup use in ordinary projection, use a method as shown below and provide ample space between the units to ensure that exhaust heat does not accumulate near the intake opening or around the units. Dual stacked projection of the PT-D5700U/D5700UL is not recommended.
- 4. If the projector is placed in a box or enclosure, ensure the temperature of the air surrounding the projector is between 0 °C/32 °F and 40 °C/104 °F*. Also make sure the projector's intake and exhaust openings are not blocked. Take particular care to ensure that hot air from the exhaust openings is not sucked into the intake openings.
- *Even when the ambient temperature may the intake opening Is.48 *C/104 *F.or lower, an accumulation of not air inside the pablingt may gause the protective circuit to activate and shut down the projector. Please give ample consideration to the design with regard to ambient temperature conditions.

Operating the Projector Continuously:

- 1. If the projector is to be operated continuously 24 hours a day, use the dual-lamp optical system's alternating lamp operation (lamp changer) function. The projector cannot be operated continuously 24 hours a day in dual-lamp mode. Allow a minimum of two hours per day of non-operation time per day if the using the dual-lamp mode.
- 2. The lamp replacement cycle duration becomes shorter if the projector is operated repeatedly for short periods.
- . The projector uses a high-voltage mercury lamp that contains high internal pressure. This lamp may break, emitting a large sound, or fall to Illuminate, due to impact or extended use. The length of time that it takes for the lamp to break or fail to illuminate varies greatly depending on individual lamp characteristics and usage conditions
- · The brightness of the lamp will gradually decrease with use.

For more information about Panasonic projectors. Visit — >>> http://panasonic.co.jp/pavc/global/projector/ Please contact Panasonic or your dealer for a demonstration.







Weights and dimensions shown are approximates. Specifications are subject to catange without notes. This product may be subject to export regulations. An application has been illed for trademark rights, or trademark rights have been granted, for PJLInk in Japan, United States of America and other countries and area UHM is trademark or Matsushita Electric indusurial Co., Ltd. VSA and rademarks of international Business Machines Corporation. All other trademarks are the property of their respective trademark or independent disablement of the property of the DLP, DLP logo and DLP Mediation logo are trademarks or registered trademarks or Income Instruments tor Systems Company is a Unit Company of Panasonic Corporation of North America. All rights reserved. (C) 2007 Metsushitta Electric Industries Countries (All rights reserved. PT-D6700U1-07May20K Printed in Japan.



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Specifications



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Power Supply (rated)

7.2 V DC

Power Consumption

4.8 W (using viewfinder). 5.7 W (using LCD screen)

PRINTERS

Television System

EIA standard (525 lines, 60 fields) NTSC color signal

Video Recording system

2 rotary heads, helical scanning system DV system (consumer digital

VCR SD system); Digital component recording

Audio Recording system

PCM digital sound: 16-bit (48 kHz/2ch); 12-bit (32 kHz/4ch)

Image Sensor

3 CCD 1/4" Pixel Shift (charged coupled device) 410,000 pixels

(380,000 effective pixels)

Tape Format

Videocassettes bearing the MiniDV mark

Tape Speed

SP: 3/4 ips (18.81 mm/sec); LP: 1/2 ips (12.56 mm/sec)

Maximum Recording Time (with

an 80-min. cassette)

SP: 80min; LP: 120 min

Fast Forward/Rewind time

2 min. 50 sec (with a 60 min cassette)

f/1.6 -2.9, 20X POWER ZOOM, 4.2-84MM

Focusing System

TTL autofocus, manual focusing possible

Minimum Focusing Distance

Tele: 3.3 ft (1m); Wide: 0.39 in (1cm) on maximum wide angle

Frame Rate

Lens

1/15.000 sec.

Minimum Illumination

6 lx

Recommended Illumination

more than 100 lx

Filter Diameter

58mm

Viewfinder

0.44 in., color LCD (approx. 180,000 pixels)

LCD Screen

2.5 in. measured diagonally (6.4 cm), 200,000 pixels (approx.)

Microphone

Stereo electret condenser microphone

DV Terminal

Special 4-pin connector (based on IEE 1394)

Video Terminal

1 VP-p/ 75 (Y signal) ohms unbalanced

S-video Terminal

1Vp-p (Y signal), 0.286 Vp-p (C signal)

Audio Terminal

-10 dBV, less than 3 kohms, unbalanced

Operating Temperature range

32-104° F (0-40° C)







Product Advisories:

Remove the Cassette Warning

- Customer Instructions

Dimensions

4 5/8 x 5 3/8 x 12 in (118 x 136 x 306 mm)

Weight (not including lens and

battery pack)

2lb. 7 1/2 oz. (1.25 kg)

Mumory Card

Recording Media MultiMediaCard, SD Memory Card

Image Format

Design rule for Camera File System (DCF)

Print Order format

Digital Print Order Format (DPOP)

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NORTHWESTERN STATE UNIVERSITY OF LOUISIANA Natchitoches, LA 71497

Mrs. H. D. Dear, Sr. and Alice E. Dear School of Creative and Performing Arts

Music Art (318) 357-4522 Art (318) 357-4483 Theatre (318) 357-5744 FAX (318) 357-5906

October 25, 2007

To Whom It May Concern:

Please consider this a letter of support for the Student Technology Fee Grant Proposal from Mr. Scott Burrell and Mr. Robert Graham on behalf of the entire theatre program.

The Student Technology Grant Fund has been extremely generous to the School of Creative and Performing Arts in the past and we are extremely appreciative of this support. With this thought in mind, I hope you will give serious consideration to funding the requests that are in the current proposal from the NSU Theatre.

All three of the proposals are important to the continued growth and improvement of our theatre program and they will help ensure that we are able to continue to attract the finest students and to provide the highest quality of performances.

It is will pleasure that I support this application and I hope you will give it every consideration.

Sincerely,

Bill Brent

Director, School of Creative and Performing Arts



Office of the Dean

The Graduate School

Telephone (318) 357-5851 FAX (318) 357-5019 E-mail: grad_school@nsula.edu http://www.nsula.edu/graduateschool/

Northwestern State University Natchitoches, Louisiana 71497

A Member of the University of Louisiana System

October 29, 2007

TO WHOM IT MAY CONCERN:

The Theatre and Dance department is submitting three projects to be funded through Student Technology Fee Grants. I concur with the need for the equipment and technology specified, and to the priority given the projects.

The first grant for consideration is for the renovation and upgrade of the Theatre Technology infrastructure for the Loft Theatre. By improving the theatrical lighting and sound systems, theatre students will have an improved facility to explore the various aspects of their training in a more laboratory-like setting. The addition and improvement of theses systems will bring the Loft Theatre fully online as an operational studio theatre. By providing this additional performance space, which the department plans to be used for the student-produced Second Season, the students will have a space that is more appropriate for students to 'experiment' with the theories and methods they learn in class than the two larger theatre spaces. Additionally, this will create a more appropriate classroom/laboratory for the lighting and sound design curriculum, which will improve the quality of instruction in those courses. Also, the addition of a third 'viable space' in the theatre department will improve our ability to host outside events on a small scale, which we have not been capable of doing in the past. Student organizations will now have A.A. Fredericks Theatre (1300 seats), Theatre West (95 seats) and the Loft Theatre (50 Seats) which could be used for meetings and events. This enhancement will not only improve the overall educational mission of the theatre program, but become a very attractive part of the department's recruiting capability. Very few programs nationally have 3 fully operational venues, and fewer yet have a space that is entirely dedicated to

The second grant to be considered is a projection system for the A. A. Fredericks Fine Arts Building theatre facilities. The selected equipment will allows students to record video, play back video and still image projections, and playback multichannel audio sound effects, during theatre productions. This system will give Northwestern students an opportunity to work with equipment being used in their professional field in experimental ways. Installing and using this equipment will also allow the Theatre to recruit more students in the Design and Technology concentration

The third and final grant request is for an upgrade to the lighting control for A.A. Fredericks Auditorium to an ETC Congo Jr. Lighting Controller. The current lighting control system in Fredericks is and ETC Expression III lighting controller. In a past grant, the department received funding to add Intelligent/Robotic lighting fixtures for the facility. With the funding provided from that grant, the department was able to purchase 4 Varilite VL1000 light fixtures. This marked a vast leap forward in lighting technology. Unfortunately the control board, while capable of operating with these and other fixtures of this type, does not interface with the units in what would be considered an industry-normal manner, and forces students to learn non-standard programming techniques. By upgrading to a controller which is designed to interface correctly with these newer technologies, students will work with industry standard technologies and methods in their practical production and classroom work. Additionally, this would allow a 'trickle down' assignment of the controllers in Theatre West and the Loft, upgrading the control capabilities of those spaces at no additional cost. Having this technology available for student use improves a graduate's strength as they enter into the job market, and strengthens the department's ability to recruit students of design/technology, an area that the department would like to improve.

Thank you very much for your time and consideration of this grant proposal, and your continued support of the Northwestern Theatre & Dance program and the College of Liberal Arts.

Sincerely,

Steven G. Horton, Ph.D.

Stever 6. 1th

Dean

Associate Provost