

Student Technology  
Fiscal Year 2006-07

Dr. Jim McCrory:

Approved

Denied

Comment: \_\_\_\_\_

Signature: \_\_\_\_\_

*Jim McCrory*

Date: \_\_\_\_\_

Tim Chadbourne:

Approved

Denied

Comment: \_\_\_\_\_

Signature: \_\_\_\_\_

*TC*

Date: \_\_\_\_\_

*8/23/06*

Gary Gatch:

Approved

Denied

Comment: \_\_\_\_\_

Signature: \_\_\_\_\_

*Gary Gatch*

Date: \_\_\_\_\_

*8/29/06*

Dale Martin:

Approved

Denied

Comment: \_\_\_\_\_

Signature: \_\_\_\_\_

*Dale Martin*

Date: \_\_\_\_\_

~~Diane Hamilton~~  
~~Tyron Tinnerello~~

Approved

Denied

Comment: \_\_\_\_\_


Signature: \_\_\_\_\_

*DH*

Date: \_\_\_\_\_

*8-24-06*





**Student Technology Fee  
Funding Request Form  
Special Initiative Funds Fiscal Year 2006-07  
Northwestern State University of Louisiana**

Prepared by: Alan Sypert For: Bill Brent

College: Liberal Arts Campus: Natchitoches Department: Creative and Performing Arts

Where will requested equipment be located/installed/housed: Bldg. CAPA Rooms 208-210/Magale  
Are property policies and procedures in place by the department for equipment requested. yes

Delivery to the Student Technology office located in Watson Library, Room 113. Date \_\_\_\_\_

1. Describe target audience.

All Music students at NSU. It would have the greatest impact on the piano majors, but would also directly impact all music students through their performances with these students.

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

This grant is for the purchase of four MPC6 6'11" Yamaha Grand Midi Pianos and one DC7M4t Disklavier Grand Piano. This grant would supply our students with up to date technology and performance quality equipment. The purchase of these pianos would allow our piano majors a great opportunity to learn additional skills and master those which they have already learned. The technology in these pianos would allow our students additional opportunities to compose and print their own music. It would aide in the study of theory, composition and orchestration. Finally with the addition of the DC7M4T, performances in Magale Recital Hall will have access to this great technology on a very high quality instrument.

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

The primary objective is to improve the quality of education and performance of our music students. The tools provided by this grant will produce greater quality performances.

4. Indicate how each project objective will be evaluated.

The amount of time these pianos are used will be monitored and efforts made to improve their impact on our department. The quality of performances will be a direct evaluation of the effectiveness of this equipment.

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

The purchase of this equipment will have a great impact of the department. It will free up an equal number of quality Grand Pianos and will allow for additional students to have keyboard time on good instruments. Music Education and Music Performance is one of the largest majors at NSU, next to nursing. This project would impact a very large number of students.

6. How will funding of the project advance the University and College / unit technology plan?  
By improving student access to technology that will be in their professional fields.

1, 8.

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.

Mr. Bill Brent will be in charge of the installation and oversight of the project, he is the Department Head for CAPA and has filled similar rolls on numerous occasions.

Dr. Fitenko and Dr. Allen will be in charge of the usage and student access to the equipment as well as any specific training for use of the equipment. Both of these individuals are concert pianist and represent the NSU Piano Faculty.

8. Describe any personnel (technical or otherwise) required to support the project/initiative.  
No additional technical support would be required for this equipment.

9. Provide a schedule for implementation and evaluation.

Upon arrival of the equipment, installation will occur same day and student usage will begin immediately. Evaluation of the project will occur throughout the year and adjustments to student access time may be made to improve the effectiveness of the project.

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

The Pianos have a life expectancy of 20+ years. The technological aspect of the equipment should be usable for at least 10 years.

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 Tech Fee grant.

Four of the pianos are one inch short of seven feet long and weigh about 880 pounds. Significant disassembly would be required for them to be removed from the rooms they are in. Still the rooms will be locked at all times in which faculty is not present, and student access to the rooms will be strictly supervised. The fifth piano will be located in Magale Recital Hall, which is FOB protected, and can be moved to one of three large ensemble rehearsal halls for rehearsals. This piano is 7'6" and ways 999 pounds.

12. Attach a detailed budget, including: specs., description, cost, state contract number, and vendor for each item; cost of outside support personnel; and a description of how the proposal will support University/College/unit resources (i.e., cash match, funds from other sources, or reallocation of existing hardware/software or other equipment).

13. Attach a letter of support for the project signed by the requesting unit's Dean, the appropriate Vice President (for non-academic units), or the SGA President from the requesting campus (for student requests).

## Yamaha Midi Piano/Disklavier Budget

### **Fully Funded Grant**

Yamaha MPC6 6'11"      \$25,500 per unit      x4 units      \$102,000.00

Yamaha DC7M4t 7'6"      \$45,000 per unit      total      \$45,000.00  
**Total:**      **\$147,000.00**

### **Partially Funded Grant Preference #1**

Yamaha MPC6 6'11"      \$25,500 per unit      x2 units      \$51,000.00

Yamaha DC7M4t 7'6"      \$45,000 per unit      total      \$45,000.00  
**Total:**      **\$96,000.00**

### **Partially Funded Grant Preference #2**

Yamaha MPC6 6'11"      **-Either-**  
\$25,500 per unit      x2 units      \$51,000.00

Yamaha DC7M4t 7'6"      **-Or-**  
\$45,000 per unit      total      \$45,000.00

*Cost estimates based on date of phone quote*



YAMAHA CORPORATION OF AMERICA

DC7M4t



**Mark IV Series  
Full-Function Grand Pianos**

 [Enlarge Picture](#)

## Built to Perform

### The Ultimate in Personal Music Entertainment

Ever since the original Yamaha Disklavier introduced the marvels of hybrid acoustic/digital pianos back in 1986, these computer-age 'player' pianos have evolved into instruments that can reproduce 'live' acoustic piano concerts and ensemble music with instrumental backings and vocal tracks. The Disklavier Mark IV takes this all a step further. Yamaha's unique combination of both acoustic and digital superiority has made it the obvious choice of music-lovers, pianists, and educators worldwide. Its easy-to-operate user functions make the Disklavier a breeze to customize and automate, always giving you the right music at the right time. Combining the tone and touch of world-class Yamaha grand pianos with an astonishing range of interactive capabilities, the Mark IV is the ultimate piano for home entertainment systems, business establishments, or educational and creative environments.

### An Easy-to-Use, Yet Advanced Music Entertainment System

#### Pocket Remote Control (PRC-100)

The sleek, compact design of the PRC-100 literally packs all of the Disklavier Mark IV's features and functions into a single hand-held device. Its intuitive full-color touch screen (320 x 240 pixels) is as easy to read as it is to use. You can browse your entire library with the handy stylus, or create custom playlists using the built-in QWERTY keypad.

#### Tablet Remote Control (TRC-100)

The TRC-100's synergy of elegance, style, and technology makes operating the Disklavier Mark IV an experience like no other. The 10.4-inch liquid crystal display provides several animated visual environments to access your favorite features, either with a tap of the stylus or a touch of a finger. Using the TRC-100, you can view karaoke lyrics, select background visuals, browse your song library, and even run a slide show of your own digital pictures!

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### **Music So Inspiring You'll Want to Sing Along**

Just connect a microphone to the Disklavier Mark IV piano and sing along through its built-in speakers. To fine-tune your experience, the Mark IV offers performance-enhancing vocal effects including room, stage, hall, and reverb. You can choose to display song lyrics externally on any TV monitor or on internally via the Tablet Remote Control. To browse the vast library of song disks available, visit [www.yamahamusicsoft.com](http://www.yamahamusicsoft.com).

### **A Built-In Amplified Speaker System Only Possible From Yamaha**

The Disklavier Mark IV performs as a stand-alone unit or as part of the ultimate home audio/video system. With genuine Yamaha speakers, each powered monitor is discretely mounted at an outward angle sending music away from the piano for a more spacious overall sound. For larger audio systems and installations, flexible output routings are provided to send music to any part of the house your system allows. Outputs assigned to areas far from the Disklavier can have a digital piano sound inserted into the audio stream, while keeping a background only mix sounding in areas near the acoustic piano.

### **Low-Profile Hardware Provides the Gateway for All of Your Music Software**

Using the Media Center, software can be played directly from the built-in floppy disk and CD drives, and removable USB storage devices\*, or loaded to internal memory for easy access. Convenient connections include headphone outputs, microphone input, and USB ports. The retractable glossy, black cover conceals the Media Center and matches the finish of the piano's cabinetry.

\* Certain USB storage devices may not function properly with the Disklavier Mark IV Series. For a list of compatible products, please visit [www.yamaha.com/disklavier](http://www.yamaha.com/disklavier).

## **PianoSoft™ Quality Meets Quantity**

### **Performances by world-class artists on PianoSoft™**

#### **PianoSoft Solo™ Series**

World-class solo pianists perform piano-only music upon your request. Available in many genres, these selections are for the piano purist in all of us. With everything from country to contemporary, and from ragtime to Rachmaninoff, PianoSoft Solo makes the legendary Yamaha acoustic piano the featured soloist.

#### **PianoSoft Plus Audio™ Series**

Introduced with the revolutionary Disklavier Mark III, this CD-based software line takes advantage of everything digital audio has to offer. Specially recorded vocal and ensemble parts accompany the Yamaha acoustic piano for the ultimate in realism and accuracy.

#### **PianoSoft Plus™ Series**

The 'Plus' adds digital instruments to the solo piano appropriate for the style of music selected. You may hear full orchestras including strings, horns, and percussion, or a Country band, a Rock band, and much more.

#### **Smart PianoSoft™ Series**

Cutting-edge PianoSmart technology is at the heart of Smart PianoSoft, the Mark IV's fastest growing line of software. Traditional store-bought audio CDs (that you may very well already own) can accompany the Disklavier's professionally arranged piano performance. Recordings don't get any more authentic than the original artists, and that's exactly what Smart PianoSoft delivers... by the hundreds.

**Built-in PianoSoft Sampler – The Disklavier Mark IV is Ready to Play**

Every Mark IV Disklavier comes pre-installed with hours of music right from the factory featuring selections from PianoSoft Solo, PianoSoft Plus, and even PianoSoft Plus Audio! This means that the moment your Mark IV is delivered and powered-up, you'll be listening to music right away.

You can purchase and, in many cases, download titles from the PianoSoft catalog, or view the entire catalog at [www.yamahamusicsoft.com](http://www.yamahamusicsoft.com).

**Practice Makes Perfect****More Than a Piano – the Yamaha XG Tone Generator**

Many educational software titles are available with ensemble backgrounds to accompany practice. The Yamaha XG tone generator has hundreds of high-quality instrumental voices to get the most out of your accompaniment.

**The New AEM Tone Generator**

Taking digital instruments to new levels of realism, the new AEM (Articulation Element Modeling) tone generator breathes new life into orchestrated backgrounds. This next-generation sound source produces the subtle nuances heard in brass, saxophone, and string sections. Regular software, including educational and even karaoke titles, will spring to life with Yamaha's latest sound technology.

**Practice One Hand While the Disklavier Plays the Other**

Every teacher knows that practicing hands separately improves speed, accuracy, and memorization. With the ability to play the right and left hands independent of one another on selected software titles, as well as vary the tempo, practicing piano on the Disklavier has become a truly interactive experience. Add to this the fact that many popular method and lesson books are being offered with hands-separate recordings on disk, and you've got the ultimate music practice partner.

**Digital Quiet Mode/Headphone Mode Flexibility**

Yamaha Sound Muting System allows you to instantly switch off the sound of the acoustic piano, enabling the digital piano to be played at ultra-quiet volumes. With this feature, you can play and listen in Quiet Mode with the built-in speakers or in Headphone Mode via the privacy of dual headphones. Enjoy the Disklavier anytime at a sound level best suited for you and those around you.

**The Ideal Synergy of Audio, Video, and One Beautiful Acoustic Piano PianoSmart™****PianoSmart™ Audio Synchronization**

You won't need to look too hard to find audio CDs that are compatible with your Mark IV Disklavier – you probably already own them. Thanks to PianoSmart, any one of hundreds of standard store-bought audio CDs are ready to play along with the Mark IV. All that's required is the corresponding Smart PianoSoft title for the CD of your choice. So choose a CD of a world-class Yamaha artist playing the piano and watch the Mark IV match the piano recording with the CD. After you load titles into the Mark IV's internal memory, PianoSmart automatically and seamlessly synchronizes your audio each time.

**PianoSmart™ Video Synchronization**

Yamaha didn't stop at just playing audio CDs along with your Disklavier. PianoSmart also provides you with the ability to synchronize videotaped performances with the Mark IV. By simply connecting the audio jacks of a standard video camcorder to the SYNC jacks of the I/O Center, your performance can be immortalized for playback on the Mark IV and a standard TV monitor at the same time!

**Classic Form Contemporary Function**

### **SmartKey™ – Now Anyone Can Play Right Away**

Have you ever dreamed of playing the piano but thought you didn't have time to learn? With SmartKey technology, the new Disklaviers can make your dream come true. Even if you've never touched a keyboard or read a note of music in your life, the new SmartKey feature makes it easy to learn without a single lesson. Just follow along as SmartKey shows you which notes to play by partially depressing the next key in the melody. SmartKey prompts the Disklavier to wait for you and play at a speed within your comfort zone. Within minutes, you'll be playing entire songs while the Disklavier follows your lead with virtuoso harmonies and arpeggios.

CueTIME™, another exciting development in music software, offers sophisticated auto-accompaniment where you don't play along with recordings – the recordings play along with you! Simply play the printed piano part and the digital orchestra follows your cue, matching your pace and enhancing your performance with professional arrangements.

\*Note: SmartKey software may not be available in some countries.

### **The International Piano-e-Competition**

#### **Truly the First of its Kind**

Imagine a top-level classical piano competition where the performers, the judges, the audience, the pianos played, and the pianos heard are all in different cities at separate corners of the globe. This happens every other year at the International Piano-e-Competition, and it wouldn't be possible without the technology found only on Yamaha Disklavier pianos. This unprecedented event, first held in June 2002, uses state-of-the-art technology to expand the arena of virtuoso competition.

Contestants gather in selected cities to perform on Yamaha CFIIS concert grands equipped as Disklavier Pros. Performance data is then transmitted over the Internet, allowing judges and audiences to listen on actual acoustic pianos on stage – not through audio recordings subject to the quality of speakers and microphones. This method is so ground-breaking that it has been noted by Gustav Alink, who rated the International Piano-e-Competition among the top 30 in the world (from over 400) in his book *Piano Competitions Worldwide*. Disklavier owners around the world watched the competition's Web site ([www.ecompetition.org](http://www.ecompetition.org)) waiting for the latest performances to be posted. Once pieces were downloaded, enthusiasts enjoyed world-class musicians giving private performances on a live acoustic piano – all in the comfort of their own homes.

### **Unparalleled Experience Means Unrivalled Recording and Playback**

There's a reason why the Yamaha Disklavier has become the symbol of excellence in reproducing pianos.

Disklavier technology is factory-built into the piano from the beginning of its construction.

#### **Superior Yamaha development and design**

The Disklavier Mark IV's advanced intricate internal construction:

1. Power supply unit
2. I/O center
3. Powered speaker
4. Powered speaker
5. Solenoid unit
6. Media center
7. Sensor

#### **Ultra-Large Internal Music Storage Capacity**

Floppy disks, CDs, and other removable media are fine for carrying music from one place to another. But once the music makes it to the Disklavier Mark IV, it can be



loaded onto the vast internal memory capable of holding hundreds of hours of music. Virtually every MIDI song file ever created for the Disklavier could be loaded and stored inside the Mark IV. If that seems a little excessive, the extra storage comes in handy for loading CD audio tracks.

#### Yamaha's Exclusive High-Performance Grayscale Hammer Sensor

The world's first continual-detection optical hammer sensor continuously traces the hammer position from the time a key is pressed until it's released. This outperforms the previous two-point detection sensors of earlier Disklaviers and the simpler "Key ON/OFF" sensors used on many other systems. With the grayscale key sensor, the Mark IV monitors every motion of the key and hammer – even rapidly repeated notes – with meticulous precision and the softest touch.

#### Servo Control for Precision Playback Performance

Under the command of specially developed LSI microprocessors, the servo control system continuously monitors the movement of each key, precisely recreating every detail of the original performance. This allows for a slow return of the keys and delicate pianissimo, things that were previously unattainable.

#### Get Connected with the I/O Center

The Disklavier Mark IV has the ability to connect to a wide range of external equipment. Essentially, any device that connects to the Mark IV will be plugged into this "Input/Output" center. You can connect TVs, cameras, computers, home networks, and various other audio and music equipment to the I/O Center. No matter what your particular needs are, the Mark IV is ready to play...

### Specifications:

DC7M4t		
Sensor System	Key Sensors	Non-contact optical fiber/grayscale shutter sensing system for 88 keys (senses the key position, keying velocity, and key releasing velocity)
	Hammer Sensors	Non-contact optical fiber/grayscale shutter sensing system*
	Pedal Sensors	Non-contact digital optical sensing system (senses the pedal position)** *Except for DGC1M4, DC1M4, DC2M4 **Continuous sensing for the damper and soft pedals, and on/off sensing for the sostenuto pedal.
Drive System	Keys	DSP servo drive system (high-power servo controlled solenoids)
	Pedals	DSP servo drive system (servo controlled solenoids)
Data Storage	Internal Memory	80GB
	File Format	Standard MIDI File (format 0, 1) / E-SEQ
Removable Media	Floppy Disk: 3.5" 2DD (720 KB) or 2HD (1.44 MB) floppy disk Compact Disc: Audio CDs, PianoSoftoPlusAudio™, Data CD USB Flash Memory: Yes	
Media Center	Drives	CD and floppy disk drive
	Dimensions (W x H x D)	16" x 10-1/8" x 2-7/8" (405 x 257 x 73 mm)
	Weight	7.3 lbs. (3.3 kg)
Pocket Remote Control		
Dimensions (W x H x D)	2-15/16" x 5-7/16" x 15/16" (74 x 138 x 23 mm)	
Weight	7.4 lbs. (210 g)*	

	*Includes rechargeable battery, but not the screen protector and wireless LAN card.	
<b>Monitor Speakers</b>	<b>Rated Power Output</b>	20W x 2; tone and volume controls
	<b>Drivers</b>	8-1/4" (16 cm) woofer x 2
	<b>Dimensions (W x H x D)</b>	5-11/16" x 9-5/16" x 6-5/8" (144 x 236 x 167 mm)
	<b>Weight</b>	9.7 lbs. (4.4 kg)
<b>Record/Playback Modes</b>	Standard	
<b>Pitch Control</b>	Set at A=440, tunable 50 cents in 1-cent steps	
<b>Sound Muting Mechanism</b>	Motor-driven hammer shank stopper	
<b>Piano Voice and Performance Tone</b>	<b>Type</b>	AWM2/Articulation Element Modeling (AEM)
	<b>Polyphony</b>	64-note digital stereo sampling (90MB wave memory, 16 bit linear) (AWM2) 6-note AEM
	<b>Normal Voices</b>	Piano (digital stereo sampling) and other 42 voices
<b>Ensemble Tone</b>	<b>Type</b>	Advanced Wave Memory 2 (AWM2)
	<b>Polyphony</b>	32-note max.
	<b>Ensemble Parts</b>	16
	<b>Voice Module Modes</b>	XG, GM
	<b>Normal Voices</b>	676
	<b>Drum Voices</b>	21 kits total
<b>Power Source</b>	Local AC current, 100~240V, 50/60Hz	
<b>Supplied Accessories</b>	Media Center, installation kit for the Media Center, monitor speaker, installation kit for the monitor speaker, speaker cord, PRC100 Pocket Remote Control, CF wireless LAN card, EA-BL08 rechargeable battery, cradle, EA-70 AC adapter, AC power cord, advanced operating manual, Quick Guide, stereo headphones	
<b>Optional Accessories</b>	HPE-170 headphones	
<b>Length</b>	7' 6" (227 cm)	
<b>Width</b>	61" (149 cm)	
<b>Height</b>	40-1/2" (101 cm)	
<b>Weight</b>	999 lbs. (453 kg.)*	
	*Weight includes control unit and speakers	
<b>Finish</b>	All models available in polished ebony finish. Please contact your dealer for other available finishes.	



YAMAHA CORPORATION OF AMERICA

**MPC6****6' 11" Grand MIDI Piano****The Piano That Lets You Connect**

The Yamaha MIDI Piano lets you connect traditional tone, touch and elegance to the world of digital electronics. The quality and craftsmanship inherent in every Yamaha piano are combined with state-of-the-art fiber optic technology. Multi-point optical sensors at each key and pedal register every facet of the player's performance with unparalleled precision, instantly transforming keystrokes into digital data. This opens the doorway to a new world of creative educational opportunities.

**MIDI In/Out**

MIDI Musical Instrument Digital Interface connects the MIDI Piano to other keyboards, external modules (like the Yamaha DSR1 Digital Sequencer Recorder) and computers.

**Computers**

With the simple connection to a computer you can record and print your own music, learn to play the piano and even download music from the internet.

**Double Sensor System**

The sensor system consists of optical sensors located at each key and hammer. This industry unique feature provides the highest degree of precision and sensitivity. Because these sensors are optical, they have no effect on the feel of the keys as they accurately transmit every nuance of your playing to the digital electronics.

**Yamaha QuickEscape™ Action and Piano Mute Rail**

When you engage the Piano Mute Rail, the hammers will not strike the strings, allowing you to play MIDI sounds or the onboard digital piano sound without hearing the acoustic piano. The exclusive QuickEscape™ action mechanism provides a consistent touch in either the piano mute mode or acoustic mode. These two features instantly convert the MIDI Piano into the perfect MIDI controller or multi-track recording instrument.

**Built-In Digital Piano Sound**

The on-board digital piano expands your playing potential. The sound of a Yamaha

concert grand is digitally recorded and captured on a powerful 30 megabyte computer chip and available at your fingertips.

#### **Key-Release Velocity**

The key-release velocity feature can detect and respond to expressive fingering, capturing the speed each key is released. Key-release velocity results in the capturing the characteristic sound and feel of an acoustic piano while playing the digital piano.

#### **Headphones**

Plug in the headphones and enter your own concert hall environment with the tone and ambiance of a concert grand on stage. Add the piano mute rail and you can play in complete privacy.

#### **Reverb**

Add the acoustic environment of a concert hall.

#### **Audio Out**

Project the sampled sound of a concert grand through speakers or direct to a tape deck.

#### **Produced by the World's Leading Piano Manufacturer**

This grand piano is of the highest quality, designed for high sound quality with reliability and attention to detail built in at every stage. Yamaha has the rare combination of advanced optical fiber sensor technology, extensive experience with digital pianos and keyboard, and a long tradition of acoustic excellence in piano design.

#### **Seasoned for Destination**

Yamaha specifically seasons this piano for the U.S. market. The tuning stability, finish and overall musical integrity are enhanced over the long life expected of a fine piano.

#### **Permanent Crown Solid Soundboard**

Yamaha utilizes a process that creates a permanent crown in the soundboard and at the same time minimizes soundboard cracking. The customer can feel confident that not only will the piano last for years, but the beautiful sound of a Yamaha piano will last a lifetime.

#### **Solid Spruce Soundboard**

At the Yamaha lumber mill and wood processing facility, the finest spruce is quarter sawn; and less than 10% of the total is selected and reserved for Yamaha piano soundboards. Solid spruce, rather than laminated spruce or poplar, is the choice in all fine pianos for the best amplification of sound, best tone and sustain.

#### **Full Length Ribs**

Yamaha reinforces the crown in its soundboards by using ribs that continue to the edge of the soundboard and are glued into the notched liner (or inner rim on the grand piano). Reinforcing the crown ensures that the tone quality will remain for years and years and improves tuning stability.

#### **V-PRo Plate**

Yamaha uses V-PRo (Vacuum Shield Mold Process) in casting the iron frame (plate). V-Pro plates are stronger and visually more appealing. Critical dimensions

are produced more accurately than before.

### Extruded Aluminum Action Rails

Yamaha engineering developed a unique Extruded Aluminum Alloy Action Rail (bearing a Yamaha patent) that is one of the best innovations for improving a piano action in the last 100 years. The usual fluctuations in wood rails that effect touch, caused by periodic weather changes, are eliminated allowing stable, long-lasting action regulation.

### Balanced Action

Each key of a Yamaha piano is individually tested and measured for the corrections needed to obtain uniform "down weight" pressure. Yamaha actions play correctly and uniformly. This balancing helps ensure a lifetime of superior touch and control across the keyboard.

### Uniform Key Travel

Yamaha designs all grand and vertical pianos to have the same key travel. Regardless of size, type or model of Yamaha piano, the keyboards will always feel the same.

### Spruce Keys

Yamaha uses Spruce for the keys on all models of pianos. Spruce is very light and possesses a very high ratio of strength to weight. It is ideal for key construction, even though its cost is greater than either sugar pine or bass wood. Yamaha keyboards respond quickly providing fast repetition for the most intricate piece of music. Yamaha keyboards withstand heavy use over years of fortissimo passages.

### Yamaha Servicebond™ Assurance Program

The Yamaha Servicebond Assurance Program is provided to the customer, without additional charge, 3-8 months after delivery of their piano. This service is a thorough check up and adjustment procedure to "rejuvenate" a piano after play-in and acclimation to its new environment. After 3-8 months or so of settling and becoming acclimatized, the piano will receive the benefit of a service visit to return it to the conditions specified by the manufacturer.

### Specifications:

Piano Silencing Mechanism	Lever-activated hammer shank stopper	
Action	Grand piano action with Quick Escape mechanism	
Sensor System	Keys: 88 two-beam, four-point optical fiber sensors (key-release velocity sensing); Hammers: 88 one-beam, two-point optical fiber sensors; Sustain and shift pedals: Continuous position sensors; Sostenuto pedal: On/off sensor	
Digital Piano Tone Generator	Type	Digital stereo sampling with sustain pedal resonance effects
	Voice	Yamaha CFIIIIS concert grand piano;
	Memory	30 megabyte (wave memory)
	Polyphony	32-note stereo
	Pitch control	438~445 hertz in 1-hertz steps, fine tuning in 1.2 cent steps
Reverb	Room, Hall1 (default), Hall2, with continuous depth control	

Other Controls	Volume, power switch with pilot lamp
Demonstration Songs	8
Power Supply	15V DC, 2000mA supplied from AC adaptor
Connectors	Headphones x 2, MIDI In/Out, AUX In/Out, DC In
Finish	Polished Ebony
Depth (Length)	6' 11"
Net Weight	880 lbs.

**Accessories:****Included:**

HPE-170 Headphones x 1

AC adaptor

Owners manual

**Optional:**

DSR1 Digital Sequencer Recorder – Tone Generator for the Disklavier, Clavinova, GranTouch, or MIDIPiano.



**NORTHWESTERN STATE**  
UNIVERSITY OF LOUISIANA  
Natchitoches, LA 71497

**College of Liberal Arts**  
P. O. Box 5314

Telephone (318) 357-4330  
FAX (318) 357-4255

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August 11, 2006

TO: STAT Committee

FROM: Dr. Donald Hatley

A handwritten signature in black ink that reads "Donald Hatley". The signature is written in a cursive style and is positioned over the printed name in the "FROM:" field.

It is with pleasure that I support the Student Technology Grant that has been prepared and presented by Alan Sybert to add disklavier pianos to faculty studios and provide additional rehearsal and performance opportunities for music students in the School of Creative and Performing Arts.

As an "Area of Excellence" for the University of Louisiana System, it is important that we do all that we can to ensure that the School of Creative and Performing Arts has the absolute latest in technology for our students. The addition of the pianos that are requested in the grant, I have been told, will do much to further the educational opportunities of our students. Therefore, I hope that the members of the STAT Committee will give this proposal a careful and thoughtful review.

You have been extremely supportive of the School of CAPA in the past and we appreciate this support. I assure you that the faculty members of the School will continue to do all they can to insure the success of our music students.

Your consideration is appreciated.