

# QRS PNOmation II Upgrade Instructions

## Pianomation™ MIDI Retrofit Kit Installation Manual Addendum

### PMII User Guide

### Driver Version 2.26

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QRS is revolutionizing the player-piano industry with the introduction of its latest player technology, PNOmation II . PNOmation II is the most advanced player-piano system available on the market today. Just take a glance at some of its great features, and you will see why new and current customers are upgrading to the latest in player technology.

#### BETTER AESTHETICS

PNOmation II is an invisible player. With PNOmation II , there is no visible front-end controller mounted under the piano keyboard. Enjoy the benefits of a player without altering the appearance of your piano.

#### BETTER USER EXPERIENCE

PNOmation II offers the industry's best user experience. PNOmation II not only functions as a stand-alone player system, but also as a node on your home network. With PNOmation II's web-enabled user interface, the possibilities are endless: create playlists and control your player piano with an iTouch, iPod, iPhone, or any web-enabled phone; or use a PC or MAC on your home network.

#### BETTER PERFORMANCE

PNOmation II features enhanced playback abilities with superior execution of dynamics. The softest pianissimos and loudest fortissimos offer greater extremes of expression and produce more convincing musical performances. PNOmation II also dramatically improves the control over the sustain pedal solenoid which allows for quieter sustain pedal operation and more accurate performance.

#### BETTER DESIGN

PNOmation II incorporates PNOscan II , the player industry's leading MIDI recording tool.

#### BETTER NOW, BETTER LATER

PNOmation II is a simple and easy upgrade. It only takes four screws to swap the PNOmation II processor into your existing player system, and it has been designed from the ground up to integrate with your existing system while offering the latest, cutting-edge technology. PNOmation II is also prepared for the future, as it is high-bandwidth ready for next-generation MIDI standards.



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81525	<b>Package Contents</b>	
80108	PNOmation II Processor	
80103	2 Mounting brackets with four screws	
79226	SD Card with the QRS Music Library	
80124	Pin-Light Port Extender [PLx] [Six Lights; IR Sensor; Stereo & USB Ports; Microphone; Reset Button]	
50128	2 Cable: Audio [1/8" Male to 1/8" Male]	
50131	Cable: USB Male A to USB Male A	
50126	Cable: USB A Male to USB 5-Pin Mini B	
790185	Cable: Six-Pin Ribbon [White]	
79224	<b>Portable Wireless</b> Universal power adapter (5V/1A, 100V~240V) Cable: USB A to wireless power jack Cable: RJ45 Ethernet 50074 - Velcro Strip [Use to attach ASUS to beam or back post]	
70213	Cable [6" - RCA M Plug - 2 RCA F Jacks]	
70204	5 Cable Ties [ UPGRADE KIT ONLY]	
30403	Screw Driver [Right-Angled Phillips #2 to remove old processor] [ UPGRADE KIT ONLY]	
70208	3 Clamp [Wave Shaped Ribbon] [ UPGRADE KIT ONLY]	
70585	3 Screws for Clamp [6x1/2"] [ UPGRADE KIT ONLY]	
30409	Screw Driver [Snub-Nosed Phillips] [ UPGRADE KIT ONLY]	
990026	Cable: Speaker [1/8" stereo plug to two RCA] [ UPGRADE KIT ONLY]	
70152	Cable: 10' MIDI [ UPGRADE KIT ONLY]	

## 1 Remove the Existing Pianomation Processor

Turn OFF the player system and unplug the AC power cord from the wall outlet.

Locate the Pianomation processor. It's within a foot of the power supply.  
*The power supply is a black box the size of a loaf of bread.*

- On a GRAND piano the processor is mounted to a beam under the soundboard area.
- On an UPRIGHT piano remove the lower panel to gain access to the power supply.

Flip the ON/OFF switch on the power supply to the OFF position.

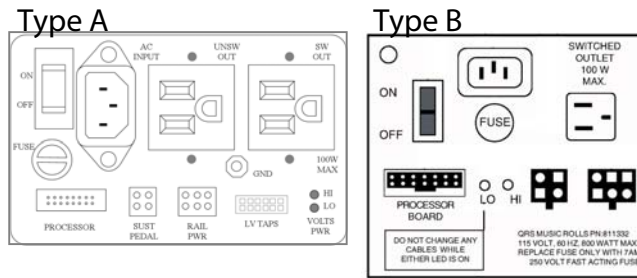
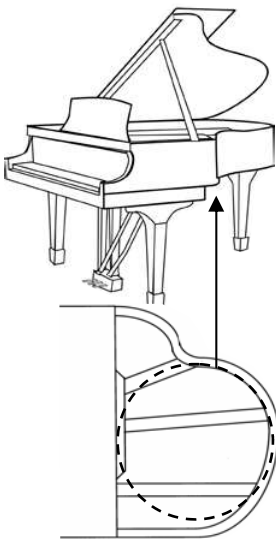
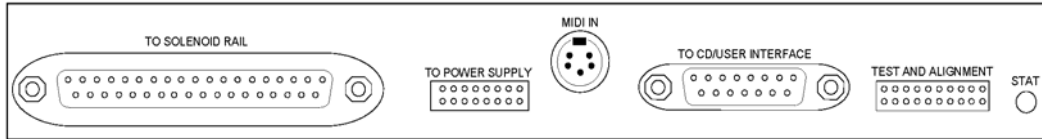
Disconnect all of the cables from the old Pianomation processor.

*Some older processors have different type connectors and use different cables than what is shown below. You may need to replace the 'SOLENOID RAIL' cable.*

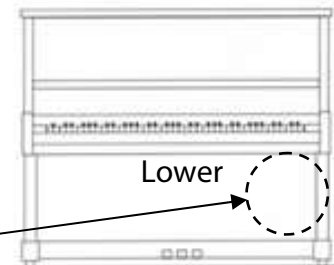
Go to the QRS Music Home Page/Support/Hardware Upgrades/Upgrading Your QRS Pianomation MIDI System' for details.

- TO SOLENOID RAIL *This ribbon cable may be held in by two small screws.*
- TO POWER SUPPLY
- TO CD/USER INTERFACE

Remove the old Pianomation processor and brackets from the piano by removing the 4 screws.



The Power Supply [Type A or B above] and the Processor are located in these areas.



## 2 Mount and Connect the New PMII Processor

Mounting the new PNOmation II processor to the piano.

When upgrading a current system, place the new processor in the same location as the original.

On a new system installation with record, place the processor in a location where all of the cables will reach:

Driver Port B - To Driver Boards

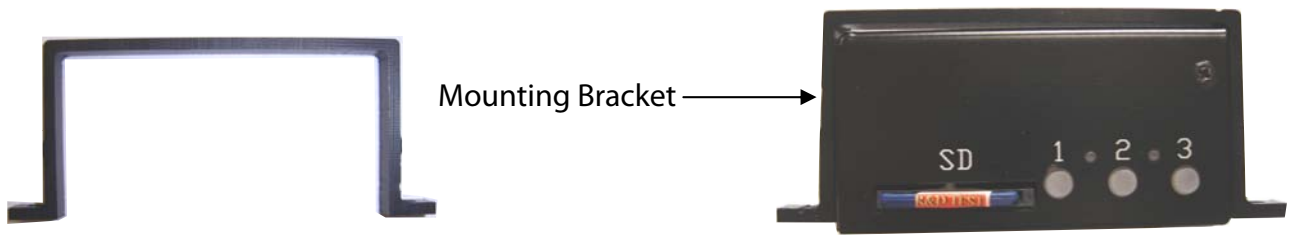
Power Supply

Keyscan Primary - To the record system's Soft-Shift circuit board.

Position it so that the connectors are easily accessible.

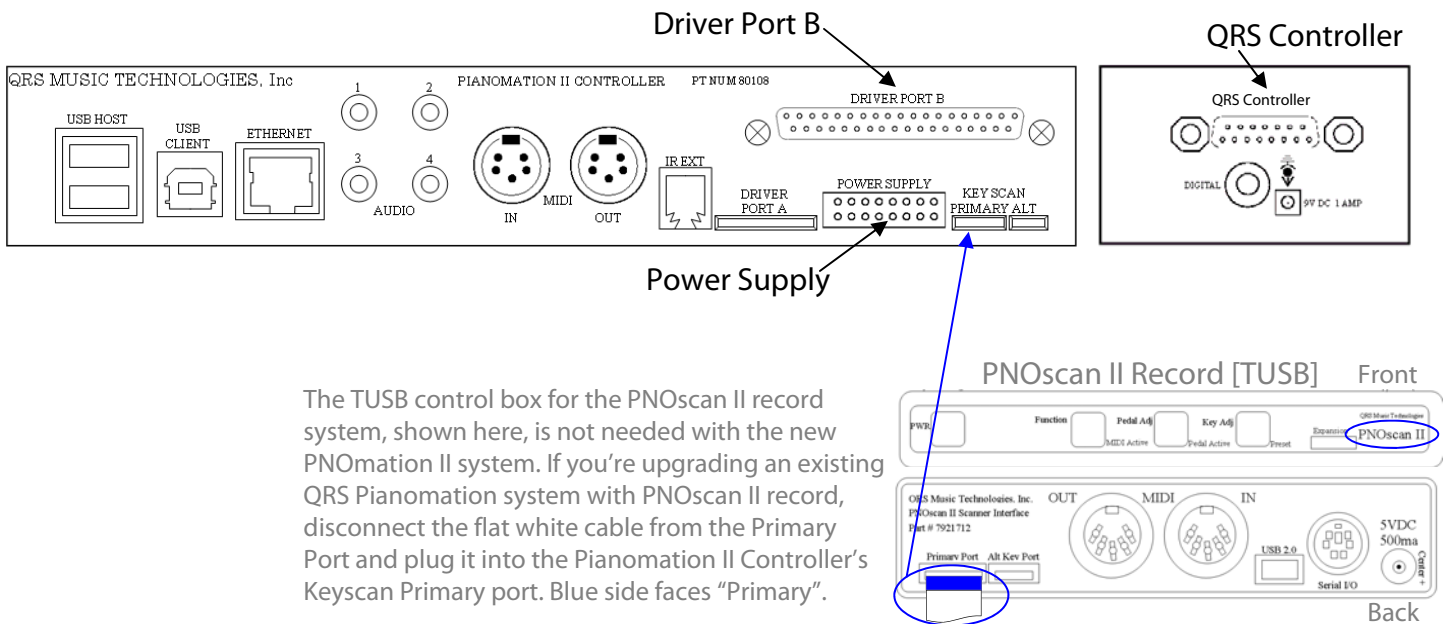
Slide the two mounting brackets over the ends of the processor.

Secure the new PMII processor to the piano with the screws provided.



Connect these cables to the new PNOmation II processor.

- "DRIVER Port B" [This is the 1-1/2" flat gray cable going to the driver boards]
- "POWER SUPPLY" [This is the 3/4" flat gray cable going to the power supply]
- "KEYSCAN PRIMARY" - QRS PNOscan Record Systems Only - *White flat cable coming from the record system's Soft-Shift circuit board and it may be connected into the PNOscan II interface under the piano keybed. If so, disconnect it from the PNOscan interface. Front and rear views of this PNOscan II unit is shown at the bottom of this page.*
- "QRS CONTROLLER" located on the side of the PMII chassis. *It is not necessary to reconnect your original QRS controller for proper operation of PMII.*



The TUSB control box for the PNOscan II record system, shown here, is not needed with the new PNOmation II system. If you're upgrading an existing QRS Pianomation system with PNOscan II record, disconnect the flat white cable from the Primary Port and plug it into the Pianomation II Controller's Keyscan Primary port. Blue side faces "Primary".

**3 Mount and Connect the Wi-Fi Adapter and Speaker**

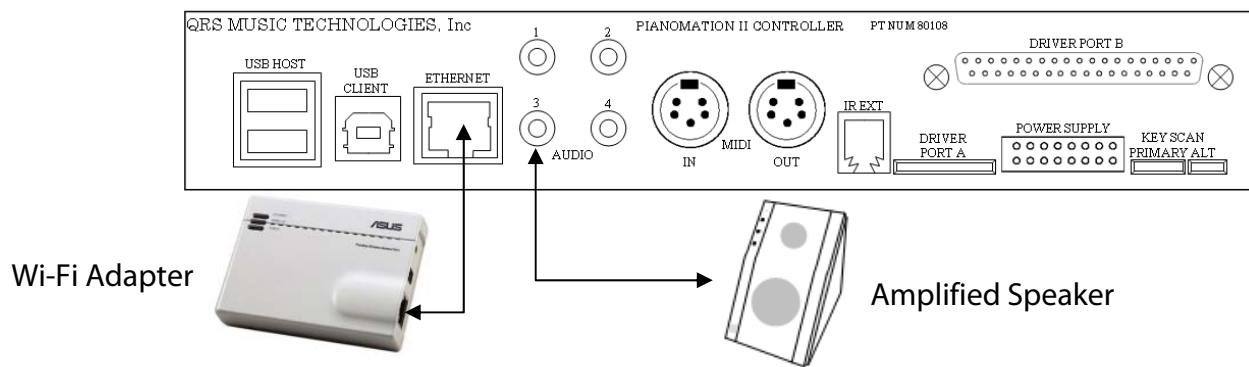
Plug the wireless power adapter into an AC outlet. There are two possible locations:

- or
- The un-switched outlet [UNSW OUT] on the type A power supply, if it's not being used.
  - The extension cord from the wall outlet that runs inside or under the piano.

Connect the Ethernet cable from the wireless to the Ethernet port on the PMII processor.

Using the Velcro strip supplied, attach the wireless unit to the piano .

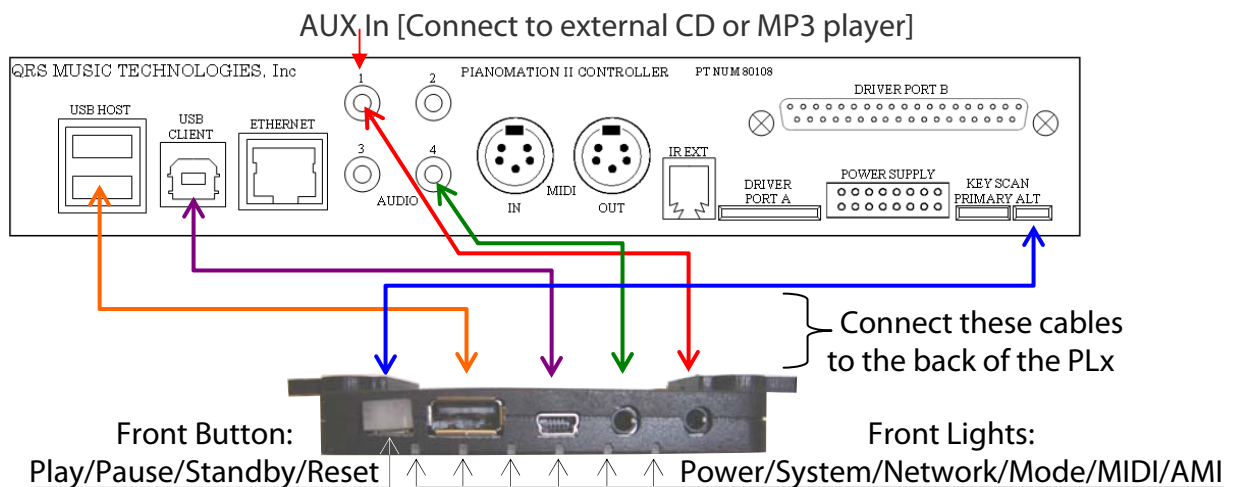
Connect your powered speaker to the PMII's Audio #3 jack. *Use the 1/8" stereo-to-RCA cable provided.*



<b>4</b>	<b>Mount and Connect the Pin-Light Extension [PLx]</b>
The Pin-Light Extension serves several functions:	
Six lights will display valuable information about your system.	
The built-in IR Sensor will allow you to use your existing QRS Remote to control PMII.	
USB A, USB Mini B & 1/8" stereo jacks allow you to extend the ports from PMII to an accessible position on the piano.	
The button is for Play / Stop / Standby and Reset.	
Mount the PLx unit to the piano.	
We suggest mounting the PLx unit under the keybed at the treble side of the piano.	



- Connect one end of the 6-pin flat ribbon cable to the PMII's "ALT" port. *The blue side of the cable faces the word "ALT"*
- Connect the other end of the 6-pin flat ribbon cable to the PLx connector. *Connect so the blue side faces the ceiling.*
- Connect the USB A Male cable to one of the USB Host sockets on the PMII.
- Connect the other end of the cable, USB 5-Pin Mini B, to back of the PLx. *Used for updates and music access.*
- Connect the USB B Male cable to the "USB Client" port o the PMII.
- Connect the other end of this cable, USB A Male, to the back of the PLx. *This is used to record to a computer.*
- Connect one end of a 1/8" audio cable to the PMII's Audio #1 socket.
- Connect the other end to the last 1/8" socket of the PLx. *This is the PMII External Source's Line Input [AUX] port.*
- Connect one end of a 1/8" audio cable to the PMII's Audio #4 socket.
- Connect the other end to the remaining 1/8" socket of the PLx. *This will be used for Headphones.*



## 5 Verify Operation

Connect to Power and Turn ON to Standby Mode

Plug the AC power cord into a wall outlet.

Flip the power supply switch to the "ON" position. *See page 4.*

PNomation II will take several minutes to turn on the Low Voltage.

*During this power-on/boot sequence PMII is loading the operating system and indexing the music on the SD card. You may remove the SD card for faster boot time during initial setup and service.*

*Note: Once removed, the SD card must be re-inserted before flipping ON the power supply switch.*

The system has booted and is in standby when PLx lights stop scanning and the Power light is yellow.



## Establish a Wireless Connection and Power ON

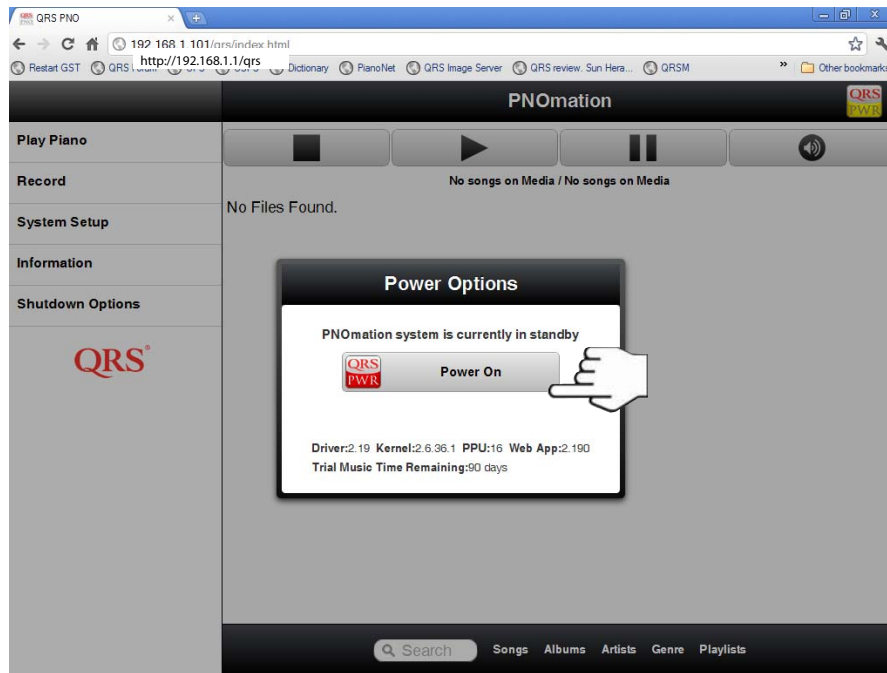
Wirelessly connect your iTouch, iPad, Wireless Computer or Android Phone to the piano's Wi-Fi Adapter.

[Settings / Wi-Fi / click on the QRSPNO ### device]

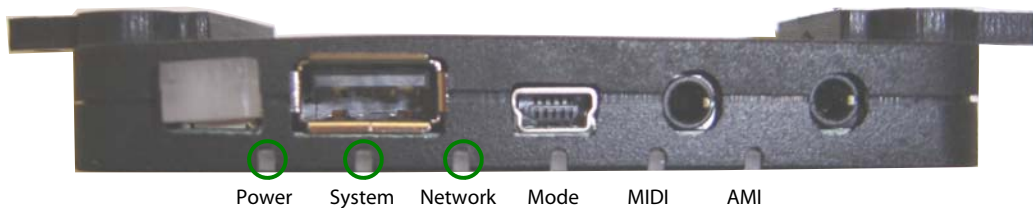
Open your Safari, Google Chrome or Android internet browser.

In the address box type: QRSPNO , http://qrspno/qrs or http://192.168.1.1/qrs and refresh your browser.

Press the Power ON button



The "Power", "System" and "Network" lights should be green.



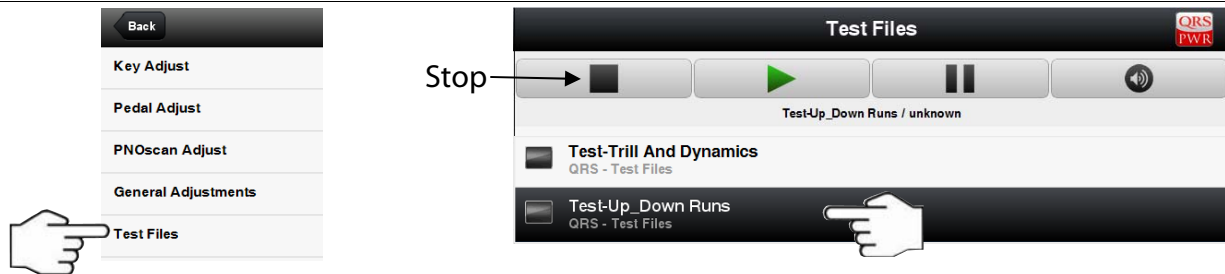
## Key Adjust

The key adjustment sets the minimum force for each key.  
There is no "save" button. Your changes are automatically saved to memory.

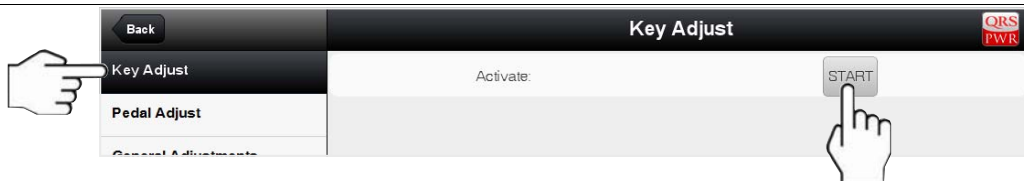
Press "System Setup"



Press "Test Files" then "Test-Up\_Down Runs" for a warm-up before adjusting key levels.



Stop the Test File. Press "Key Adjust" and then the "START" button.



Piano key #5 should begin to repeat. [Key #1 for 88 note systems]

You must set the Legato AND Staccato Force levels for each key.

### Set the Legato adjustment first.



	Previous Key / Key Number / Next Key
	Key "Force": Legato & Staccato. Adjust so key plays as softly as possible.
	"Extend": Sets the Force value "displayed" to all notes <u>upscale</u> .
Global	Clicking "More" or "Less" increases or decreases the force for <b>ALL</b> Keys.
	Entering a number in the force box sets the Key Force value entered to <b>ALL</b> Keys.
	Chromatic Scale: Down/Up. Use as a final test.
	Please press the EXIT button when finished. Otherwise the note will continue to play.

## Pedal Adjust

*This procedure is not necessary on systems that do not have a sustain pedal solenoid, usually uprights .*

Press "Pedal Adjust" and then slide the "Start/Stop Test" button to the right to start the adjustment.

The sustain pedal solenoid and the sustain dampers should start to cycle ON and OFF.

Turn OFF the "Thump Reduction" by sliding the button to the left.

Press the "-" buttons to set the "Initial Drive" and "Hold" values to zero.

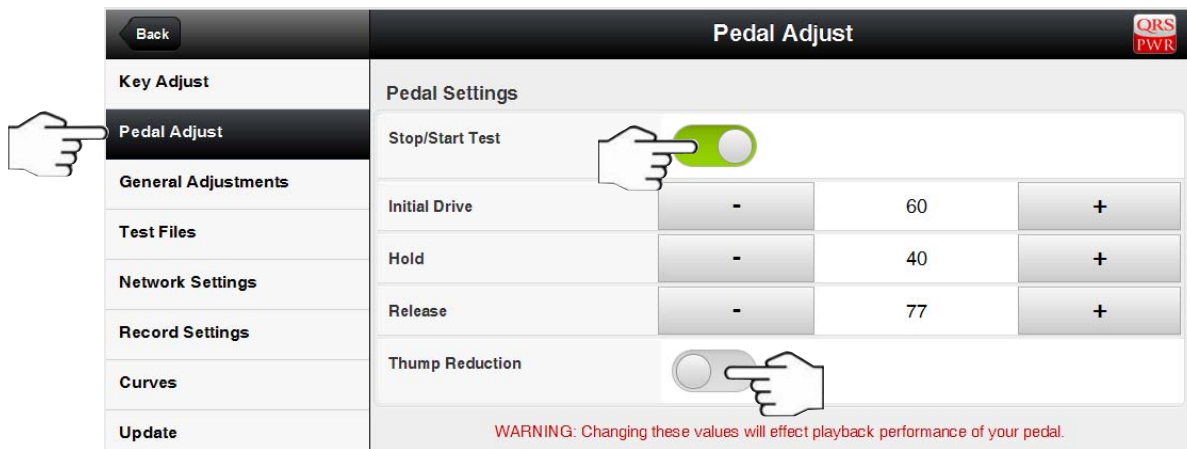
Watch the sustain dampers and press the Initial Drive's "+" button until the dampers move off the strings.

Then, press the Hold "+" button until the dampers lift up and hold off of the strings.

Turn ON the "Thump Reduction" by sliding the button to the right. Thump reduction will pulse the pedal solenoid as it's release to break it's fall and reduce noise.

Adjust the release up and down until the solenoid drops quietly.

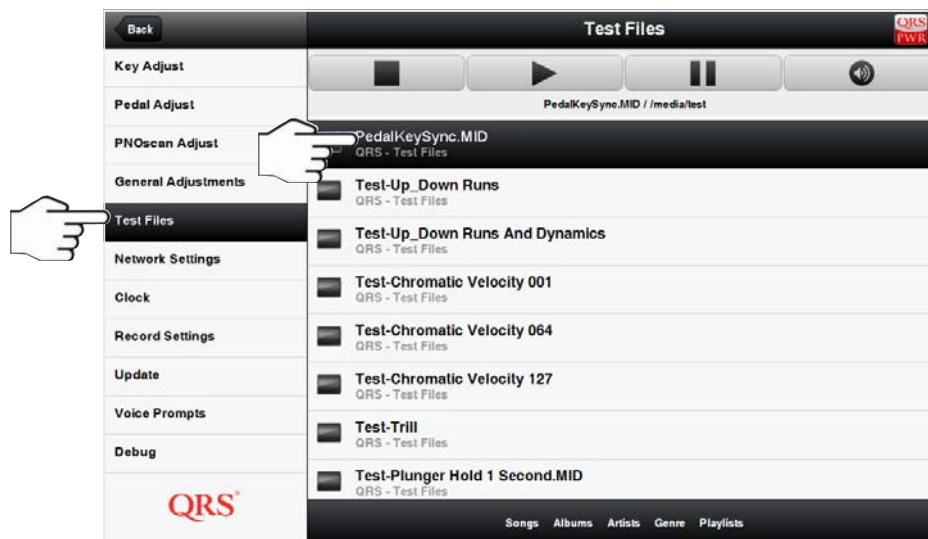
Stop the adjustment by sliding the "Start/Stop Test" button to the left.



## Pedal Test

Press "Test Files"

Select "PedalKeySync.MID to test your pedal adjustment.



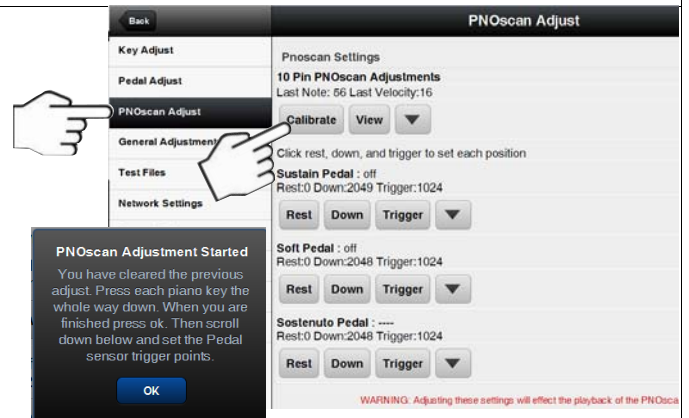
## PNOScan Adjust

If PNOmation II is connected to the QRS PNOscan II record system, as shown at the bottom of page 5, then the PNOscan Adjust option will appear on the System Setup page. The following adjustments are necessary after initial installation or when the system isn't recording properly.

Select the PNOscan Adjust option from the Home Screen's System Setup page.

Press the Calibrate button.

The PNOscan Adjustment Started box will appear. *At this point the previous calibration has been cleared.*



To calibrate the PNOscan key sensors you're going to play each key, in sequence, starting at the bass end of the keyboard. Watch the MIDI light on the PLx box and press the first bass-end key.

The light will flicker red indicating that the key is set. Release the key and proceed up the keyboard. Move to the next key when the PLx light flashes.

Press OK when finished.



Adjust the Sustain Pedal.

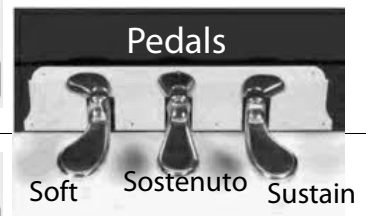
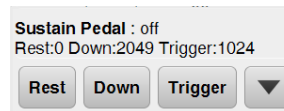
*Wait for changes in the Rest, Down and Trigger values as you make adjustments.*

Press the Rest button.

Depress the sustain pedal and Press the Down button.

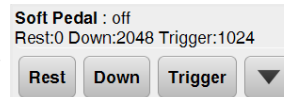
Release the pedal and depress until the strings sustain.

Press the Trigger button.



Adjust the Soft Pedal.

Follow the same procedures above with the soft pedal.

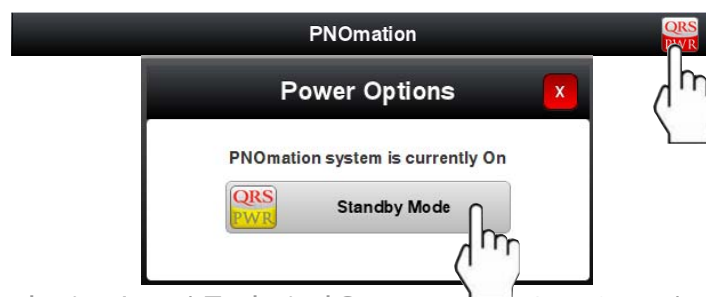


No adjustments are necessary for the Sostenuto pedal.

The PNOscan adjustments are complete.

Continue to the User Guide on the next page.

Always put the system in Standby Mode when you are finished for the day.



## Power ON the PMII User Interface

The lights on the PLx box should be ON but not scanning from right to left.  
*If the PLx lights are off, see the "Verify Operation" section of this manual on page 8.*

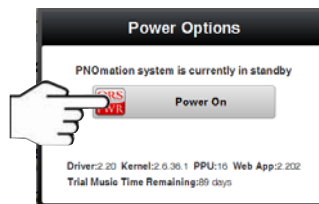


Wirelessly connect your iTouch, iPad, Wireless Computer or Android Phone to the piano's Wi-Fi Adapter.  
[Settings / Wi-Fi / click on the QRSPNO ### device]  
Open your Safari, Google Chrome or Android internet browser.  
In the address box type: QRSPNO or http://192.168.1.1/qrs and refresh your browser.

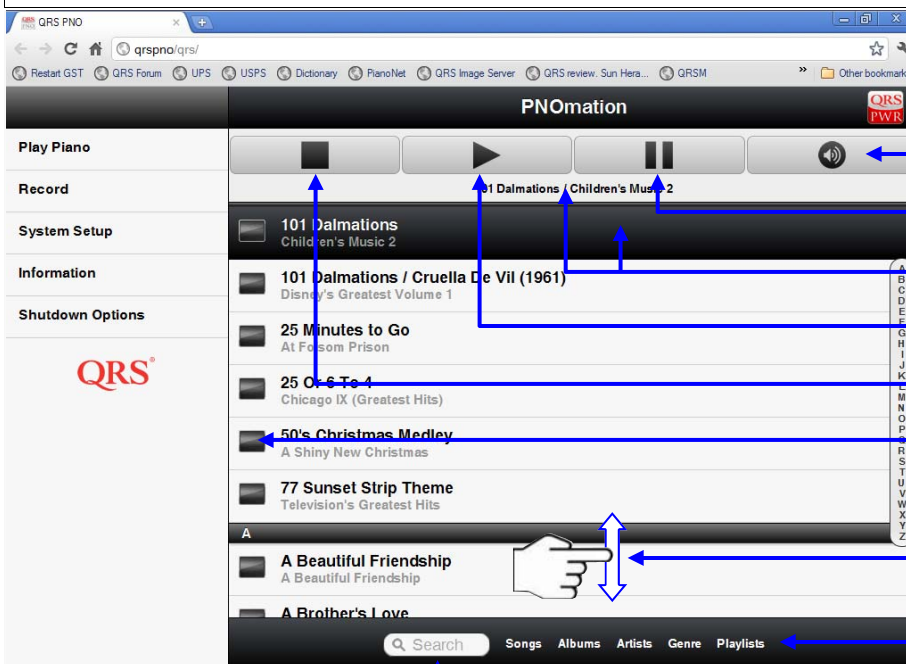
The browser will load the PMII interface and index the music.  
Then the Power Option box will appear.



Press "Power ON"



## Welcome to QRSPNO



Playback Settings

Pause

Selected Song

Play

Stop

Create or Add to Playlist

Scroll Bar - By Song Title

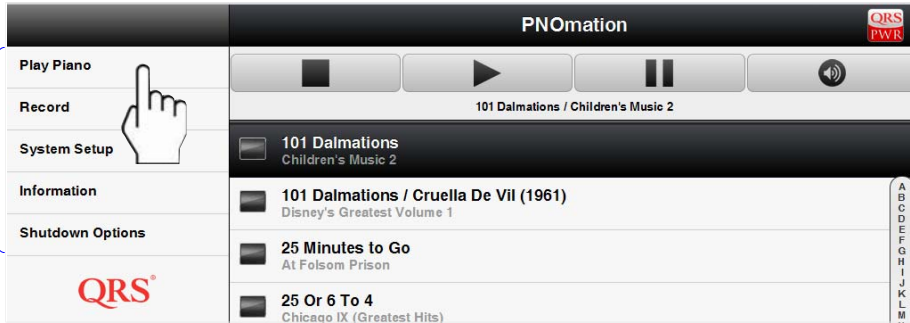
Use PC Mouse or Finger to Scroll

Music Groups

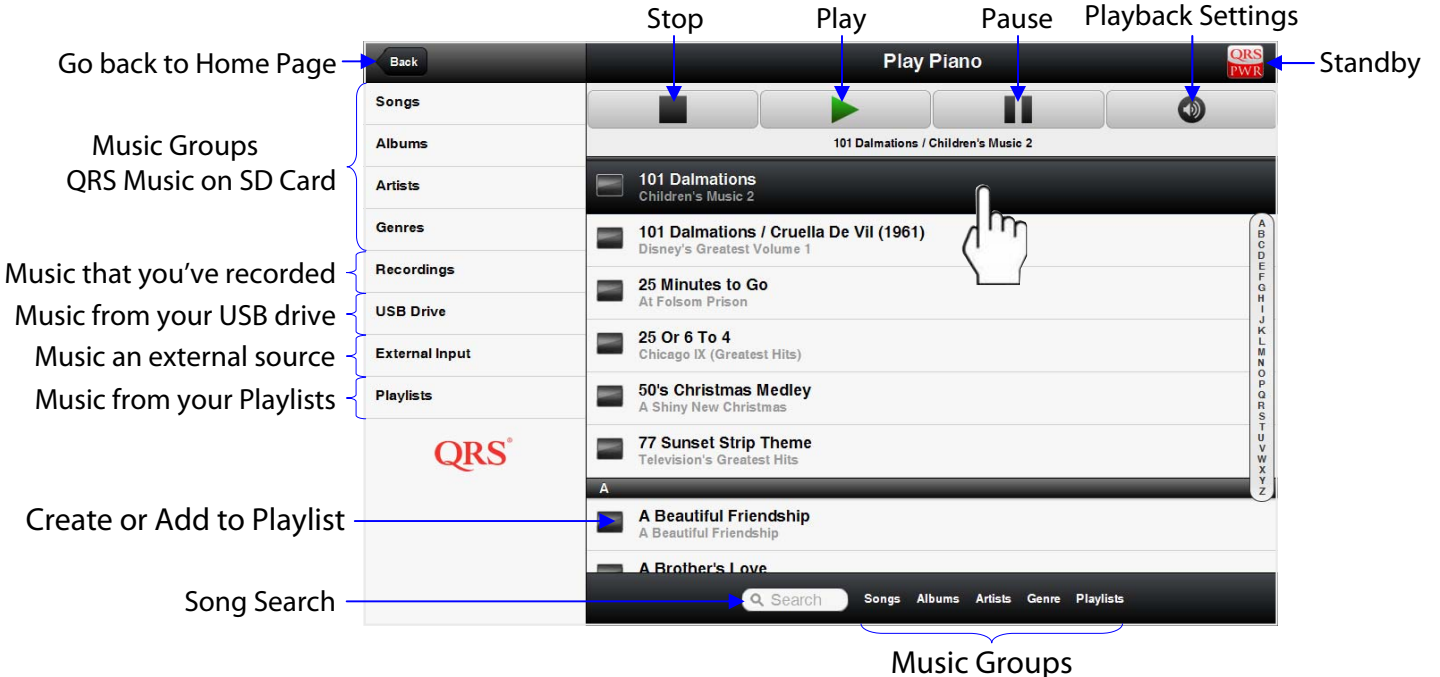
Song Search

### Play Piano

Home Page

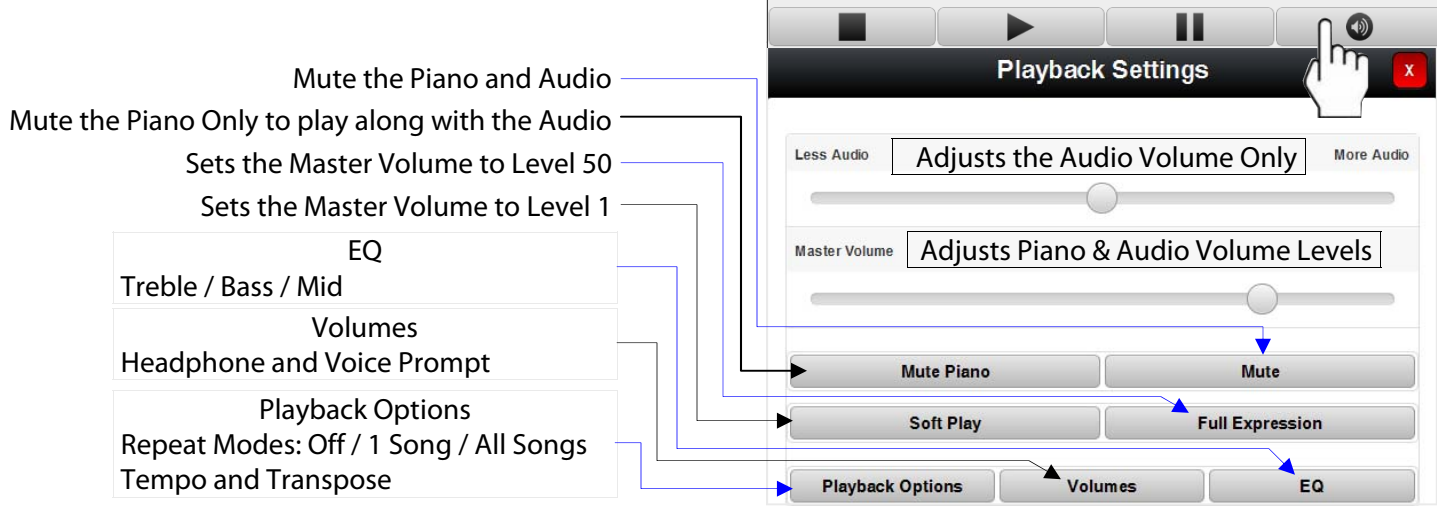


Select a song from any of these locations.



### Playback Settings

To adjust volume levels, press the "Speaker" icon to open the "Playback Settings" page.



### External Inputs

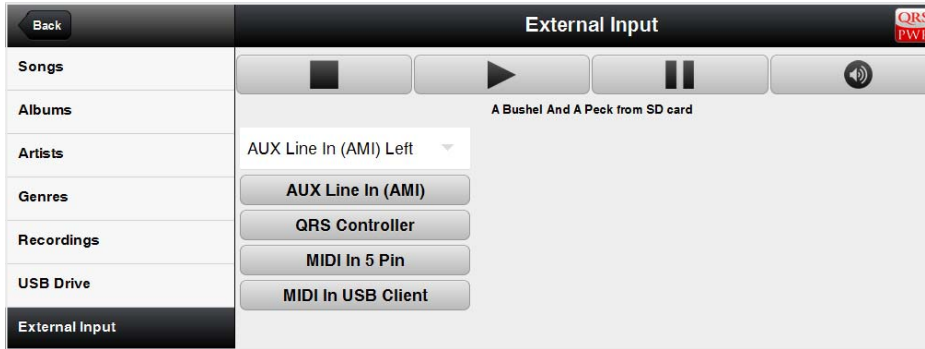
Press External Input to play from one of the four external source options.

**AUX Line In:** Connect your MP3 or CD player to the Audio jack #1.

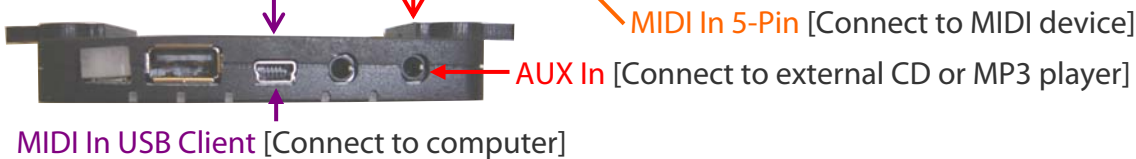
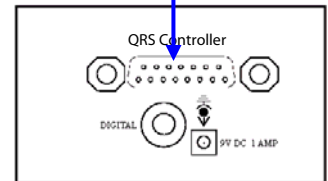
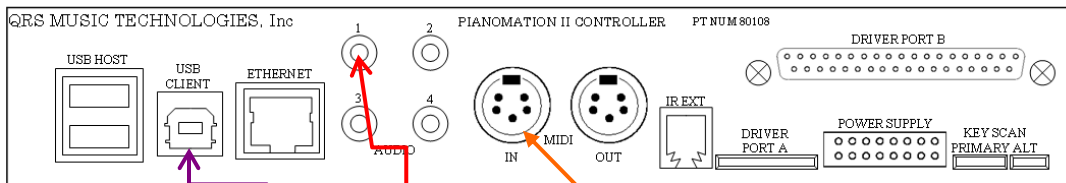
**QRS Controller:** Connect your Ancho or Petine to the "QRS Controller" socket on the PMII chassis.

**MIDI In 5-Pin:** Connect your MIDI device to the MIDI In port of PMII.

**MIDI In USB Client:** Connect your Computer with MIDI software to the USB Client port of PMII.

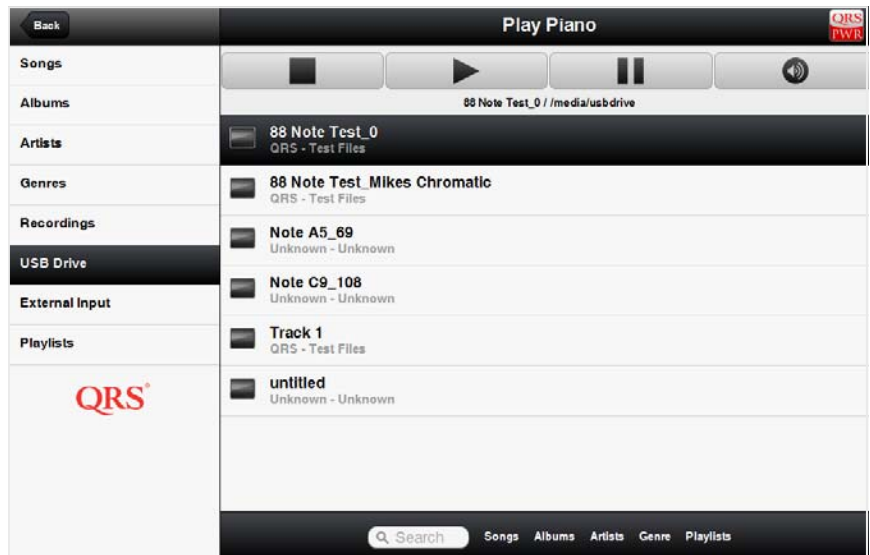
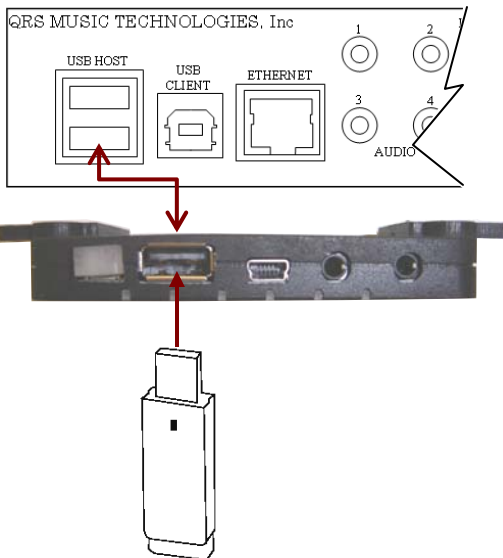


QRS Controllers:  
Petine  
Ancho  
Chili  
Serenade Pro



### USB Drive

Play MIDI or MP3 files from a USB Drive.



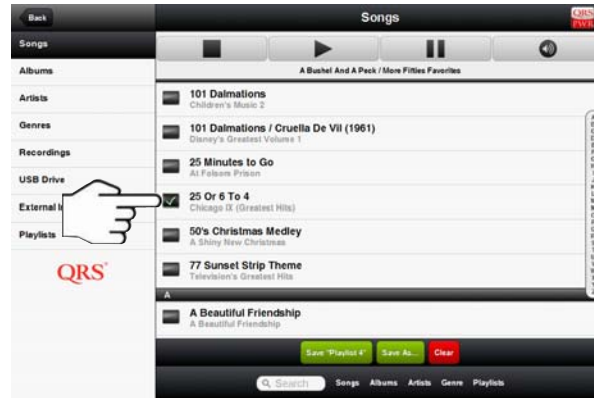
## Playlists

### Create a Playlist

To create a playlist just touch the black box next to the song title. *A check-mark will be added.*

You may continue to select songs for the playlist or...

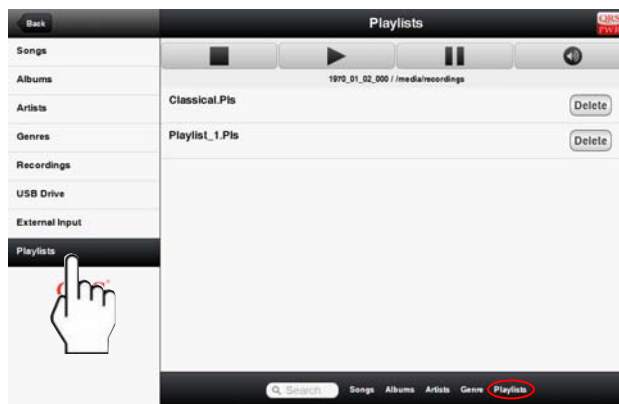
- 1 Press "Save Playlist x" to save you current selections with the default name.
- 2 Press "Save As..." to save your playlist with the name you choose.
- 3 Press the "Clear" button, before saving, to remove all of your current selections.



### Play songs from a Playlist

Press "Playlist" in the left or at the bottom of the page.

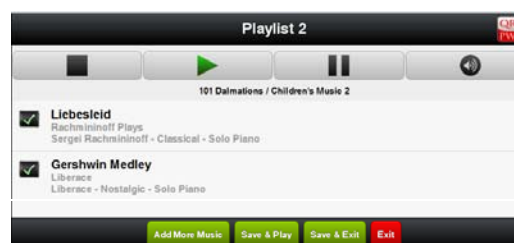
Open a playlist by touching the playlist name.



Your playlist will open where you can...

Play a song from the list.

Add more songs to your playlist

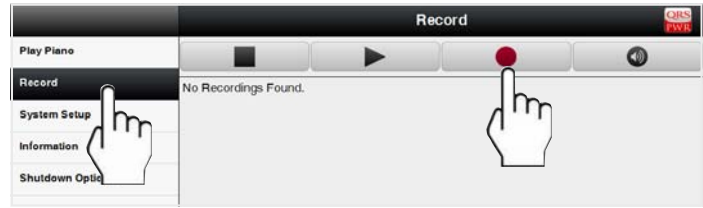


### Record

If there is a "PNOscan Adjust" option in the System Setup menu then you can record what you play on the piano.

Press the Record option from the Home Page.  
Press the red Record button.

Begin playing the piano when this "Recording" box appears.



Press the "Stop" button when you are finished.



A new song will appear in the Record window.  
Press to play.

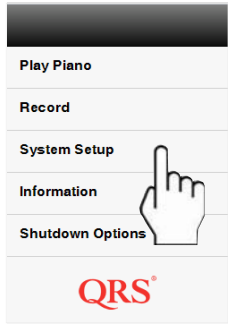


Record Options and Settings.

The diagram illustrates the Record interface and its settings. The main Record screen includes a menu on the left with options: Play Piano, Record, System Setup, Information, and Shutdown Options. The Record screen shows a song title '1970\_01\_02\_000' and a 'Delete' button. Below the Record screen are three icons: Save, MIDI, and Metronome. Arrows point from these icons to their respective settings screens: 'Save Recording', 'MIDI Settings', and 'Metronome'. Additionally, arrows point from the Record screen to a 'Recording' box and a 'Playback Settings' screen. The 'Recording' box has a 'Stop' button. The 'Playback Settings' screen includes sliders for 'Least Audio' and 'Master Volume', and buttons for 'Mute Piano', 'Mute', 'Soft Play', 'Full Expression', 'Playback Options', 'Volumes', and 'EQ'. The 'Delete Recording' label points to the 'Delete' button on the Record screen.

## System Setup

### General Adjustments



Back
General Adjustments

Key Adjust	Keyboard Settings		
Pedal Adjust	Invert Keyboard	<input checked="" type="checkbox"/>	
PNOScan Adjust	Magic Pedal	<input type="checkbox"/>	
General Adjustments (hand icon)	Lowest Key	-	5 +
Test Files	Lowest Note	-	25 +
Network Settings	Number of Notes	-	80 +
Record Settings	Transpose	-	0 +
Curves	Midi Out Delay	-	500 +
Update	WARNING: Changes to these settings will effect playback performance of your system.		
Service	Solenoid Response		
	Solenoid Delay (Ms)	-	500 +
	Trill Compensation	-	20 +
	Note Density Compensation	-	50 +
	Power Supply Compensation	-	0 +
	CPU Compensation	-	100 +
	Solenoid Heat Compensation	-	90 +
	Solenoid Algorithm	-	1 +
	WARNING: Changes to these values will effect playback performance of your solenoids.		

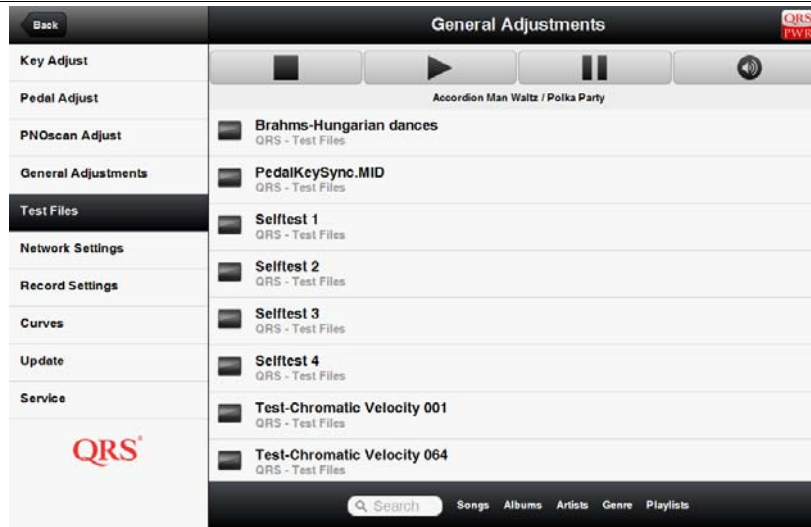
Invert Keyboard: *Shown "ON"*  
Reverses the direction of play, usually on, as shown, for upright pianos.

Magic Pedal: *Shown "OFF"*  
System automatically detects the presence of the Sustain Pedal Solenoid.

All other settings are reserved for system set-up and should not be changed by user.

## Test Files

Use these internal test files to break-in and test your system.



## Network Settings

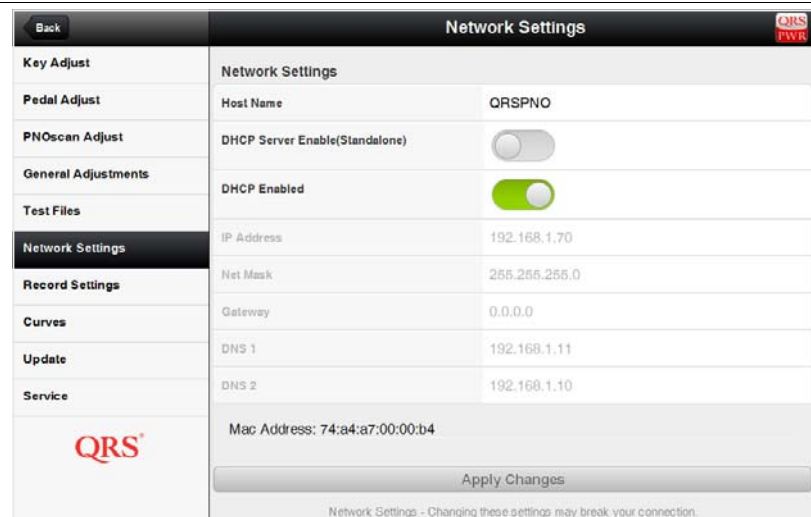
PNOmatation II systems are shipped from the factory in "Stand-Alone" mode with the IP address set to 192.168.1.1 and a host name of QRSPNO. The Wi-Fi device supplied by QRS and connected to PMII is set as an access point. See "How to...Setup the ASUS Wireless for PMII in Stand-Alone Mode".

You may want to connect PMII to your local network. This will allow you to control PMII from any PC on your network using Google Chrome. You can either connect a cable from PMII to your network or use the Wi-Fi device supplied with your player system for a wireless connection to your network.

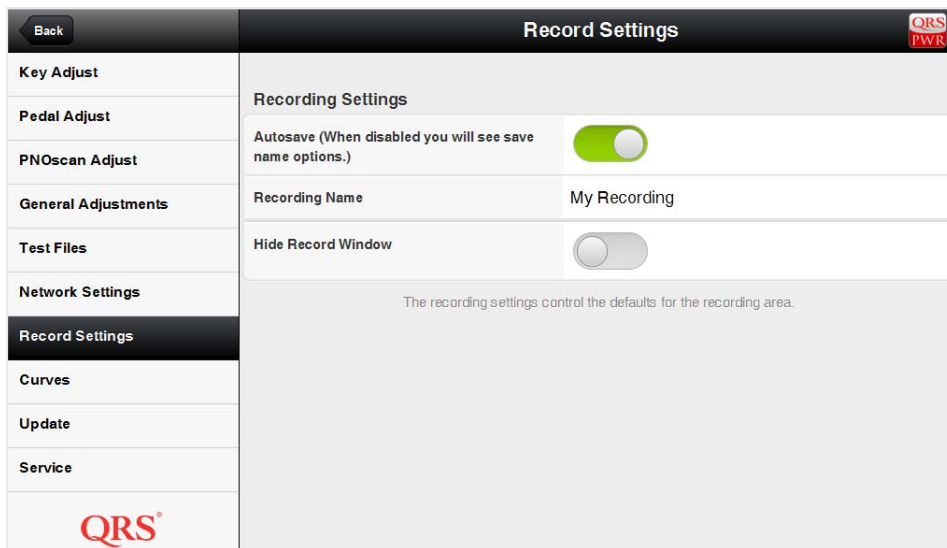
To use PMII with your local area network you must:

- 1 Set-up PMII in Network mode by sliding the "DHCP Server Enabled (Standalone)" button to the left, as shown below. *You can also use a QRS remote to make this change.*
- 2 Or...Reset the Wi-Fi device to communicate with your wireless network. See "How to...Setup the ASUS Wireless for PMII in Network Mode".

Once in Network Mode you can set a static IP address by sliding the "DHCP Enabled" button to the left and manually entering the static IP Address.



## Record Settings



## Curves



## Update

To update your PMII software.

*The current "Driver" version is shown in the System Information section on page 22.*

Download the latest "system\_patch\_2011-xx-xx.zip" from the QRS website.

Copy the zipped folder to a USB memory stick.

Plug the USB memory stick in the USB port of the PLx box.

The update procedure is automatic.

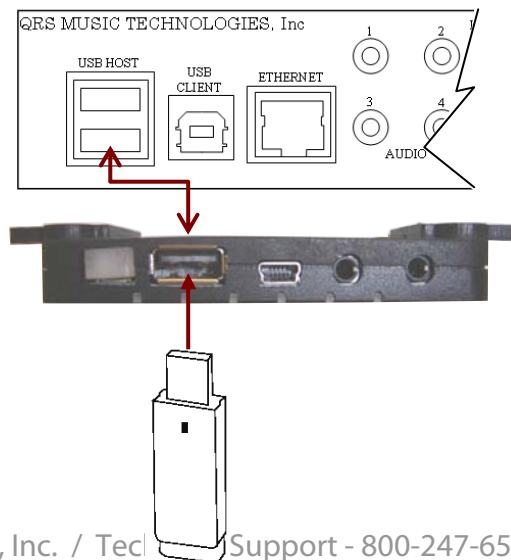
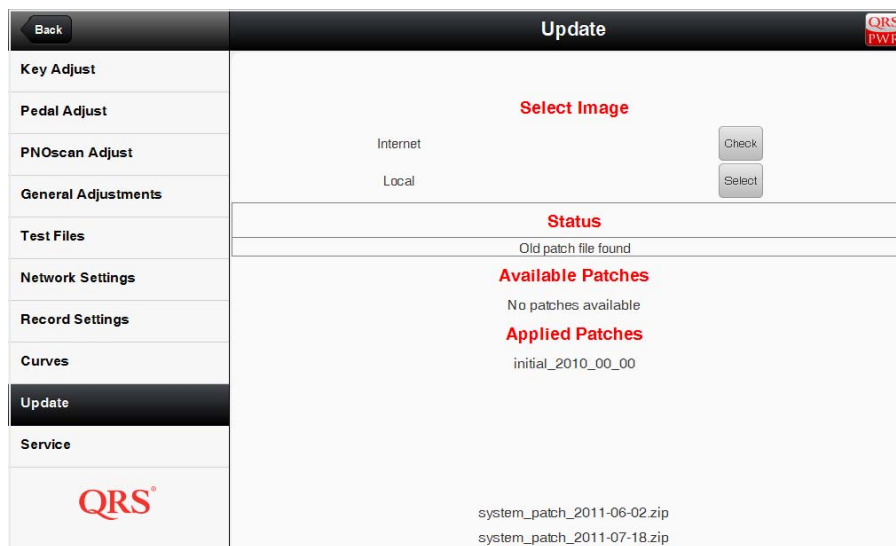
Old Patch File Found

Copy Patch File from USB Drive

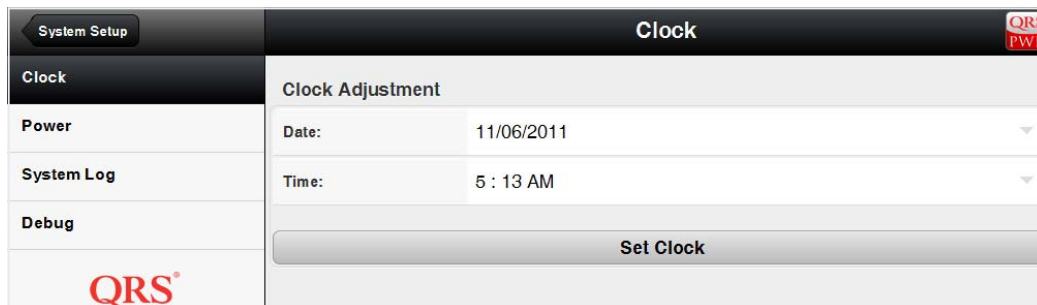
Unzip

Execute

Your system will reboot when the update is complete.

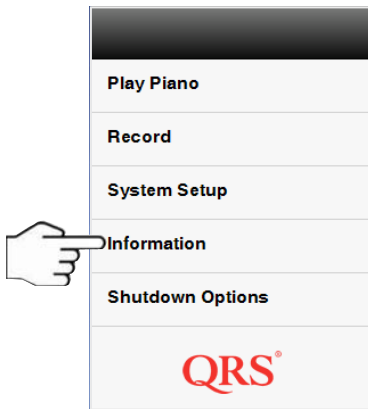


<b>Service</b>
Set the clock
The other pages will be used for troubleshooting the system.



**Information**

This page shows detailed information about your system.



Back
System

System

About

Software Versions	
Serial#	PM2121000080
Driver	2.23
PPU	16
PLX	9
10 pin PNOscan	16 16 16 16 0
6 pin PNOscan	0 0 0 0 0
Kernel	2.6.36.1
BSP Date	01-24-2011
Network Connections	
Ethernet	192.168.1.60
Wi-Fi	Not connected
Misc	
Date	10-06-2011
Time	08:13:23
Align Date	11-04-2011
pid	791
Last patch	system_patch_2011-11-03.zip
Load	0.63
Uptime	2:34
Hardware Versions	
Processor	armv5tej1
PCB	5

PMII Serial Number

10 pin PNOscan:  
Numbers above zero indicate the record sensor strip is attached

IP Address

Wi-Fi: Ignore this information.

Last Patch: Date that the system Driver was updated.

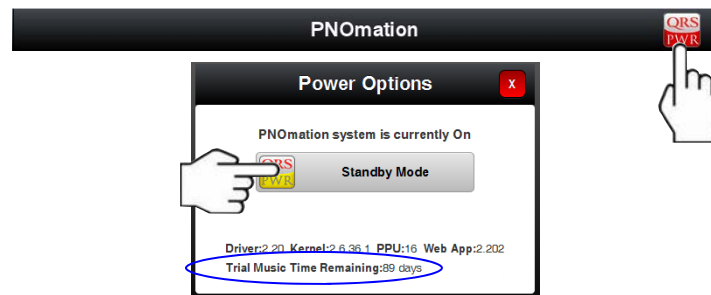
## Shut Down Options

When you're finished playing piano press the QRS PWR icon in the upper right corner.

Then, when the Power Options window appears press the "Standby Mode" button.

Standby mode shuts off the voltage to the solenoids that drives the keys but keeps the processor running.

[Note the Trial Music Time Remaining](#)



## Shutdown Options / Power

You can also enter standby mode by pressing the "Shutdown Options" button.

There are two other options from this window:

"Reboot" - Restarts the system in case the unit does not respond to commands.

"Shutdown" - Shuts OFF the system for a move or when the unit won't be used for a while.

To restart from this mode the unit must be disconnected and then reconnected to power.



<b>Pin-Light Extension [PLx] Light Patterns</b>		
Power <i>HI power LED</i>	Green	Steady: HI power LED is ON Winking: Data to Driver Boards
	Yellow	STANDBY
	Red	Steady: Short Circuit or Low Current State
System <i>LO power LED</i>	Green	Steady: LO power LED is ON
	Yellow	Flash: Remote Control Activity
Network	Green	Steady: Stand-Alone Mode for Access Point connection
	Yellow	Steady: Network Mode
	Red	Flashing: No Connection
Mode	Green	
SD Card - Source & 3		Steady
USB 1 & 2 - Source & 8 or 9		Steady - should not be same as SD card
Test Files - Source & +10 & 2		3 Blinks then Pause
Internal Demo - Source & 2		1 Blink per Second
QRS Controller - Source & 1		Steady
AUX Line In - Source & 4 MIDI In - Source & 5		Yellow
MIDI MIDI Traffic to Solenoids	Green	Steady: 10-pin PNOscan Winking: MIDI traffic
	Red	Winking: 5-pin MIDI traffic
AMI IN	Green	Steady: Decoding MIDI Data
	Yellow	Steady Carrier Present Winking: Audio pass-thru



Power System Network Mode MIDI AMI

<b>Pin-Light Extension [PLx] Button Functions</b>	
Play / Pause	Press to play selected song. Press again to stop playback.
Standby	Press and Hold for 6 seconds and then release.
Reboot	Press and hold for 12 seconds.



<b>Troubleshooting</b>
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Downloading from MAC may automatically unzip the update file.
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<b>Miscellaneous</b>
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QRS Controllers that will work with PNOmation II
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Petine
--------

Ancho
-------

Serenade Pro
--------------

Chili [77300 / ]
------------------

**Music**

**Music**

**PNomation II®**  
**ELECTRONICS/ELECTROMECHANICAL SYSTEM**  
**LIMITED WARRANTY**

**PNomation II ELECTRONICS LIMITED WARRANTY**

QRS Music Technologies, Inc. ("QRS") warrants to you for the Warranty Period that there are no defects in the materials of this Product (as identified at the end of this warranty certificate). The "Warranty Period" expires (except as explained below) Two (2) years from the date of your purchase of the Product. In order to determine the date of your purchase of the Product, you will need to provide to us a credit card receipt, a purchase agreement, a sales slip, a warranty registration or some other form of proof that you are the original purchaser and the date of your purchase of the Product.

If you are not able to provide us with some form of proof of purchase date, the Warranty Period will be a shorter period (the "Shorter Warranty Period") which is two years from the date that your dealer purchased the Product from QRS. If you cannot provide a proof of purchase date, you may contact us in the manner described below and we will assist you in determining the date that your dealer purchased the Product from us and determining the Shorter Warranty Period. This is a warranty for parts only and does not include shipping or labor.

This warranty does not apply to any accessories you may have purchased with the Product and does not apply to any piano or components of the piano with which the Product is used or any Piano in which the Product is installed. In addition, this warranty does not cover scratches, dents or other defects in the cosmetic finish of the Product.

The warranty is issued solely to the original purchaser of the Product. THIS WARRANTY IS NOT TRANSFERABLE.

If, during the Warranty Period, parts incorporated in this Product are found to be defective in material or workmanship, and the original purchaser provides Purchase Documents to QRS, then QRS or its authorized dealer will provide replacement parts without charge. We may, at our discretion, provide reconditioned parts or assemblies as warranty replacements. You as the original purchaser will be responsible to pay labor costs incurred in connection with any repair.

**LIMITATION IN CONNECTION WITH OBSOLETE PRODUCTS**

If at the time you make a claim pursuant to this warranty, we no longer manufacture or sell the same model of Product, we may, at our discretion, rather than repair or replace defective parts in the Product, offer to sell you a more current version of a similar Product. If we offer to sell you a more current model of the Product, you will be responsible to pay the difference between the Manufacturer's Suggested Retail Price ("MSRP") of the more current version of a similar Product and the price you paid for the Product you purchased. If you choose not to accept such offer, we will have no further obligations pursuant to this warranty.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, MADE BY THE MANUFACTURER IN CONNECTION WITH THIS PRODUCT. INCLUDING, BUT NOT LIMITED TO, WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT ALLOWED BY THE LAW, QRS SHALL NOT BE RESPONSIBLE FOR LOSS OF THE PRODUCT, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, SPECIAL OR CONSEQUENTIAL DAMAGES, EVEN IF THE MANUFACTURER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

This warranty gives you specific legal rights. Some states provide other rights, and some states do not allow excluding or limiting liability for incidental or consequential damage. Consequently, the limitations and exclusions in this warranty may not apply to you. In addition, some jurisdictions have consumer protection rules, regulations and statutes that may apply to you.

**Exclusions**

There is no express warranty on the Product and this warranty is void if:

- 1) You did not purchase this Product from an authorized Pianomation reseller
- 2) This Product has been serviced, modified or tampered with by anyone other than an QRS Authorized Service Representative
- 3) The name, trademark or serial number has been modified, defaced or removed from the product,
- 4) This Product has been damaged as a result of abuse, abnormal force or strain, failure to reasonably maintain and protect, modification, accident or exposure to extreme temperature or humidity,
- 5) Parts, supplies or other accessories which have not been approved by QRS have been used with this Product,
- 6) Radio frequency interference is generated by uncertified and/or illegal equipment,
- 7) This Product has been moved or delivered without reasonable preparation and packaging or
- 8) QRS reasonably determines, after inspection that there has been modification of this Product which adversely affects the reliability of the product or component.

**Owner's Responsibility**

In order to have rights under this warranty, you have the following responsibilities:

- 1) Retain your proof of purchase and purchase date and send in your Warranty Registration Card
- 2) Notify QRS or any authorized dealer of any warranty claim within ten (10) days after discovery and provide a detailed explanation of the problem.

**General**

If any provision herein shall be unlawful, void or for any reason unenforceable, then that provision shall be deemed severable from this warranty certificate and shall not affect the validity of and enforceability of the remaining provisions.

QRS reserves the right to make changes in design and/or improvements to its products without any obligation to retrofit products previously manufactured.

**INSTRUCTIONS FOR OBTAINING WARRANTY SERVICE**

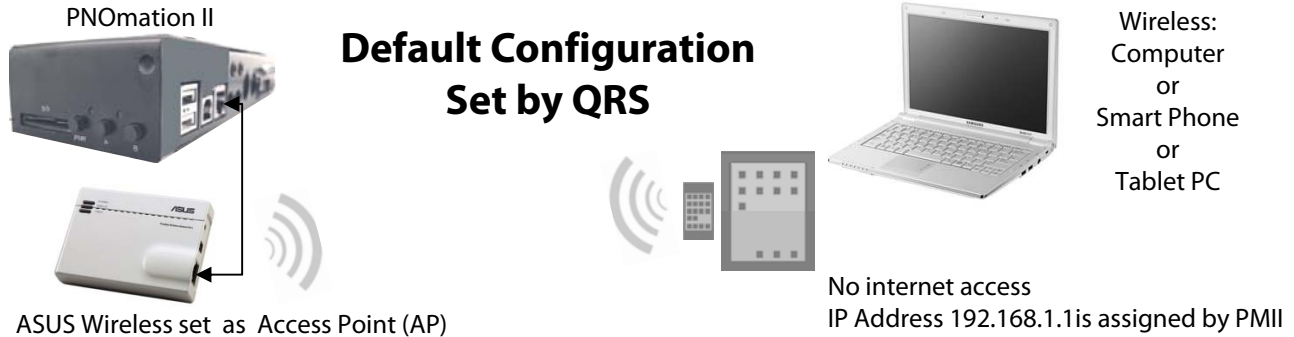
- 1) If you cannot provide proof of purchase, contact QRS at 800-247-6557 and we will attempt to determine the date on which your dealer purchased the Product and assist you in determining the Shorter Warranty Period. For warranty service, contact the dealer from whom you purchased the product, or your nearest dealer.
- 2) If no dealer is near you, contact QRS by phone at 800-247-6557.
- 3) Do not ship the product without prior written Return Authorization from QRS. Do not attempt to repair or disassemble the product yourself.
- 4) Please record your model number and serial number and your date of purchase below for your records. Keep this information with your proof of purchase in case your product requires service. Do not dispose of the warranty after it expires. In the event your product ever requires service, these instructions should be helpful in enabling you to obtain proper service.

Product Model # \_\_\_\_\_

Product Serial # \_\_\_\_\_

Date of purchase \_\_\_\_\_

## Setup the ASUS Wireless for PMII in Stand-Alone Mode



Disconnect the Ethernet cable from the PMII unit.

Using the QRS Remote Control: Press SOURCE then PROGRAM then 9 9 0. *This can also be via the web interface.*

Wait for the Network light on the PLx box to turn Green.



Power System Network Mode MIDI AMI

Unplug the two cables and remove the ASUS wireless device from the piano.

Connect one end of an Ethernet cable into the ASUS Wireless

Connect the other end of the Ethernet cable into your computer

Connect the ASUS to the computer's USB port for power. *A USB to power plug cable is provided with our system.*

Confirm that the ASUS "power" LED is ON.

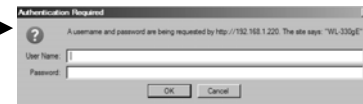
Press and hold the "reset" button until the "power" LED flashes a few times, then release the button.

Wait until the "power" button stops flashing. ["Reset" is the small recessed button next to the power jack]

Enter 192.168.1.220 in the address window of your computer's web browser  
*If unsuccessful disconnect and then reconnect power to ASUS*

The "Authentication Required" dialog box should appear.

Enter admin in the User Name field and admin in the Password field.  
Click the OK button.



The ASUS programming window opens.

Click on the AP tab.

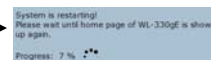
Enter the SSID name that you want to see when you connect to the AP  
from your wireless device. Our example uses ASUSQRS AP  
Click the FINISHED button.



Click OK



The ASUS will save and restart with the new settings  
Close the browser window when this blue box closes.



Disconnect the Ethernet cable from your computer and plug it into the PNOmation II Ethernet port.

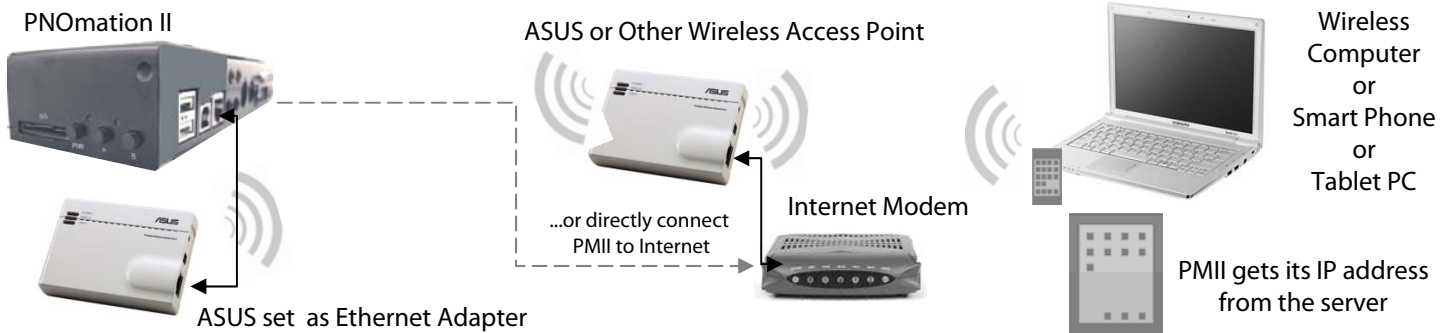
Disconnect the ASUS from power and then reconnect.

Wait for the voice prompt to report: "Standby" ... "Connected" ... "IP Address is..."

You can now wirelessly connect to PNOmation II via the ASUS wireless access point..

Enter QRSPNO [192.168.1.1/qrs] in your Internet web browser.

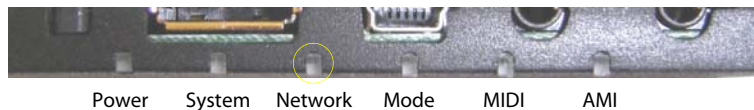
## Setup ASUS Wireless for PMII in Network Mode



Disconnect the Ethernet cable from the PMII unit.

Using the QRS Remote Control: Press **SOURCE** then **PROGRAM** then **9 9 1**. *This can also be via the web interface.*

Wait for the Network light on the PLx box to turn Yellow.



Unplug the two cables and remove the ASUS wireless device from the piano.

Connect one end of an Ethernet cable into the ASUS Wireless.

Connect the other end of the Ethernet cable into your computer.

Connect the ASUS to the computer's USB port for power. *A USB to power plug cable is provided with our system.*

Confirm that the ASUS "power" LED is ON.

Press and hold the "reset" button until the "power" LED flashes several times, then release the button.

Wait until the "power" button stops flashing. ["Reset" is the small recessed button next to the power jack]

*If unsuccessful disconnect and then reconnect power to ASUS*

Enter 192.168.1.220 in the address window of your computer's web browser

The "Authentication Required" dialog box should appear. →

Enter admin in the User Name and Password fields

Click OK



The ASUS programming window opens. →

Click on the Adapter tab.

In the Available Network List, click on the radio button next to the SSID device that you want to connect to.

In our case we want to connect to ASUS QRS AP, or the Access Point connected to PNOmation II.

Click the Connect button.



Click OK →



The ASUS will save and restart with the new settings. →

Close the browser window when this blue box closes.

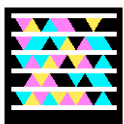


Disconnect the Ethernet cable from your computer and plug the ASUS into the PNOmation II Ethernet port.

Disconnect the ASUS from power and then reconnect.

Wait for the voice prompt to report: "Standby"... "Connected"... "IP Address is..."

Enter QRSPNO in your Internet web browser.



Link to PMII upgrade instructions

Get the free mobile app at: <http://gettag.mobi>



QRSPNO [<http://192.168.1.1/qrs>] Stand Alone Mode