

# QRS'S PNOMATION OT - LOG IN & REGISTRATION

This guide will help you get started with the QRS PNOMation OT.

We welcome your feedback, on any features, music or ideas to improve the PNOMation<sup>3</sup>. Just drop us an email at [qrssupport@qrsinc.com](mailto:qrssupport@qrsinc.com).



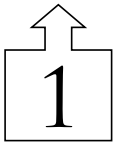
## Start Here

Setup Wi-Fi Stand Alone and Network Client  
Step 1 & 2

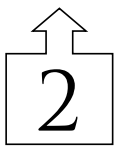
Download the QRSFinder App  
Activating Your Trial  
Step 3

Playing Your Piano  
Step 4

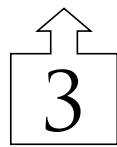
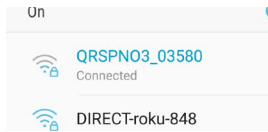
## STEP 1: SETUP WI-FI STAND ALONE



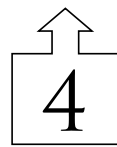
Open Settings On Device



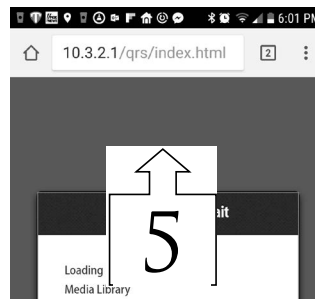
Open Wi-Fi



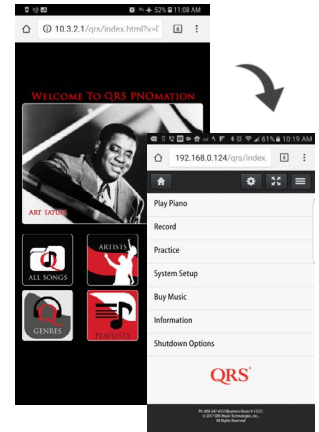
Select "QRSPNO\_ xxxx"  
Enter Password "qrsmusic"



Select Safari or Web Browser of Choice



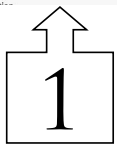
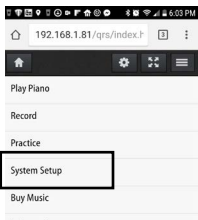
Enter IP Address  
10.3.2.1



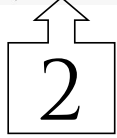
QRSPNO Start Up Screen  
Touch anywhere outside of the images to bring you to the Home Menu Screen

Stand Alone mode allows you to access the player system without a connection to the Internet.

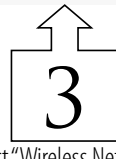
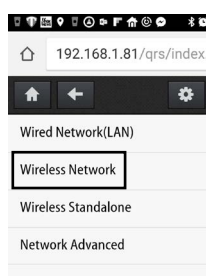
## STEP 2 : SETUP WI-FI NETWORK



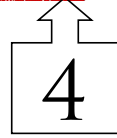
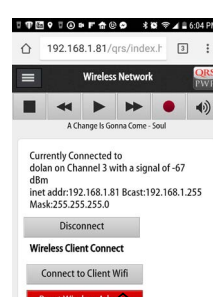
Make Sure You Are In Stand Alone Mode then select "System Setup"



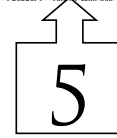
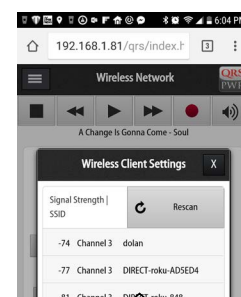
Select "Network Settings"



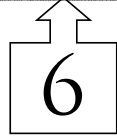
Select "Wireless Network"



Select "Connect to Client Wifi"

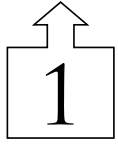
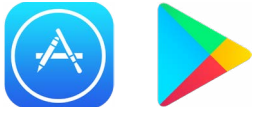


Select Client Network to Join

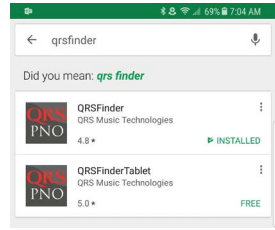


Enter The password for the network you are joining

# STEP 3: THE QRS FINDER APP & UNLOCK YOUR TRIAL

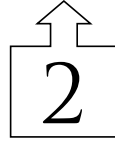
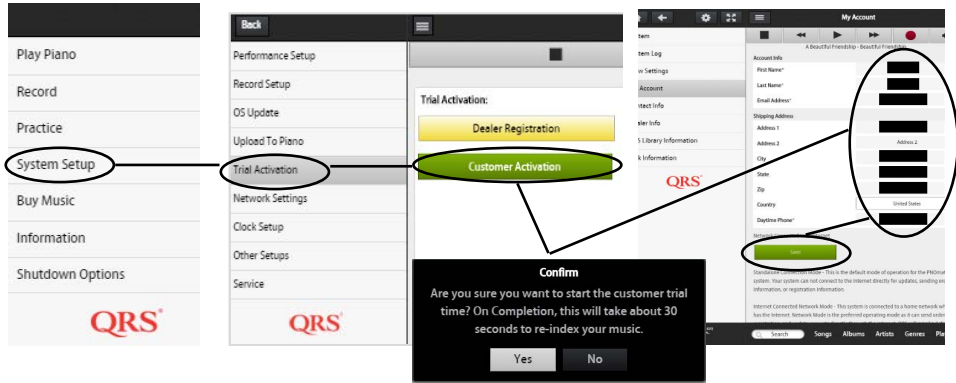


Go to the play/App store for your device, and search for QRSFinder and download it.



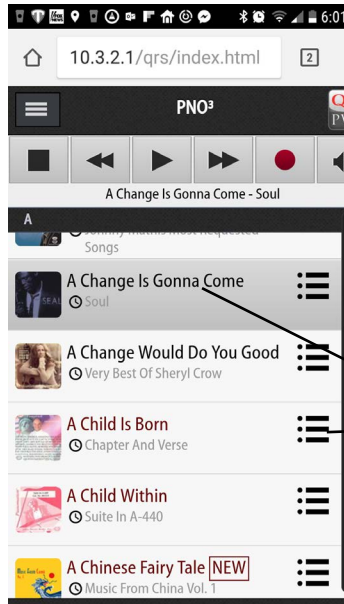
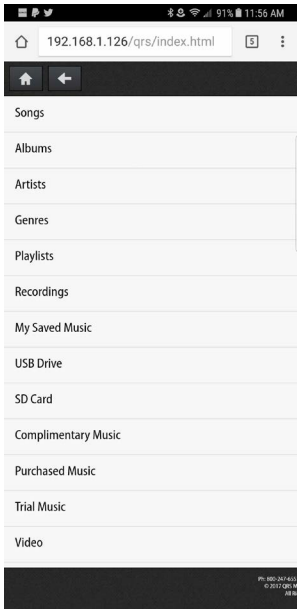
Once downloaded select the App - it will do a search of your network and open up the PNO3 Built in App.

(Note your device is a window to whats happening on your piano, and is viewed over your network not the Internet. If your network is large you may need to select retry initially for the App to first locate the piano. is large)



Unlock Your Trial

# STEP 4: PLAY YOUR PIANO



Black Font Songs	Original Artist's Audio	Sync Along Series
Blue Font Songs	Piano with Audio Accompaniment,	Concert Series
Red Font Songs	Solo Piano Only	Nostalgic/Performance

Reference the user manual for advanced setups such as key adjusts, pedal adjustments, & volume mapping necessary for upgrade kits.

Transport buttons - Stop, Back, Play, Forward, Record, Volume  
Touch the name of the song to begin its playback  
Touch the menu icon to add it to a playlist or create a new one

Selecting "Genres" will break out each type by music style.

Selecting "Radio"  
Choose your style, type or event

# OPTIONS



**QRSFinder:**  
Locates and opens your QRSPNO App if your piano is on your network. Enables Apple Watch control.



**Apple Watch:**  
Start, Stop, Play, Volume, Playlists, Log In and Notifications. The first wearable for player pianos.



**Amazon Alexa:**  
With QRS Music Skill Set, all you have to do is "Ask PNO to Play".



**Q-Sync-3:**  
Select the DVD or performance from the QRSPNO App and it plays on the big screen. Super easy.



**QRS Connect:**  
Worlds best and first Music Activity Tracker connects all you do musically.



**PNOscan:**  
Optical recording for the Acoustic Piano. All the features of a digital on an acoustic instrument.



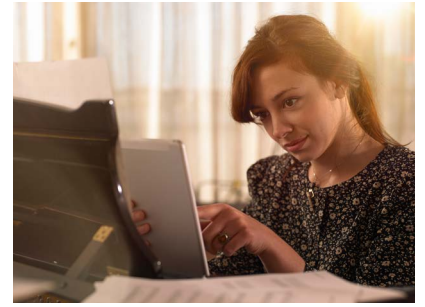
**PianoMarvel:**  
The very best app for learning, teaching and practicing piano. When installed on your system it will automatically launch from the learn button. (Requires QRS PNOscan)

# PNOMATION OT: PERFORMANCE & VOLUME SETUPS

This guide will assist you in fine tuning how well your piano performs. It sets the minimum volume it plays at, its timing and dynamics.

*(These steps assume you have a good placement of PNOmation OT on your keyboard. System Software defaults are very good out of the box performers, but every piano is a bit different. So we give you the capability to fine tune the performance. These steps take a bit of time, are optional and not critical. These functions are necessary and typically done by a certified technician on installed systems, but here we give you the capability.*

Just drop us an email with feedback  
[qrssupport@qrsinc.com](mailto:qrssupport@qrsinc.com).



**STEP 1:** Setup how quietly each key on your piano will play, while making sure the timing is correct.

## DYNAMICS & EQUALIZER



**STEP 2:** Will allow you to set up how the QRS Music content sounds dynamically on your piano in your environment. A large piano or a small upright all have their nuances. The performances can be enhanced/restricted or subtleties brought out dependent on your taste and how your piano reacts.



**STEP 3:** Setup how your piano, speakers and environment track to the PNOmation systems master volume slider.

This allows you to compensate how the piano performs with accompaniment and when playing solo. You may have a large piano and small speakers, small piano and whole house audio. You may want only dynamic solo piano +++ all of the above this step is very important and can be tweaked whenever you like.

## VOICE PROMPTS



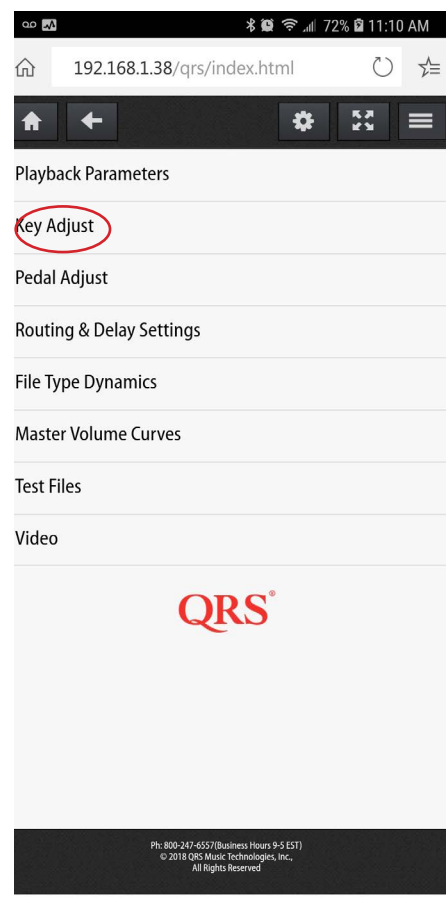
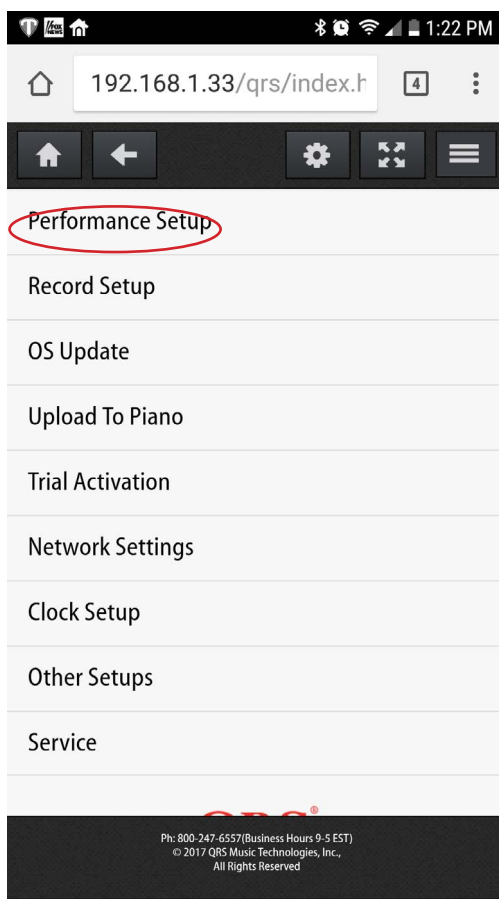
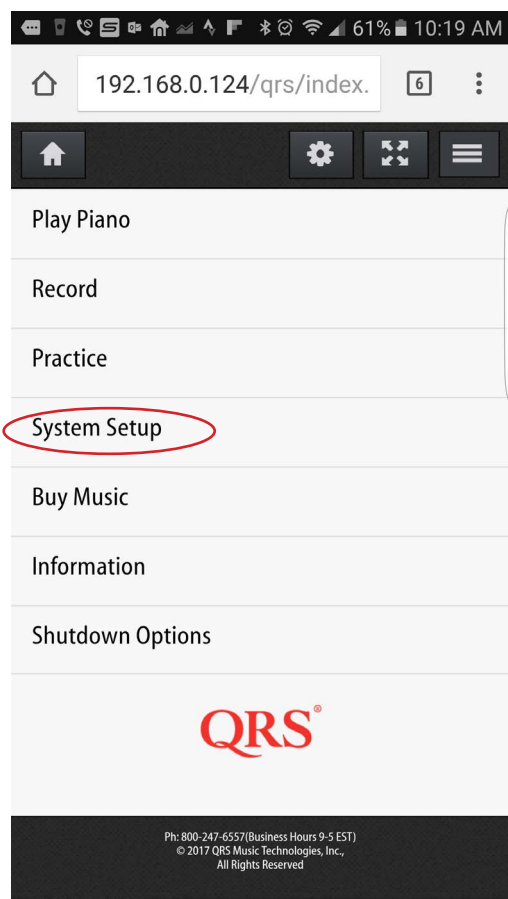
**STEP 4:** PNOmation speaks to you. It gives you its status, network status, IP address, update status, faults and serial number. But sometimes it gives it to you too loud or at the wrong time when your network is reset for example. Step 5 allows you to control all of this.

## DID YOU KNOW?



- The PLx\_v (short for Pin Light Port Extender) has only one button. That button will start and stop your piano from playing when pushed. Great for when you get a phone call, are not logged in or cant find the remote.
- The button also acts as an IR receiver so you can use your IR remote control to cue up a playlist, get voice prompts...
- Holding the button in for 8 seconds reboots the piano.
- You can also use voice control with an Amazon Skill set to start, stop, play, select songs, playlists etc. "Alexa Ask PNO to Play"
- The songs are color coded - red font are Solo, Blue are Piano with Accompaniment, and Black font are SyncAlongs.

# STEP 1: SETTING HOW QUIETLY EACH KEY WILL PLAY



In step 1 we adjust how quietly your piano can play back. It simultaneously adjusts for how quiet the notes playback when asked to in a fluid piece of music where volume is set to full dynamic range. First and most important step.

**Step 1:** Touch the The note number. Your devices keyboard will pop up, change the note number to 1, if it is an 80 note(std) player system the number will jump to 5. Select the "Start" button. The note will begin to play.

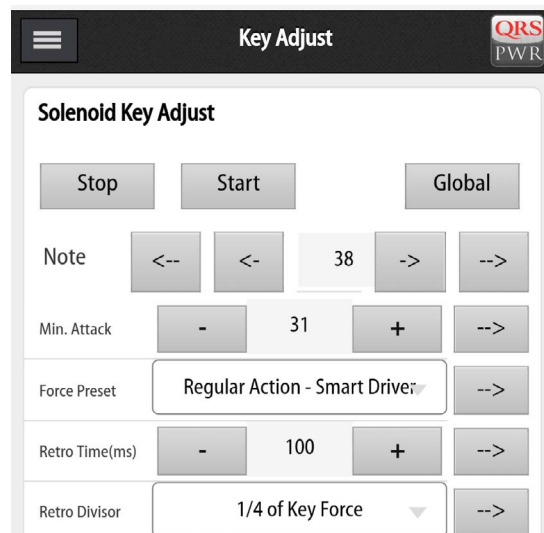
**Step 2:** Select the "-" on the MIN ATTACK line to lower the min attack value. This will lower the volume the note plays at. Lower this until the note no longer plays then bring it back up using the "+". This will be the lowest possible volume this particular key will play at. The actual playback volume is set by your piece of music and/or where the master volume is set.

**Step 3:** Select the "->" button on the "Note" line. This will increment you to the next note. The note will begin to play. Adjust the "min attack" as before using the "-" and or "+"

**Step 4:** Repeat step 3 until you have gone through every note.

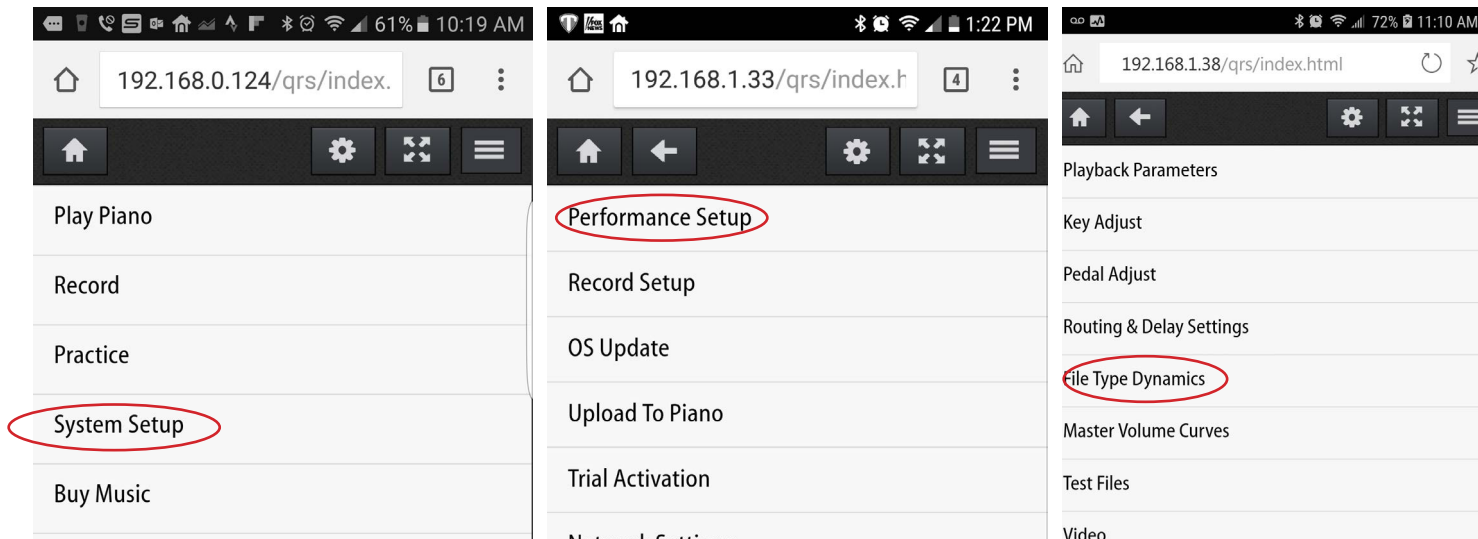
**Note:** Selecting the "->" on the "MIN ATTACK" line will adjust the min attack value of every note to the right of the current note your adjusting to the same value as the note you are currently adjusting. This will save you some time but we strongly recommend you still go through every note.

When you are done adjusting every note select the "->" on the "Note" line and every key will play back, once you are done verifying select stop.



These instructions are meant to be basic adjustments if you feel there is too much noise or timing is off there are other adjustments you can make. Call us or reference the manual.

# STEP 2: ADJUSTING DYNAMICS TO YOUR PIANO



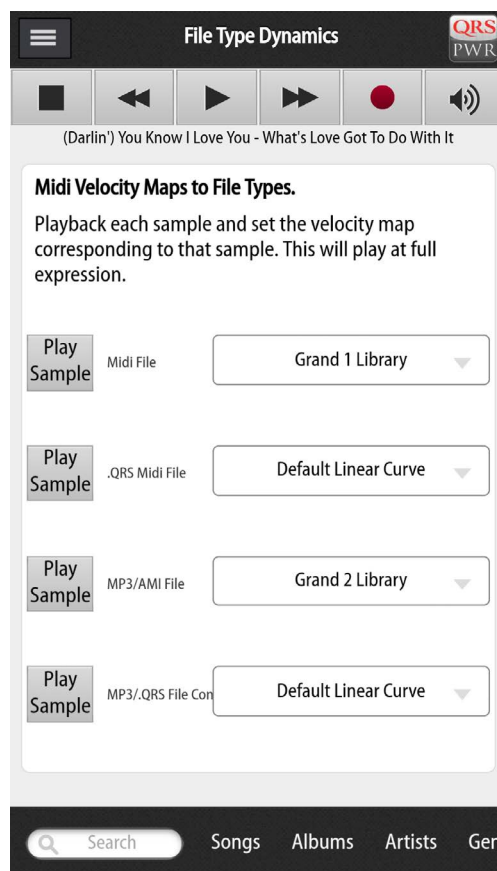
In step2 we adjust how dynamically your piano plays back. You may have a concert grand or a 50 year old upright. Each responds differently to the player system. There may be no adjustments necessary for a finely tuned grand piano but with the same playback curve on the upright you may not hear the dynamics as pronounced. This section allows you to adjust for how you perceive the performance to be optimal. Note: This is purely subjective and can be adjusted at any time. The default linear curve was the recording from a 7' grand piano and/or edited for playback performance on a 7'.

**Step 1:** Touch the speaker icon next to the red round icon. Select the button "Full Expression" and adjust audio and piano volume sliders to "0" in the middle. then exit by selecting the "x" in the top right corner of the pop up.

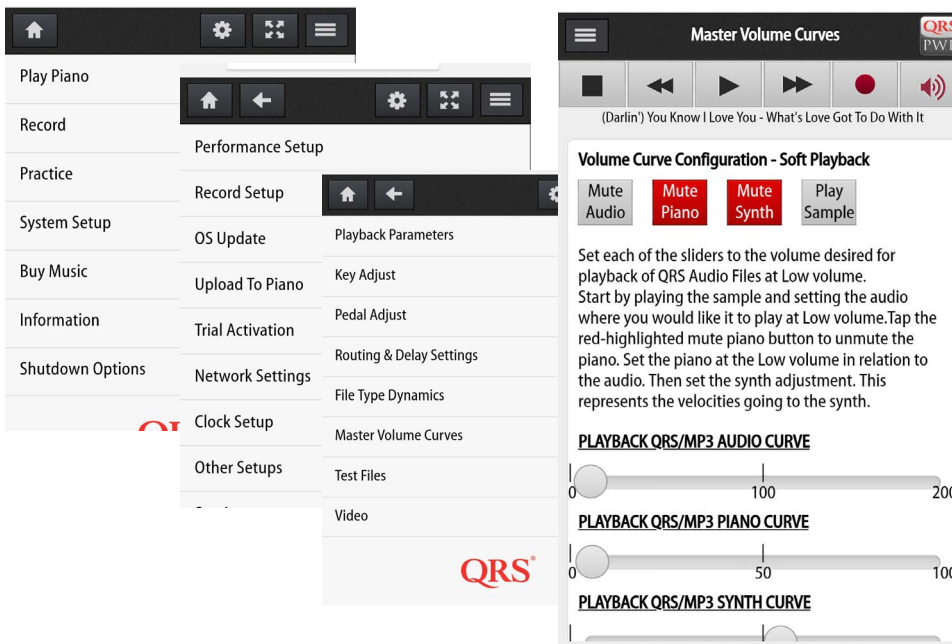
**Step 2:** Select "Play Sample" button next to the .QRS MIDI File drop down menu. Listen to playback for about a minute. Select Stop (the black square on the transport button bar)

Select the drop down arrow for the .QRS MIDI File and select "Grand 1 Library", then play the sample. Listen to playback for about a minute. Select Stop

**Step 3:** Repeat the steps above testing various curves. We recommend trying Default Linear (how artist performed adjusted for 7' Grand), Grand 1 Library, Grand 2 Library, Custom 1 Library, of course you are not limited try as many as you want. Select one that makes you feel as though it is optimal for you and your piano.



# STEP 3: MASTER VOLUME SLIDER VS SOLO PIANO AND PIANO WITH ACCOMPANIMENT



*In this step we adjust how dynamically your piano plays back relative to the type of music it is playing (solo or with accompaniment) as it tracks with the master volume slider. For example when you listen to a solo piece of music you may want the piano to play as dynamically as possible, but that same setting may result in the piano being too powerful when played back with Adel and take away from the power of her voice so at the same master volume you may want piano to be very subdued. This is where you do this.*

## Master Volume vs Solo Piano Playback Master Volume vs Piano With Accompaniment

**Step 1:** Select Master Volume Curves

**Step 2:** Skip the wizard and select "QRS Solo File Setup" You will be presented with three sliders - IGNORE THE BOTTOM TWO SLIDERS FOR THIS QUICK GUIDES PURPOSES.

**Step 3:** The first screen represents what a piano solo will sound like when the master volume slider is set to 1. Select the button "Play Sample" listen for about a minute, adjust the first slider to where you think it should be and sound when master volume is at 1. Usually you do not have to do anything just leave it.

**Step 4:** Select Stop (up top, the black square), then go to the bottom of the page and select Next. The next adjustment will represent full dynamic range/full expression. When master volume slider is at 50% or the "Full Expression" button is pushed this is what you will hear. Select "Play Sample" and adjust the slider if you want. Typically it is ok at 50%.

**Step 5:** Select Stop, then go to the bottom of the page and select Next. The next adjustment will represent full volume. What your system will sound like when master volume slider is at 100%. This will make every note play as loud as possible and is rarely set at 100% unless the piano is in a very noisy environment. It is useful though if you want to cap how loud it will ever play. Most people set it at around 65 to 70%. Select "Play Sample" and adjust the slider then select "Finish"

Most frequently seen settings for a piano with a QRS Q35 Speaker:

**Piano Solo:**

Slider 1 Solo piano: 1 - next - 50 - next - 70 - finish

**Piano with Audio Accompaniment:**

Slider 1 Speaker/Audio: 2 - next - 25 - next - 45 - finish

Slider 2 Piano: 1 - next - 10 - next - 25 - finish

**Step 1:** Select Master Volume Curves

**Step 2:** Skip the wizard and select "QRS Audio File Setup" You will be presented with four sliders - IGNORE THE BOTTOM TWO SLIDERS FOR THIS QUICK GUIDES PURPOSES.

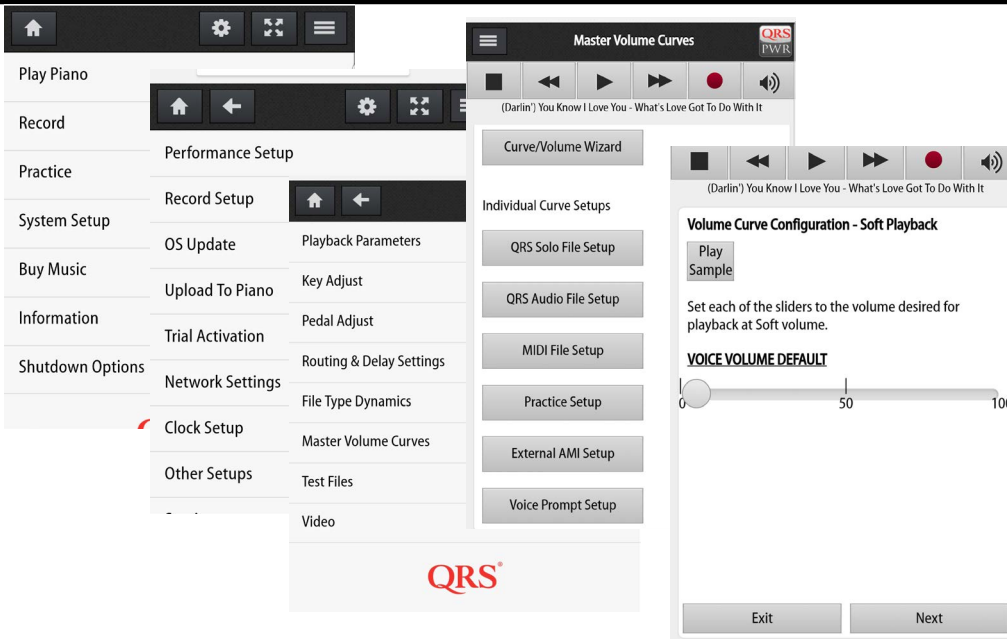
**Step 3:** The first screen represents what a piano with accompaniment will sound like when the master volume is set to 1. Select the button "Play Sample" listen for about a minute, adjust the first slider to where you think the speaker output should be and sound when master volume is at 1. This depends heavily on the type of speaker or whole house audio you are feeding. If you want background volume to be controlled from another source regardless of where the master volume slider is set. The settings for the first slider will be the same for all three screens.

**Step 4:** Select un-mute the for the piano. The piano will begin to play along with the background music. Adjust slider 2 so that it sounds good with the background. Usually this is very low.

**Step 5:** Select Stop (up top, the black square), then go to the bottom of the page and select Next. The next adjustment will represent full dynamic range/ full expression. When master volume slider is at 50% or the "Full Expression" button is pushed this is what you will hear. Select "Play Sample" and adjust the sliders as above.

**Step 6:** Select Stop (up top, the black square), then go to the bottom of the page and select Next. The next adjustment will represent full volume. What your system will sound like when master volume slider is at 100%. Most people set he first slider to 40 and second slider to 30ish.

# STEP 4: VOICE PROMPTS



Voice prompts can tell you what your serial number is, where you are during a software update, what your network status is and what your IP address is. It will tell you what software version you have on your system. It is activated during an update, power up, change of network status and/or a "shift" then "info" on your IR remote control. Very handy at times, but sometimes you may not want to hear them - this is how to change their settings.

## Turning the Voice Prompt Volume Down

## Setting when your system updates and when voice prompts for those updates are heard

**Step 1:** Select Master Volume Curves

**Step 2:** Skip the wizard and select "Voice Prompt Setups" You will be presented with one slider.

**Step 3:** The first screen represents what the voice prompt will sound like when the master volume slider is set to 1. Select the button "Play Sample" listen, adjust the slider to where you think it should be and sound when master volume is at 1. Usually you do not have to do anything just move or leave it at 0.

**Step 4:** Select Stop (up top, the black square), then go to the bottom of the page and select Next. The next adjustment will represent that the voice prompt volume will be when master volume slider is at 50% or the "Full Expression" button is pushed this is what you will hear. Select "Play Sample" and adjust the slider if you want. Typically customers like it at a low volume so set it to 2

**Step 5:** Select Stop, then go to the bottom of the page and select Next. The next adjustment will represent full volume. What your voice prompt will sound like when master volume slider is at 100%. Most customers set it at around 3. Select "Play Sample" and adjust the slider then select "Finish"

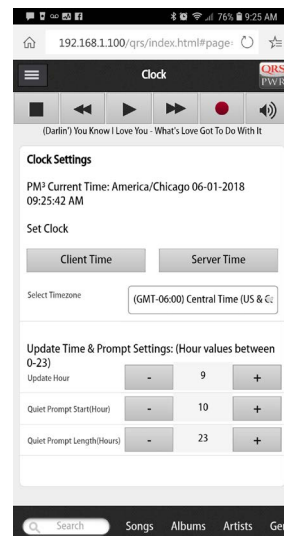
**Step 1:** Select "System Setup"

**Step 2:** Select "Clock Setup"

**Step 3:** Select "Clock" e same for all three screens.

**Step 4:** Validate the time zone is correct, if not use the drop down menu and set the correct time zone.

**Step 5:** Ne three variables below the time zone dictate when an auto update is performed and for how long your update will be announced with the voice prompts. The default update is 9AM, The next variable sets the time that the muted voice prompts will be initiated. The variable after that will tell you how long after it is muted it will stay muted. If you only want to know it is updating but not hear about it after an hour use the following 9, 10, 23



# QRS PNO<sup>3</sup> USER GUIDE

## How to Configure Network Mode

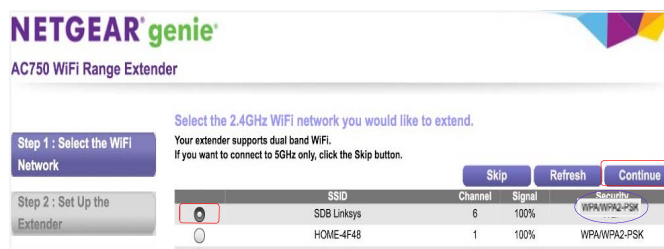
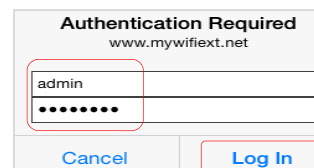
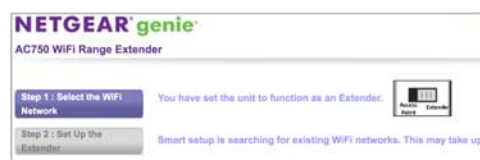
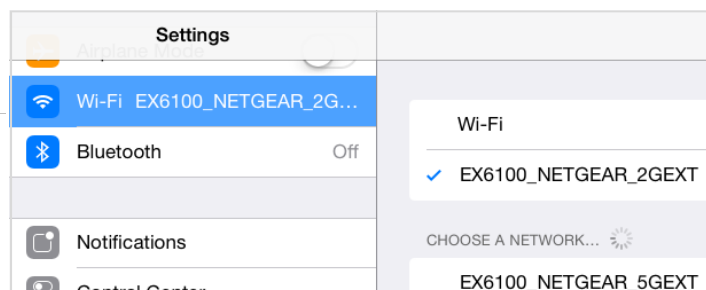
Using the **Net gear Extender EX6100 / AC750** [iPad Example]

Both PNO<sup>3</sup> and the Piano's Wi-Fi device must be programmed to change modes.

Network Mode:	NOT connected to the Internet. PNO <sup>3</sup> is a node on your homes wireless network "homeroutersid_2GEXT." PNO <sup>3</sup> hands receives its IP addresses from your router.
IP address given out by your home router	PNO <sup>3</sup> delivers control for Android, Google Chrome or Safari web browsers. Connect to PNO <sup>3</sup> by entering <b>given out IP address</b> in the address bar of the web browser.

### Netgear EX6100/AC750 PNO<sup>3</sup> Stand Alone mode programming Steps

1. Flip the "Access Point/Extender" switch to the "Extender" position.
2. Plug the Extender into an outlet - wait for the Power LED to turn green.
3. Use a paper clip to Press and Hold the "Factory Reset" Button until power light flashes 3 times (~10s)
4. The reset EX6100 will broadcast two SSID names; EX6100\_Netgear...2GEXT & 5GEXT (You may want to turn the Wi-Fi OFF and then ON to refresh the Wi-Fi list.)
5. Go to your device's Wi-Fi settings and Select "EX6100\_Netgear\_2GEXT".
6. The Netgear "genie" should appear within one minute. Or, go to your web browser - Safari or Chrome & enter: **www.mywifiext.net**
7. If requested, enter username = "admin" and password = "password" and then Select "Log In".
8. Select your home Wi-Fi network from the 2G list. Select "Continue".  
Enter your home Wi-Fi password.  
Select "Continue".





## How to Configure Network Mode (Cont.)

Using the **Net gear Extender EX6100 / AC750** [iPad Example]

### Netgear EX6100/AC750

#### PNO3 Network mode programming Steps Cont.

9. Enter your home Wi-Fi password.  
This is the most important part of the setup - If your security is "WPA type" the screen will tell you. Enter your password and Select "Continue".
10. If you have WEP Security [Capital Letters A-F and Numbers 0-9] The screen will tell you Enter your home Wi-Fi password in the "Key 1" box. (not in passphrase) Select "Continue".
11. Select "Skip" on the 5G setup page
12. Select "Private Network".  
Select "Continue".
13. Summary Page: Move to the bottom of the page and select "Continue". Then Select "OK".
14. Wait for the Netgear to apply changes and reboot.  
After Netgear reboots the light above the N in the Netgear logo will turn green and signify that the extender is talking to your homes network.
15. Go to "Settings" "WiFi". Log into "yourhomessid\_2Gext" and then surf the internet. If you can do this you have set it up correctly. If not more than likely your password is incorrect and you will have to start over.
16. Using a QRS remote control: Press the following buttons in sequence SHIFT, B
17. If you do not have a remote control, hold button 3 on the processor down for 4seconds, do this twice
18. Plug the Ethernet cable back into the Netgear and the PNOmation system should announce its new IP address. If not press "Shift 3" with the remote or use the QRSFinder App

### NETGEAR genie

#### AC750 WiFi Range Extender

Enter the security settings of the selected WiFi network

Step 1 : Select the WiFi Network

Name (SSID): NETGEAR14

Security: WPA2-PSK [AES]

Password (network key):

Step 2 : Set Up the Extender

Step 3 : Apply Settings

*Note: WPA Passwords are case sensitive, if you get it wrong you will have to start all over again. Test your password on another device first if possible.*

Select the 5GHz WiFi network you would like to extend.

Your extender supports dual band WiFi. If your router does not support 5GHz band, click the Skip button.

Step 1 : Select the WiFi Network

Step 2 : Set Up the Extender

Is this WiFi network (SDB Linksys) a private home network or a public network (such as in a hotel or coffee shop)?

Step 1 : Select the WiFi Network

Private Network

Public Network (selecting this will enable NAT/firewall)

Step 2 : Set Up the Extender

Enter name and security settings for your extended WiFi network

Step 1 : Select the WiFi Network

2.4GHz Network Name (SSID): SDB\_WPA\_2GEXT

5GHz Network Name (SSID): SDB\_WPA\_5GEXT

Step 2 : Set Up the Extender

Security Options (2.4GHz)

None

WEP

WPA-PSK (TKIP)

WPA2-PSK (AES)

WPA-PSK (TKIP) + WPA2-PSK (AES)

Security Options (WPA-PSK)

Password (network key): 1234567890 (8-63 characters or 64 hexdigits)

Security Options (5GHz)

None

WEP

WPA-PSK (TKIP)

WPA2-PSK (AES)

WPA-PSK (TKIP) + WPA2-PSK (AES)

Security Options (WPA-PSK)

Password (network key): 1234567890 (8-63 characters or 64 hexdigits)

<http://www.mywifiext.net>

**IMPORTANT**  
WPA-PSK (TKIP) ONLY operates at "Up to 54Mbps" (legacy G) mode, not N mode.  
NETGEAR recommends that you use WPA2-PSK (AES) to get full N rate support.



QRSFinder  
QRS Music