NETWORKING
PNOmATION

PUTTING PNOmATION ON YOUR NETWORK AS A CLIENT

QRS
SINCE 1900
1. **A QRS Remote Control** - You can use any of the remotes we have sold over our life time. Make sure you have battery’s installed. If they are installed correctly the remotes buttons will light up when any button is pushed.

![QRS Remote Control Image]

2. **Fetch your Home Wi-Fi’s SSID and Password**  
   (Passwords are case sensitive so it needs to be spot on)

   **SSID:**

   **Password:**

   **Security Type:**  
   WEP or WPA  (if your password is a name or number that you created that is easy to remember your security it is likely to be WPA. If it is a HEX number (numbers 0-9 and capital letters A-F) it is likely to be WEP but not always)

3. **A Tablet, Smart Phone or Laptop with Wi-Fi capabilities, one you currently use now would work great.**

![Devices Image]
UPDATE YOUR SYSTEM

WHAT VERSION DO YOU HAVE?
The fastest way to determine your version - touch the QRSPWR button on the top right corner of your QRS App

If you have version 5.53 or higher go to the next page. If not go to our website and download the latest update and follow the instructions.

Point the remote control at the Pin Light Box’s Button. Press Shift (let go) then the number 3 (info). You will see the second light blink at you when you press a button on the remote and it is seen by the system. You should then hear the voice prompts come out of your speakers. The voice prompts will tell you what network mode you are in “Standalone” or “Networked” plus tell you what your IP address is as well as the version of software.

To download the update instruction's copy and paste the link below:
https://private.filesanywhere.com/qrsinc/fs/v.aspx?v=8a7266c089a175acab9a
1. If the first pin light is amber, tap the button on the Pin Light Box—this will turn the power on and turn the light green, insuring the speaker is on.

2. Point the remote control at the Pin Light Box’s Button. Press Shift (let go) then the number 3 (for “info”). You will see the second light from left blink at you when you press a button on the remote meaning it seen by the system. You should then hear the voice prompts come out of your speakers (the sixth light will flicker amber when voice prompts are present). If not—do it again and verify that pin light 6 blinks. If it does then there may be an issue with your speaker setup or your system requires the media patch update.

3. The voice prompt volume settings may also be set low. To change the voice prompt volume using the remote we have to adjust the master volume while the voice prompts are active. So Press Shift (let go) then the number 3 (for “info”) then immediately following continuously tap “master volume up”

4. The voice prompts will tell you what network mode you are in “Standalone” or “Networked” plus tell you what your IP address is as well as the version of software.
QRS has used several different third party vendors WiFi travel routers and extenders to provide access to the PNOmation user interface through a customers WiFi device.

Originally the piano was configured to allow the customer access to the piano in a “standalone” mode then if the customer chose, to provide them their own means of putting the piano on their home network. All of the devices we provided work very well in “Standalone” mode. Changes in how we back up systems, deliver music and upgrades - now require and the customers preferred to have their pianos on their own home network.

The earlier devices we provided, for the most part, acted as a solid network client (in “network” mode) if you took the time to set them up. The operative word was time. It turned out it was easier/faster and less expensive for the customer to purchase their own Powerline, or Airport Express, or WiFi extender than fool with the travel routers we provided. QRS would provide a credit for any customer still in warranty toward a different device. For the last year we have been providing either a TPLink Powerline or Netgear WiFi extender and the networking issues and time have mostly disappeared.

So review the device you have and determine what would be the best plan for your network. We are currently recommending and phone supporting the Netgear WiFi extender although your IT team or requirements may offer other options. Especially if you have Apple or Sonos products in your home. Give us a call if you have any questions.
HERE ARE YOUR CHOICES:

Option 1: Using the PNOmation’s Netgear AC750
If you have one of the other routers we provided with the player system we encourage you to move to either of the options listed below or trade out for a Netgear then go to step 6

Option 2: Using your own WiFi Adaptor, many of you would like to use other manufacturers devices such as Apples Airport Express, or Sonos adaptor to bring the background to your stereo. We are happy to support you in this endeavor.

Option 3: Using an Ethernet over Power Line adaptor - Simplest—Fastest. It does not require a password, but does require an open wall power outlet behind your homes router. The power circuit of the router should be on the same breaker box as the PNOmation system. This is not shipped with your system.

Option 4: Run an Ethernet cable directly to the piano. Usually not possible unless your still building your home. This is the best option if possible.
SETUP THE EXTENDER ON YOUR HOMES NETWORK

- Unplug the Ethernet cable if the Netgear device is attached to the piano.
- Flip the switch to Ext for extender.
- Go to your WiFi device and check to see if your homes network signal is strong by the piano. If your homes WiFi signal is not strong, we will have to move the Netgear extender to another room closer to your router to set it up. Don’t worry we will move it back once set. Your piano is not required to set up the Netgear WiFi Extender.

When we are done this light will be green if the Netgear is on the customers network.

We are going to flip this switch to extender mode.
LOG INTO THE QRSPNO NETWORK

1. Turn on your Wi-Fi device. (iPad, Computer, Tablet—you can use your phone but the screen is typically too small and annoying for a setup)
2. Go to “Settings” then select “Wi-Fi”.
3. Turn it on.
4. It should scan for available networks one of the networks will be QRSPNOxxxx_2GEXT or Netgear6100_2GEXT
5. Select the network.
6. Wait for a check mark confirming your connection.
7. Once connected either a Netgear Geni screen will appear or if it does not go to “Safari” or your web browser, clear the address bar and type in www.mywifιext.net
1. Open your Web Browser
2. Clear the address bar
3. Enter www.mywifiext.net
4. Then touch “Go”
5. The Netgear Geni screen will appear.

1. The Netgear Geni will present you with a list of WiFi networks that are in your home/facility.
2. You will want to select the network that you typically log into when surfing the net. IT CAN NOT BE A GUEST NETWORK.
3. Touch the radio button associated with that network and select “continue”
After you select continue the next screen will ask you what your homes/facilities password is, and tell you what type of security you have. Sounds simple right? Well far from it. There are basically two types of security—WPA or WEP. WPA is typically a name or number that is easy to remember but not always. The screen will tell you what type of security you have. If you are unsure about your password this is NOT the place to test it. Use your smart phone or iPad to check it.

**To test to see if you have an accurate password:**
1. Go to settings on your WiFi device.
2. Go to your homes/facilities WiFi network (probably has a check mark on it) and select it by touching its name.
3. Select “Forget Network”.
4. Then turn off the WiFi on your device.
5. Turn it back on - your devices WiFi will then scan for available networks.
6. Select your homes/facilities network.
7. It will then ask you for your password- You need to know what your password is—passwords are case sensitive.
8. Enter it - if it is good then you are good to go with it and can continue with the Geni setup, if not play with it until you get it right.
9. Once confirmed go back to your web browser and continue with the Geni.

If you have WEP it’s a bit more tricky—they will offer you a place for a passcode as well as 4 different channel slots.
Put your password in the slot for Channel 1 Then go to Continue. In some cases we have seen the customers phone number a 10 digit number used as the password but structured as WEP - put that in the Channel 1 slot.
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**SKIP & CONTINUE**

You will then be asked about a 5G network - Select Skip

You will then be asked if your network is public or private. - Select Private and Continue

It will then ask you if you would like to put a name or password that is different than the defaults listed to your extender - don’t change anything - just select continue.
Take your remote control and point it at the IR receiver and press “shift” then “7” (voice prompt will say “function”) then press “9” then “9” again then “1” (you do not have to hold the shift button down while you push the other buttons). You should hear a voice prompt say “Function—Nine–Nine—One” If you do not hear the voice prompts try again. Push any of the numbers on the remote while pointing the remote at the button on the Pin Light Box, a voice prompt will repeat it. If it does not go to step 3.

If the network cable is installed, the third light on the Pin lite box will turn amber if not it will continue to blink until you do.
1. Log into your homes network—the network you just put your pianos Wi-Fi adaptor on.

2. Then open your web browser.

3. Clear the address bar.

4. Type in your new IP Address. The IP address displayed is only an example. If you do not know your IP use your remote control and select “shift” “3”

5. The QRS App should appear.

6. Create a short cut on your home screen if you would like.
1. Plug one node of the power line adaptor directly into a wall outlet behind your home's router. First light will turn green representing power.

2. Plug an Ethernet cable into the power line adaptor and then into the router.

3. Plug the other node of the power line adaptor into the extension cord under your piano. The first light will turn green representing power and the second light will turn a steady green representing that it sees the other node. If it does not see the other node you can push a find button on the node itself.

4. Unplug the Ethernet cable from the existing WiFi adaptor and plug it into the power line adaptor. The third line will blink saying it is sending and receiving data. The piano's voice prompts will say network off then turn back on and give you a network IP address.

5. A voice prompt should announce your new IP address. If you do not hear it use the remote and select “Shift” “3” To announce it again.

6. Log into your home's Wi-Fi network.

7. Open your web browser.

8. In the address bar enter the new IP address.

9. PNOmation should open up.

10. Create a shortcut and you are ready to go.

11. Do NOT connect either power line adapter into a surge protector or an outlet strip.
1. After Log In go to the main menu and touch System Setup
2. Then touch Service
3. Then touch View Settings
4. Then touch Email and Send Logs
5. Go back to main menu and touch System Setup again
6. Touch Other Setups
7. Touch OS Update
8. Turn on Auto Update
9. If you have not done so yet activate your trial
10. Go to System Setup
11. Touch Trial Activation
12. Fill in information
13. Activate trial
Trouble Shooting

Known Issues:

- Hooking up to an ATT U-Verse using Option 1 - ATT U-Verse blocks the use of many devices. Use a Power Line - it will save you hours of time.

- Comcast provided WiFi Routers use the same default address as the TP-Link—192.168.0.254—hence you will lose internet if you hook up the TP-Link. Please use the Netgear device. If using a Power Line make sure you are not going through a surge protector or power strip.

- Password recall is not accurate. This is a huge problem that will cause hours of time lost. We strongly urge you to test the password using your own smart phones WiFi to test it first. Section 9

- Customer has an easy to remember password that is a number like a 10 digit phone number but when you go through the Netgear setup, it detects the password as being a WEP type. Then it gives you a space for a passcode and 4 channel spaces for passwords. If this occurs assume it is Channel 1s password and not the passcode.

- The Pianos Voice Prompt gives you 0.0.0.0 as an IP. First check to make sure the netgear device has a green light above the N in the Netgear logo that means it is communicating with the customers router. If not, it will have to be reset and put back on. If it is green then verify the processor to Netgear Ethernet cable is attached. If the Ethernet cable is attached then we will reset the network.
function on the pianos processor by pointing the remote control at the PLx and in sequence push “shift” 7991. You’ll hear the voice prompts say “Network Off” then after a minute or so “Network Connected IP xxx.xxx.xxx.xxx”

Log into your homes/facilities network then open your web browser and enter that IP address into the address bar.
SETTING UP YOUR TPLINK

Note: If your TPLink has Green Lights on it—Do Not Attempt
17 OPEN THE TPLINKS WI-FI ADAPTOR’S SETUP

1. Open your Web Browser
2. Clear the address bar
3. Enter 192.168.0.254
4. Then touch “Go”
5. The TP-Link set up screen will open
1. Touch “Quick Setup” located on the left panel
2. Select “Next”
3. You will notice you are currently in “AP” mode
   We are ultimately going to end up in “Client” mode but we will start first with “Bridge” mode – this will save time if we happen to make a password mistake.
4. Select “Bridge”
5. Select “Next”
1. Select “Survey”
A list of networks that are available to hook up to will be displayed
2. Select the “Connect” button next to the network you would like to connect to.
This network can not be a “guest” network.
1. Select the type of security your system has
2. If it is a number like a phone number or a name that is easily remembered you more than likely have “WPA”
3. Select “WPA”
4. Enter your password remember it is case sensitive.
5. Select “Next”
6. A pop up screen may come up telling you that your channel needs to match your routers.
7. Change the channel
8. Select “Next”
1. A screen asking about security will come next.

2. This asks if you would like to secure access to the Wi-Fi adaptor. We recommend disable.

3. Select “Next”

4. A nice little congratulations note appears

5. Select “Reboot”

6. A confirmation screen will appear—Select “ok”
Identify your pianos new IP address

Point the remote control at the Pin Light Box’s Button. Press Shift (let go) then the number 3 (info). You will see the second light blink at you. You should then hear the voice prompts tell you what your new IP address is.
1. Log back into your WiFi Adaptor by going to your web browser and typing in 192.168.0.254
2. Select “Quick Setup”
3. Select “Next”
4. Select “Client”
5. Select “Next”
6. Screen will ask you to Reboot.
7. Select “Reboot”
8. Select “Ok” to confirm you want to reboot.
9. Done