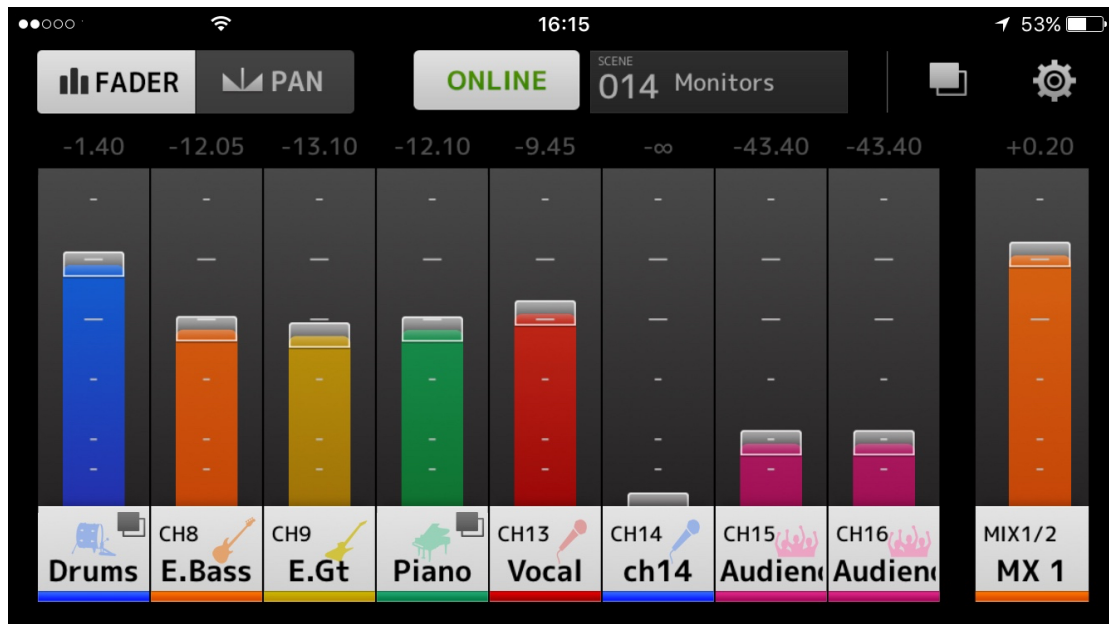


# MonitorMix v1.1.0 Setup Guide

## Welcome:

Thank-you for downloading Yamaha's MonitorMix app. It is compatible with Yamaha TF, CL & QL series mixing consoles. Up to 10 iPod touch, iPhone and iPad devices can be used with each mixer, to wirelessly control individual Mix or Aux send, pan and output levels. They even allow for personal groups to be created, allowing multiple channels to be adjusted simultaneously by just one gesture.

The musicians get more control, while the sound engineers get more time to focus on other aspects of the sound system.



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## 1.0 System Requirements

- Apple iPhone 4 or later / iPad 2 or later / iPod touch (5<sup>th</sup> generation or later)
- iOS 7 or later
- Yamaha CL or QL series console version 4.0 or later / TF series console version 1.12 or later.
- Wi-Fi access point or router, with CAT5 cable connection to console

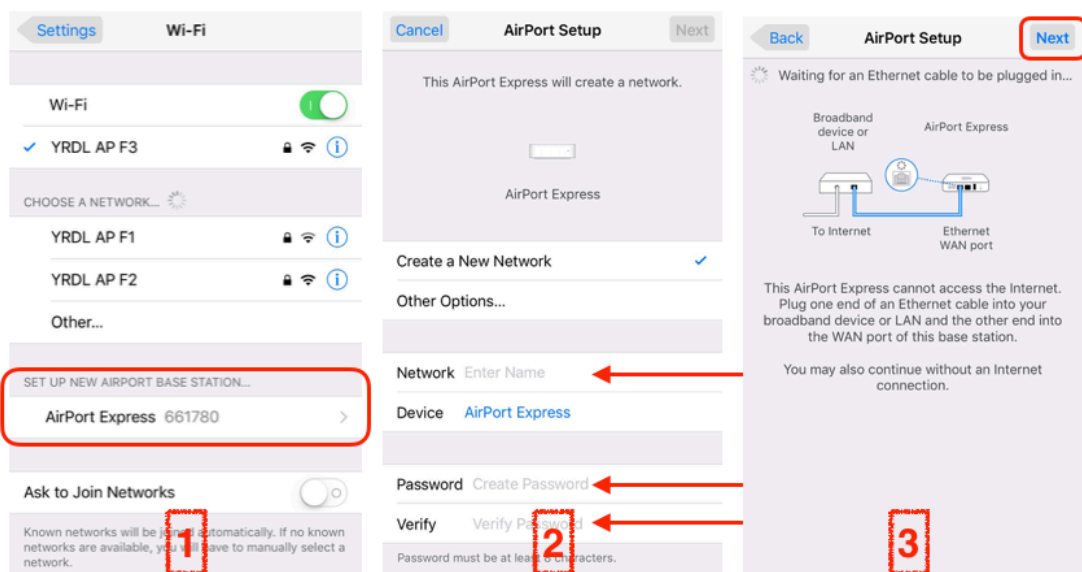
## 2.0 Wi-Fi Setup

Many different types and makes of Wi-Fi router are available to work well with MonitorMix. However, this guide will focus on the Apple AirPort Express (2<sup>nd</sup> generation) because of its ease of use with Apple iOS devices.

### 2.1 Configure from Default Settings

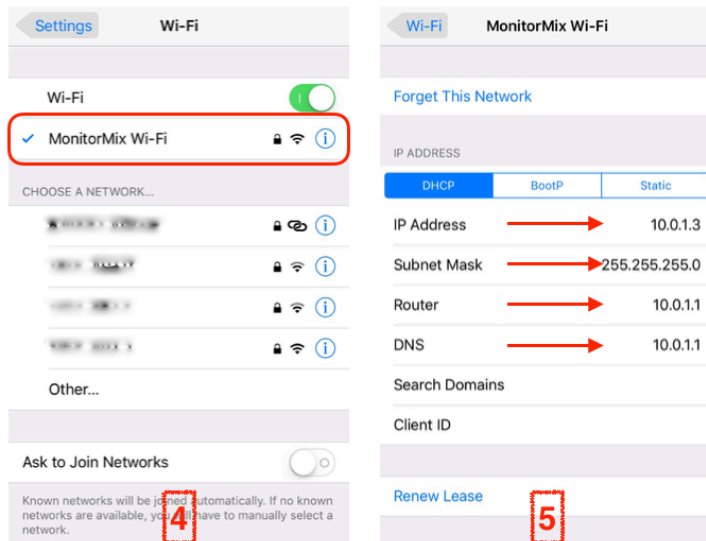
To start with a new AirPort Express, or one that is reset to its default settings, power it on and use an iOS device within Wi-Fi range to access its “Settings” app.

1. Open the “Wi-Fi” menu, and “SET UP NEW AIRPORT BASE STATION...” should be visible near the bottom of the page. Select the AirPort Express, and the app will take a moment to gather information about it.



2. Enter a name for the Wi-Fi network, and a password, then press “Next”.
3. The app will wait for an Ethernet cable to be plugged in, for connecting to the internet. But for this case it is not needed, so press “Next” again. Wait a moment, and the AirPort Express will be prepared for use.

- Back in the Wi-Fi settings of the iOS device, the new Wi-Fi network should be selected. Press the “i” in the blue circle to access information about the network. It should show an IP Address of something like 10.0.1.3, a Subnet Mask of 255.255.255.0, a Router setting of 10.0.1.1 and a DNS setting of 10.0.1.1.

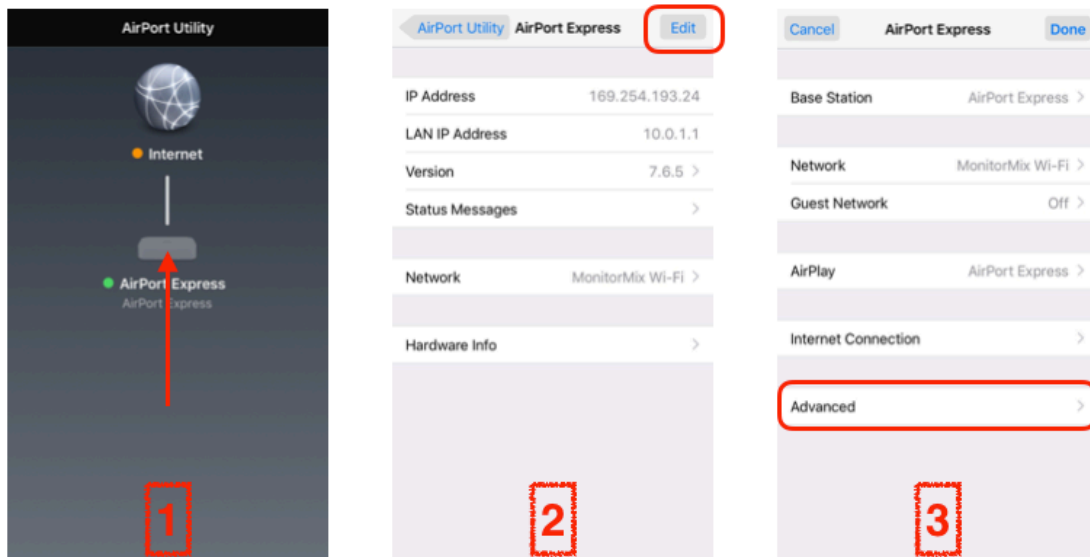


- These settings are important when it comes to setting up the CL or QL mixer’s Network parameters.

## 2.2 Modify Existing Settings

If the AirPort Express is already configured for use, then the “AirPort Utility” app can be used to edit the settings. It is free to download from Apple’s App Store. Here are the main points to follow:

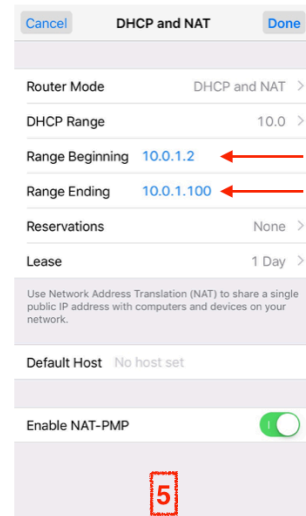
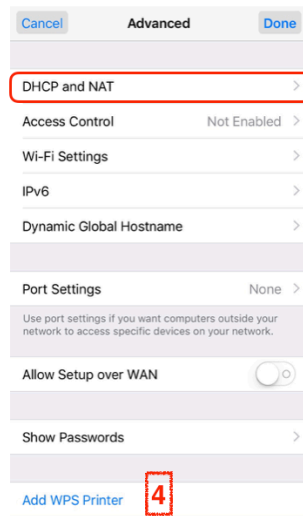
- After opening the app, it should automatically find the AirPort. Touch the AirPort icon to access the settings.
- A password is probably required. Next, press “Edit”.
- Then select the “Advanced” menu.



- The top line shows the Router Mode. “DHCP and NAT” is recommended. Press this line to edit the mode, and to see the DHCP range.

5. A range of 10.0 is the default, though the other ranges are also

useable. Check that there are at least 15 numbers between the Beginning and Ending of the range, because each device that connects to the network will need to be given a unique number within this range. The default range is from 2 to 200, allowing for 199 devices. Make a note of this range, because it determines which numbers are best to use for devices that need

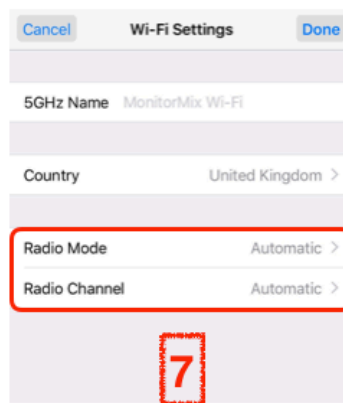
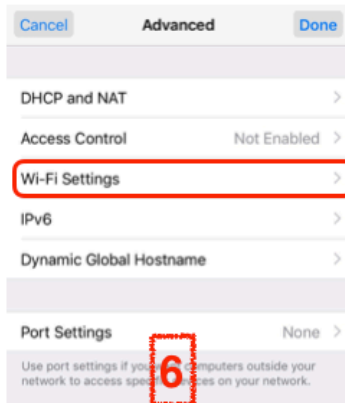


manual IP address setup, such as Yamaha CL and QL consoles.

6. Back in the Advanced menu, “Wi-Fi Settings” can be accessed. They might be set to “Automatic”, or configured manually.

7. If manual setup is used, then consider the following points:

- 5GHz “Radio Mode” will allow for faster communication between devices, but is less able to penetrate walls. If possible, keep line-of-sight between the AirPort and the musicians on stage.
- 2.4GHz ‘Radio Mode” will have slower communication, but better range for long distance and getting around obstructions.



8. The “Radio Channels” can be configured manually to avoid interference with other known Wi-Fi networks covering the same area. Don’t operate two Wi-Fi networks in the same space using the same channel, or even adjacent channels. Keep the channel numbers as far apart as possible from neighboring networks. Press “Done”, then “Update” when the settings are completed.

**Tip:**

Computer software is available to scan Wi-Fi frequencies (such as “Wi-Fi Explorer” for Mac OS or “NetStumbler” for Windows), to find the most suitable channels to use.

### 3.0 Console Setup

Before connecting the Wi-Fi router to the console, check the NETWORK settings. This is found in the SETUP menu of CL & QL consoles, or in the SYSTEM SETUP of TF consoles. TF consoles support “DHCP” mode, which is ideal.



However, CL & QL consoles must be given an IP address manually.



- I. Remember the DHCP range given to the Wi-Fi router in the previous section? Make sure the IP address of the CL or QL console has the same first 3 numbers (10.0.1 for example). But the last number should be outside of the DHCP range. So if the range is 2-200, chose a number such as 201. This will avoid the possibility of two devices having the same IP address, which could cause chaos.
- II. While in the NETWORK menu, set the GATEWAY ADDRESS to be the same as the router’s IP address: 10.0.1.1 in this example.
- III. Create a NAME and PIN code for the console, which will be used when connecting the MonitorMix app. The PIN code can be used as security to stop people from accessing the wrong Mix settings.
- IV. After touching the “OK” button, the console may need to be rebooted in order to apply the new network settings.

Connect the Wi-Fi router’s LAN port to the console’s NETWORK port.

(Avoid connecting the Wi-Fi router to the Dante network).





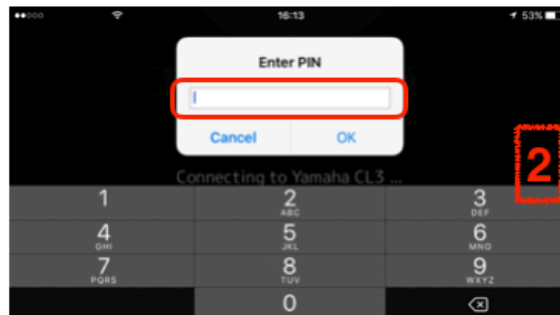
## 4.0 Opening MonitorMix

After launching the MonitorMix app, any CL, QL or TF mixer in the same network will be discovered and listed.

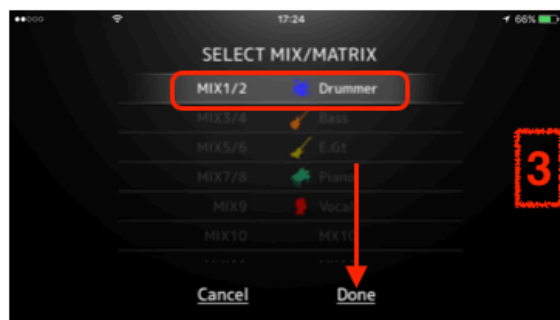
1. Select the required mixer, and touch “Connect”.



2. Enter the PIN code as set in the console’s NETWORK menu. Keep this as a secret to stop the performers changing to a different Mix.



3. Select the Mix or Matrix bus to control: the channel numbers, names, icons and colors are shown, as configured on the console. Touch “Done” to continue. (Matrix is not available for selection with TF consoles).



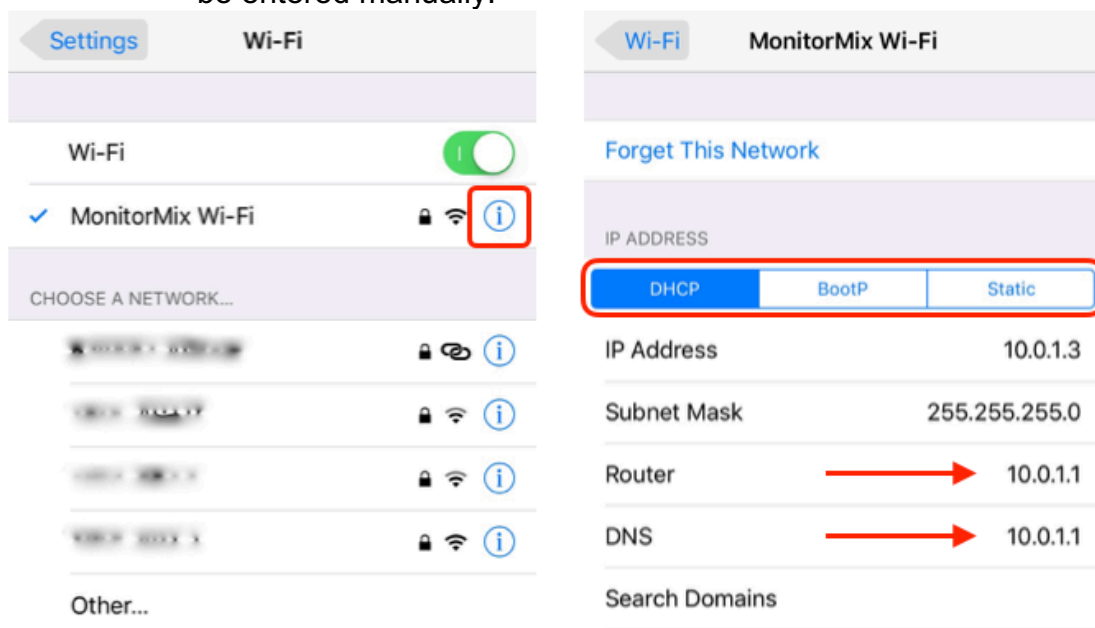
Up to 10 devices can run MonitorMix at the same time controlling the same mixer. Though it is possible to have multiple devices controlling the same Mix, it can become problematic if different “Personal Groups” are set, so it is recommended to have just one device controlling each Mix.

## 5.0 Troubleshooting

The most common problems with using MonitorMix are related to Wi-Fi signal and setup.

If your iOS device is connected to Wi-Fi but cannot sync with the console, check the following:

- Is the console firmware and app version compatible? Check here: <http://www.yamahaproaudio.com/global/en/products/peripherals/applications/monitormix/index.jsp>
- Are 10 devices already synchronized (this is the maximum number possible at any one time)
- Is the Wi-Fi router connected to the correct Network port on the rear of the console?
- Is the IP address of the console in the same range as that of the Wi-Fi router and the iOS device? For example, they all begin with “10.0.1”, but have a different last number.
- Check that every device uses an IP address with a different last number. (For example 10.0.1.\*\*\*).
- Does the iOS device have an IP address set for “Router” and “DNS” in its Wi-Fi settings? (These IP addresses normally begin with the same first three numbers as the other addresses, and end with “1”, for example “10.0.1.1”). How to check this:
  - Open the iOS “Settings” app, and select “Wi-Fi”.
  - Touch the blue “i” on the right-hand side of the connected Wi-Fi network’s name.
  - If the IP ADDRESS mode is set to “DHCP”, then the addresses are entered automatically by the Wi-Fi router. If the Router and DNS addresses are blank, then the router needs to be re-programmed to supply these details.
  - If the IP ADDRESS mode is set to “Static”, then the details can be entered manually.



If your iOS device frequently loses connection with the console and tries to re-sync, check the following:

- Are other Wi-Fi routers used in the same location, set to the same Wi-Fi channel, or an adjacent channel? (Use a Wi-Fi scanning tool to check). This would cause interference, so choose a different channel.
- Are you working without line-of-sight to the Wi-Fi router's aerials? This could restrict the useful range of the Wi-Fi signal.
- Are you working too far away from the Wi-Fi router?
- Is the network cable between the Wi-Fi Router and the console damaged or not connected securely? Try a new CAT5e or CAT6 cable.
- Is your iOS device trying to connect to a different Wi-Fi router with a stronger signal?
- Does the iOS device have an IP address set for "Router" and "DNS" in its Wi-Fi settings? (These IP addresses normally begin with the same first three numbers as the other addresses, and end with "1", for example "10.0.1.1"). Without these, there can be connection problems. See the above paragraph for tips about changing these settings.

For updates, user manuals and further information about the devices which are compatible with MonitorMix, visit [www.yamahaproaudio.com](http://www.yamahaproaudio.com)