USING OLDER GENERATION AirPort EXPRESS FOR DL SERIES MIXER WIRELESS CONTROL

SUMMARY
The older generation Apple AirPort Express with a single Ethernet port is NOT recommended for use with DL Series Mixers. Using this device to provide wireless control of a DL Series Mixer is not supported nor is it thoroughly tested.

However, because many of these devices are in circulation, we are providing limited instructions for use. No other assistance or support can be provided. We highly recommend using alternate Wi-Fi routers such as those described in the DL Series Reference Guide and those listed on the DL Series website.

BACKGROUND
The older generation AirPort Express sold between June 2004 and June 2012 has only one wired network port. We will refer to this as a “Single Ethernet Port AirPort Express”. This single WAN (Wide Area Network) Port is configured to allow connected wireless clients access to the internet. There is no configuration where the built in DHCP server will assign an IP address to a client connected to the one wired network port. This prohibits standard operation with a DL Series Mixer and is why it is an unsupported device. In order to use a Single Ethernet Port AirPort Express with a DL Series Mixer connected directly to the wired port, one must disable the built in DHCP server and allow the wirelessly connected iPad and mixer to auto negotiate a Link Local IP address. This will result in a much longer time to connect each and every time the system is used. Below are instructions to set up this configuration.
DOWNLOAD THE AirPort UTILITY
To configure the Single Ethernet Port AirPort Express for this use, you will need the iPad AirPort Utility app. Download the AirPort Utility by searching the App Store for “AirPort Utility” or follow the link. When the AirPort Utility shows up in the list, press “Install”.

CONFIGURING THE SINGLE ETHERNET PORT AirPort EXPRESS
Beginning with the DL Series Mixer powered off and with the Ethernet cable disconnected from the AirPort Express, power on the AirPort Express. When setting up an AirPort Express for the first time, it will show up in the Wi-Fi section of the iPad Settings App below the list of available networks. A section will appear called “Set up an AirPort Base Station...” and the Single Ethernet Port AirPort Express will be listed. Select it.
After the iPad connects to the AirPort Express, it will typically ask to extend another network whether one exists or not. It may also suggest you create a new network. Whichever of the two screens below you see, do neither and instead select “Other Options” and press “Next”.

Select “Create a New Network” and press “Next”.

Type in the Network name such as “DL1608 Wireless” (which we will use for the rest of this document), add and confirm a password and press “Next”.

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When prompted with a “Waiting for an Ethernet cable to be plugged in...” notification, press “Next”. Do **NOT** connect the Ethernet cable or power on the DL Series mixer at this time.

Press “Continue Anyway” to the following notification of “No Internet Connection”.

Press “Done” when prompted that the setup is complete. However, you aren’t done and the setup is not complete.
If you view the device’s Wireless properties by pressing the arrow next to “DL1608 Wireless” in the Wi-Fi section of the iPad Settings app, you will notice that the IP Address is not a 169.254.x.x address which means that it was configured by the Single Ethernet Port AirPort Express’ DHCP server. We need to configure the Single Ethernet Port AirPort Express so the iPad Auto configures itself using a Link Local address.

Press the iPad Home button and launch the AirPort Utility. You should notice that the status LED on both the Single Ethernet Port AirPort Express and in the AirPort Utility are flashing yellow. The AirPort Utility will also display an error count in red. We will address these later.
Select the AirPort Express to display a properties dialog. Press the “Edit” button at the top right.

Press “Advanced”.

Press “DHCP and NAT”.

Press “Router Mode”.

Change the “Router Mode” from “DHCP and NAT” to “Off (Bridge Mode)”.

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Press the back button labeled “DHCP and NAT” at the top left to return to the previous dialog which should reflect the new mode.

![DHCP and NAT dialog](image)

Press “Done” at the top right of each subsequent dialog until prompted to “Update Settings”. When prompted, press “Update”.

![Update Settings dialog](image)

We’re almost there. After the Single Ethernet Port AirPort Express is done updating, which may take a minute or two, the AirPort Express should become available again in the AirPort Utility. If the AirPort Express is not shown or does not reconnect, be sure the iPad is still connected to the “DL1608 Wireless” network from the iPad Settings app (you may see a spinning connecting icon next to the wireless network; this is normal) and that you see the connected Wi-Fi symbol in the top left of the iPad status bar. Sometimes, we have found that the AirPort Utility will have difficulty reconnecting at this step and it must be forced quit and launched again in order to communicate to the AirPort Express.

Once you see the AirPort Express listed in the AirPort Utility, select it to display the properties dialog.

![AirPort Utility dialog](image)
If there are Status Messages listed in the AirPort Setup app (the screen shot above shows 3), select “Status Messages” and review them. You will most likely see some combination of the following 3 status messages:

1) Ethernet Unplugged – Set “Ignore this issue” to “On”. The AirPort express will quickly update; you will need to reselect it in AirPort Utility to view the remaining status messages. At this time, you should connect the DL Series Mixer to the AirPort Express with the Ethernet cable and power on the DL Series Mixer. This message should no longer be shown.

2) Internet connection - Set “Ignore this issue” to “On” since we aren’t connecting the AirPort express to the Internet. The AirPort express will quickly update; you will need to reselect it in AirPort Utility to view the remaining status messages.

3) No DNS Servers - Set “Ignore this issue” to “On” since you would only need and only get DNS servers assigned to the Single Ethernet Port AirPort Express if the network port were connected to something other than a DL Series Mixer. The AirPort express will quickly update; you will need to reselect it in AirPort Utility to view the remaining status messages.

If there are any other status messages, review them and solve or ignore them as needed. The AirPort Express Status LED will turn green once all of the status messages are solved or ignored.
Note also at this time you may see an indication next to the Version number as shown below. This is telling you that the AirPort Express needs a firmware update.

You will not be able to update your airport express from this configuration since it is not connected to the internet.

If you have problems with this setup and you see this message, you should update the firmware in your AirPort Express and try the entire process again. Follow the instructions from Apple to do so.
Now that the system is properly configured and the Status LED is green, you can start Master Fader, select the Tools icon, select the Devices tab and connect to the DL Series Mixer.

The DL Series Mixer will connect and you can control it wirelessly from Master Fader.

**BOTTOM LINE**

These settings should only need to be made once, but every time you power cycle and use this system, you may need to wait 2 or more minutes for the AirPort Express to boot and for the Status LED to turn green. Then power on the mixer and again wait 2 or more minutes for the DL Series mixer to become available for wireless control. Additionally, only one DL Series Mixer can be used with this system since the AirPort Express only has a single Ethernet port. For these reasons, and because of the complexity of the setup, the older generation AirPort Express is not recommended for use with a DL Series Mixer.