

How to Reserve Your Routers IP Address Apple Airport Extreme & Express

USER GUIDE #08



How to Reserve Your Apple Airport Extreme or Express (Router)

IP Address

Like Having a Static IP

A simple, fast, easy way to use fotoShout is having a router connected to the laptop by Ethernet cable. The iPads connect to the computer through a router. The camera connects to the computer through the router. This is a private network. The computer connects to the internet through its built in wireless connection.

Simple, clean, easy, powerful connection.



Canon wireless WFT units require you to set the IP address. Tablets running fotoShout log into the computer using the IP address (TCP/IPv4). If you do not want to constantly be changing the IP address, reserve the IP address. Once the IP address is reserved your camera and tablet will always have the same IP address to login to.

I use the Apple AirPort Extreme router for numerous reasons – The newest AirPort Extreme is a Wi-Fi router providing simultaneous dual-band wireless networking using the 802.11ac specifications. (802.11a, 802.11b, 802.11g, 802.11n, and 802.11ac). Transmitting in both 2.4GHz and 5GHz, has a built in firewall, utility software for easy setup, and is professional grade. How does this really help me? My Canon cameras transmit to the router on the older 802.11g at 2.4GHz, at the same time my iPads transmit on the 802.11n at 5GHz – which has better transmission signal, not as congested. The new AirPort Extreme is approximately 4"x4"x6" with 6 antennas and built in power supply. Small footprint, easy to pack, easy to setup, reliable.

Setting Up and Reserving an IP Address

A.) Obtain Your MAC address

- 1) Setup your AirPort Extreme as called for by Apple using the Apple utility software
- 2) You will need the MAC address of your laptops Ethernet Adapter. (this MAC has nothing to do with Apple, MAC is short for media access control address) To obtain the MAC address -
 - i) Press the **Windows key** and Press **"R"** at the same time
 - ii) Enter **cmd** in the dialog box
 - iii) Type in **"ipconfig/all"** without the quotes
 - iv) Use the slider to move the text until you see In;
Window 7- **"Ethernet adapter Local Area Connection:"**
Window 8 or 8.1 – **"Ethernet adapter Ethernet"**



Below this text a few rows will be the text “**Physical Address**,” on the same row will be a number like “**14-DA-E9-01-5F-96**” This number is your LAN adapters address physical address – **Write Down This Number**.

B) Reserving IP Address

- 1) Your Router is connected by Ethernet cable to your computer, turn off the laptop’s internal Wi-Fi adapter during this portion of setup
- 2) Open the Apple **AirPort Utility** Software on your computer
- 3) Double click on the correct **AirPort Extreme** Router
- 4) Click on the **Internet Icon** in the menu bar of the Airport Utility software
- 5) ***If you’re using the new Apple Airport Express (not the Airport Extreme) select internet Icon; change from “connection sharing” to “Share a Public IP Address.” Airport Express will work, but range is limited compared to the Apple Airport Extreme.*
- 6) Click on the **DHCP** tab
- 7) You’re going to change the DHCP beginning address and ending address. In my example, the default range of our IP address is 10.1.10.2 to 10.1.10.200. I want to raise up the minimum address to make room for our assigned IP Address
 - (a) In the **DHCP Beginning Address** dialog box change the last 2 numbers to something higher than 2. Go to 20 or 30. The address is now 10.1.10.20
 - (b) The **DHCP Ending Address** can be left the same or lowered. Such as changing the last number of 200 to 100. The address would then be 10.1.10.100
- 8) Change the **DHCP lease** to **365 days**
- 9) Go to **DHCP Reservations**, click on the “+” symbol
- 10) A new dialog box will open; enter a **description** i.e. “*Toshiba Lan adapter*,” any description that has you associate this router with this particular computer.
- 11) **Select** the radial button “**MAC Address**”, click continue
- 12) In the new dialog box enter your **Ethernet adapter Local Area Connection Physical Address** that you obtained in Steps **A-2**. You will just enter the numbers; the colons will be entered automatically. It will look like this 14:DA:E9:01:5F:96 There is a button named “**This Computer**.” If you click the button it will enter a MAC address, but it is the computers MAC address not the Ethernet adapters MAC address. **Do not use This Computer button** with Windows PC systems.
- 13) The last box to fill in on this same page is the **IPv4 address** you want to reserve. You will only need to select the last two numbers. The 2 numbers need to be **below your minimum** DHCP beginning address. If your beginning address is 10.1.10.20, you need to select a number between 2 and 19. **FYI** - I write down the IPv4 address and tape it to the side of my router. I tape the password to the bottom of the Router. It keeps me from having to look up the information when needed.
- 14) Click “**Done**”
- 15) Click “**Update**”, then exit the Airport Utility
- 16) I always like to reboot my computer

C) How to Confirm the Reserved IP Address?

- 1) Select the **Windows Key** plus “**R**”
- 2) Enter **cmd** into the dialog box, click enter
- 3) Type in **ipconfig/all**
- 4) Use the slider to find the **IPv4 address**, it should be the one you reserved



Or

- 1) Right click on your internet connection icon in the lower right hand corner of your desktop screen
- 2) Left Click On **"Open Network and Sharing Center"**
- 3) In **Win 7** click on **Local Area Connection**, in **Win 8** click on **Ethernet**
- 4) Then click on **details**
- 5) Look for the **IPv4 address** in the dialog box, it should be the one you reserved

D) Now Go To Users Guide #09 – Give Your Wireless Lan Priority

1. Wireless Lan Priority Must be completed in order to use the setup given above.

TIPS:

The Airport Express will work, but distance is limited.

Write down the SSID name, number of the IPv4 address, the computer name it's matched too, and tape it to the side of Apple Router. Tape the Password to the bottom of the Router. If you add an additional tablet to your workflow or switch from one computer to another, the information will be easily accessible.

In a crowded environment, limited solid walls, metal piping, thousands of mobile smart phones, such as a trade show. A solid Wi-Fi connections can be a challenge. If you find yourself in this situation change your Airport Extreme Router channel selection in the utility setup from "automatic" to manual, then try a different channel. *(I have only had this occur at one event in the last 10 years.)*

After completing this part of the setup, review and complete User Guide #09 How to give your Wireless LAN priority.