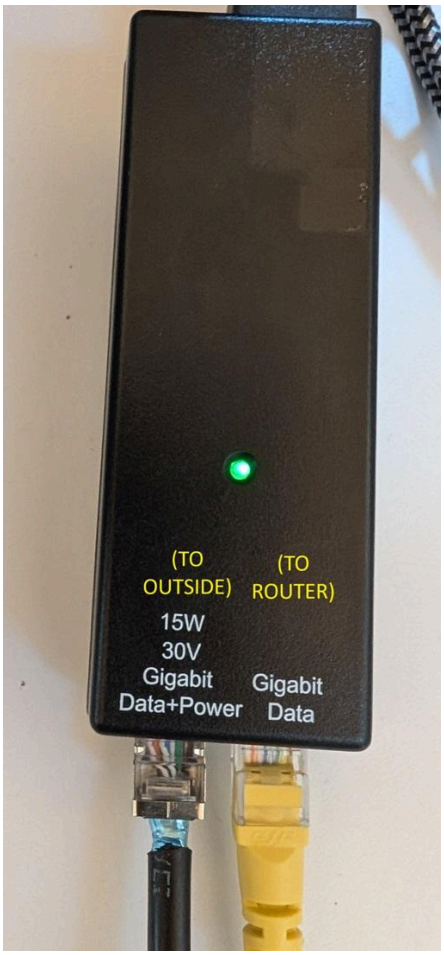
# Hooking up a 3rd Party Router With PoE Injector

The (usually) black cable coming in from the outside dish should be plugged into the port that says **Data+Power** or **PoE**. You would then just use 1 ethernet cable to connect the other port that says **Data** or **LAN** on this power brick to the WAN or internet port on your router. The set up will look similar to the pictures below.




### A Note About 2.4 GHz & 5 GHz WiFi

Modern routers can operate individual wireless networks on both the 5 GHz and 2.4 GHz radio frequencies. Some router manufacturers will distinguish these 2 wireless networks by adding a "5G" to the end of the wifi name for that Wifi network. As an example, a router will have a 2.4 GHz Wifi called "WiFi Name" and another named "Wifi Name-5G". Note that 5G in this case has nothing to do with 5th generation cell phone networks which are also known as 5G. Others (especially mesh systems) will use the same WiFi name for both WiFi networks so it is not possible to differentiate between the two..

There are advantages and disadvantages to using each of the wireless bands. An advantage to the 2.4 band is that it has longer range and can go through walls and other solid objects more easily than 5 GHz. The disadvantage to 2.4 is that it is susceptible to interference from neighboring WiFi networks and wireless extenders. Additionally, Bluetooth devices such as smartphones or smart speakers, as well as other 2.4 devices like baby monitors also operate at this frequency and will cause interference. The 5 GHz band is faster and not as susceptible to interference, but it has a shorter range and does not go through walls and other obstructions as well as 2.4Ghz.

Our general recommendation is that you should attempt to connect devices near the router to the 5 GHz Wifi whenever possible and use 2.4 Ghz for devices further away or that are unable to connect to 5 GHz WiFi. Devices that remain in a fixed location such as desktop computers, Smart televisions, and streaming devices such as Rokus or Fire Sticks will especially benefit from operating on the 5 GHz Wi-Fi network. Note that if a device is right next to the router, using a hard-wired Ethernet cable to connect that device to an open LAN port on the back of your router will always be more reliable than a wireless connection.