Internet Radio Linking Project (IRLP) Wiki

Keeping the Radio in Amateur Radio

Powering your Pi

The power supply for the Pi is a very important part of its stability and operation.

If the voltage seen AT the Pi board is too low, you will have issues, particularly with the network adapter (which is powered from the USB system). It will trip and make your Pi look like it has crashed if you only access it from the network side.

The Adafruit power supplies provided with complete PiRLP systems produce voltage at the top range of the USB spec (5.25V DC). As such, the voltage drop (AKA resistance) seen across cables and connectors between the Pi and it's supply will drop the voltage a bit before it gets to Pi. Since the supply already supplies voltage a little higher than others, the Pi sees a voltage well within its range of operation.

If you choose to use one of the little "Apple Cubes", you may be okay. There are some cheap knock-offs out there though, and it is important to ensure that the voltage read at the board, when operating, is above 4.8V, when measured at the GPIO connector pin 2. See the graphic for details on where the GPIO header pin 2 is.

If the voltage is lower than 4.8V, you may have stability issues with your Pi.