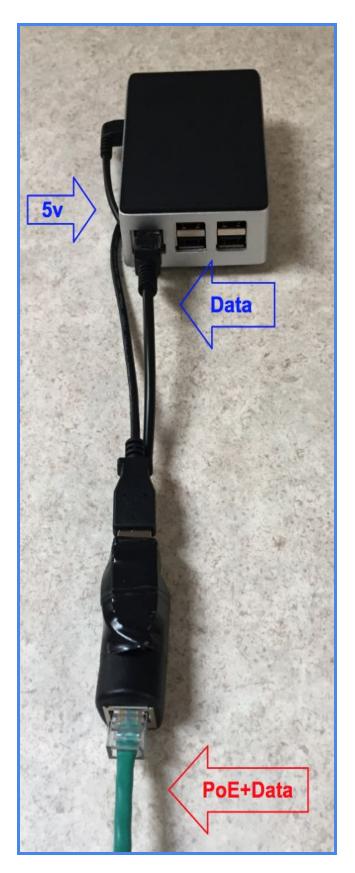# DIY Passive PoE Adapter for 5v Devices

This is a regular passive PoE adapter which has been modified to include a USB power port instead of the standard barrel connector.  It can be useful for powering a 5v Raspberry Pi or VoIP phone directly from a regular PoE cable running up a mast to a Pi with a camera, RTL-SDR and APRS, weather sensors, etc.
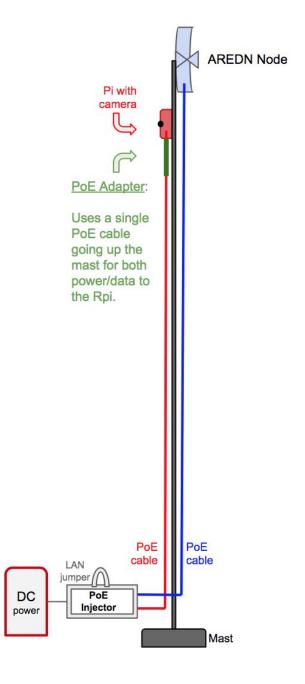
The USB power converter is a small circuit board measuring less than 1 x ½ inches.  It accepts a range of 6v-24v DC input from the PoE cable, and it outputs 5v-3a max on the USB jack.

This mod works on either the male or female adapter, so you can make two of these per set of PoE adapters. The power lead is trimmed so it can be soldered to the + and - points on the circuit board. Wrap in Kapton tape and secure with heat shrink. Weather-proof the adapter as needed, or secure it in an enclosure with the device being powered.



AREDN Node

Pi with camera

PoE Adapter:

Uses a single PoE cable going up the mast for both power/data to the Rpi.

PoE cable

PoE cable

LAN jumper

DC power

PoE Injector

Mast