



Good learning exercise but this is really dumb as a driver circuit. Just use a DMOS transistor like 2N7000. TL084 might only be 26mA max output current, similar to Arduino, so only benefit here would be if put in more parallel op-amps to separate BNCs. Since we require the DC input voltage >5V, should also use it for the trigger voltage; make the rail splitter just enough above ground for op-amp to work, and scale the output 5V trigger up to VIN – headroom the amp needs. Then at least we could also drive 15V needed for old ximeas with 20V supply the max the arduino can take.

This is a circuit to provide buffered (powered) triggering to the Ximea cameras above the 20mA (or is it 40mA?) the Arduino 5V digital output pins can provide. I naively went for an op-amp buffer circuit using op-amps in the lab. These were not rail to rail, so they required a virtual ground because they can't cover the 0V to 5V range on input or output without help. A useful lesson though – this circuit provides 5V with whatever the max current of the TL084 is.

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