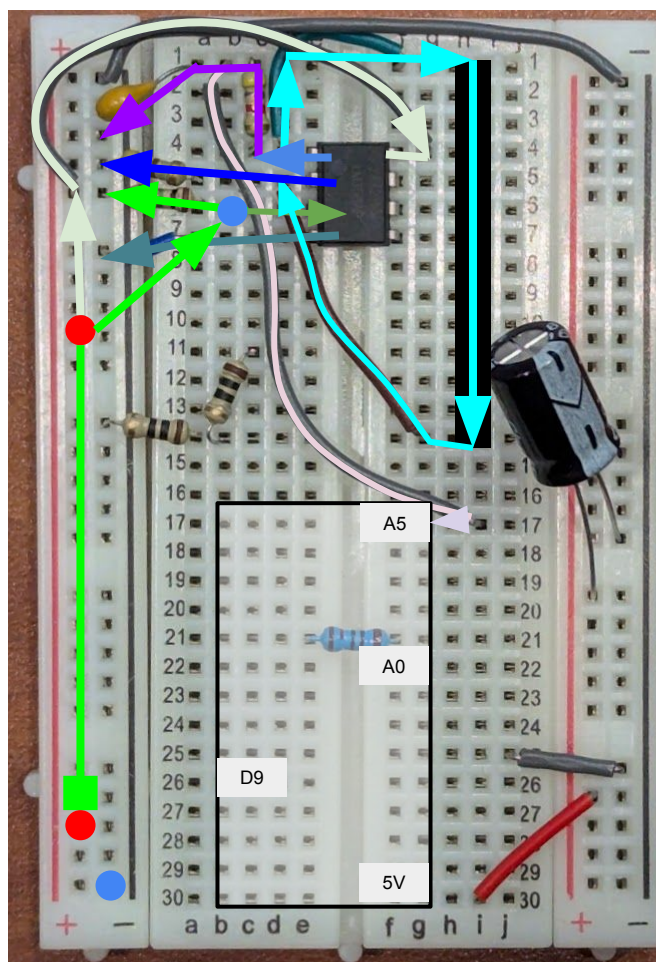
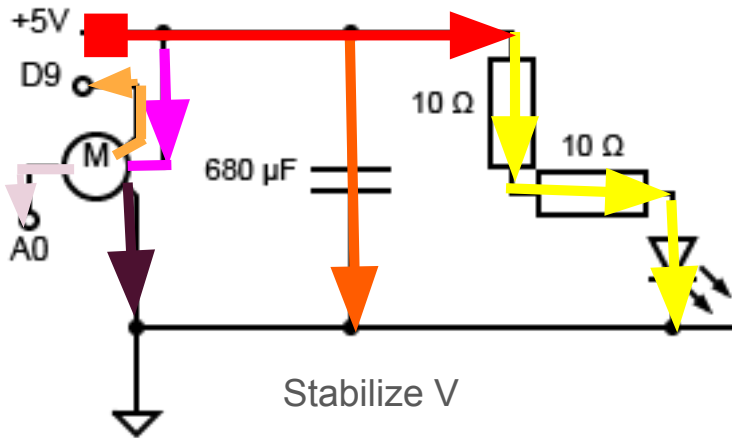
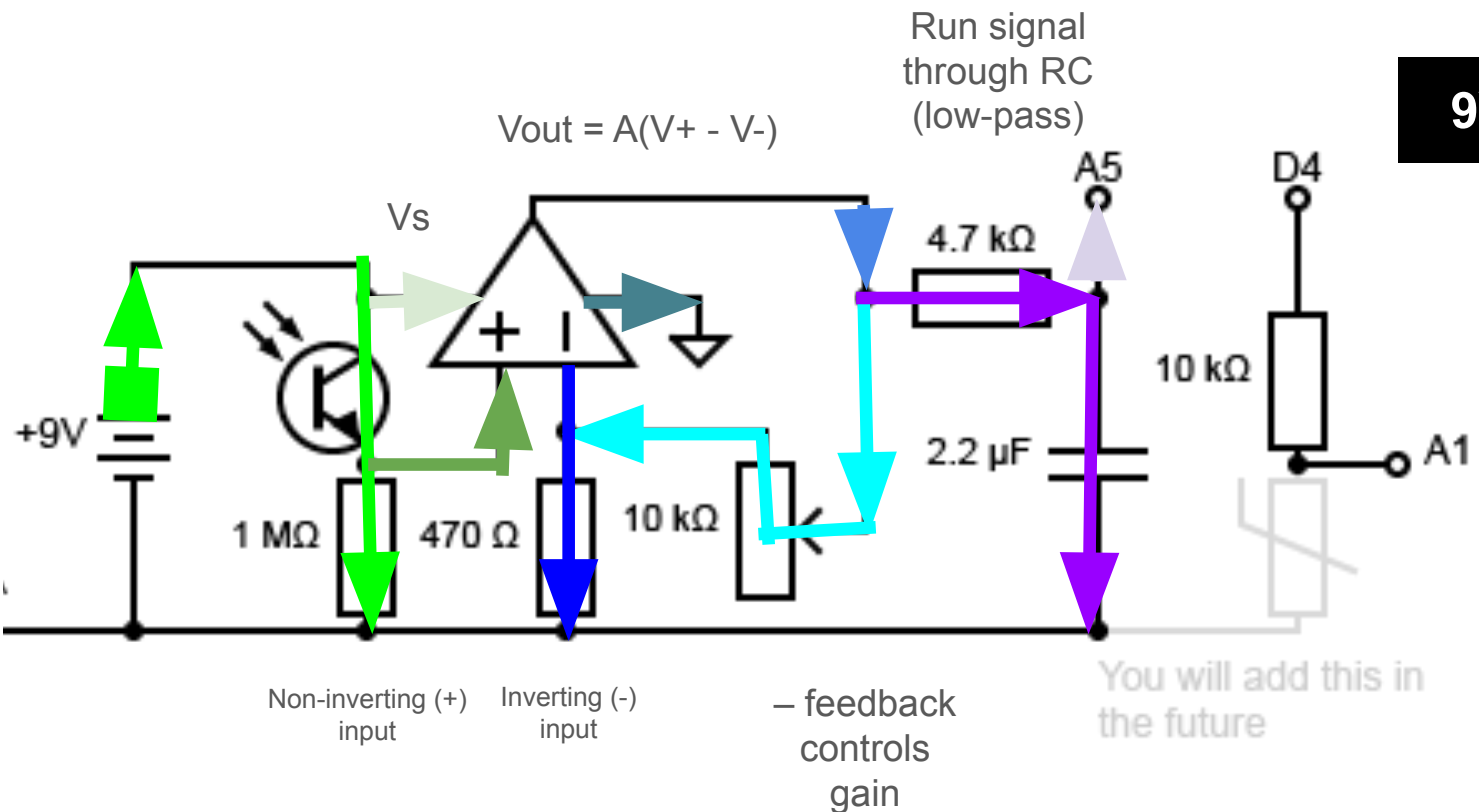




5V



9V



Notes

1. V_{+} called non-inverting $\therefore V_{+} \propto V_{out}$, similarly $V_{-} \propto 1/V_{out}$.
2. Potentiometer allows control of gain by negative feedback (we have $V_{-} \propto V_{+}$) so the gain is stabilized. This type of configuration is known as a closed-loop non-inverting (since signal is fed to V_{+} and V_{-} is grounded) amplifier.
3. RC low-pass circuits work because capacitor looks like open circuit at low frequency (DC), but a short at high frequency (AC), so all high-freq. signals pass through to ground, but low frequency go to A5. High-pass is exact opposite.