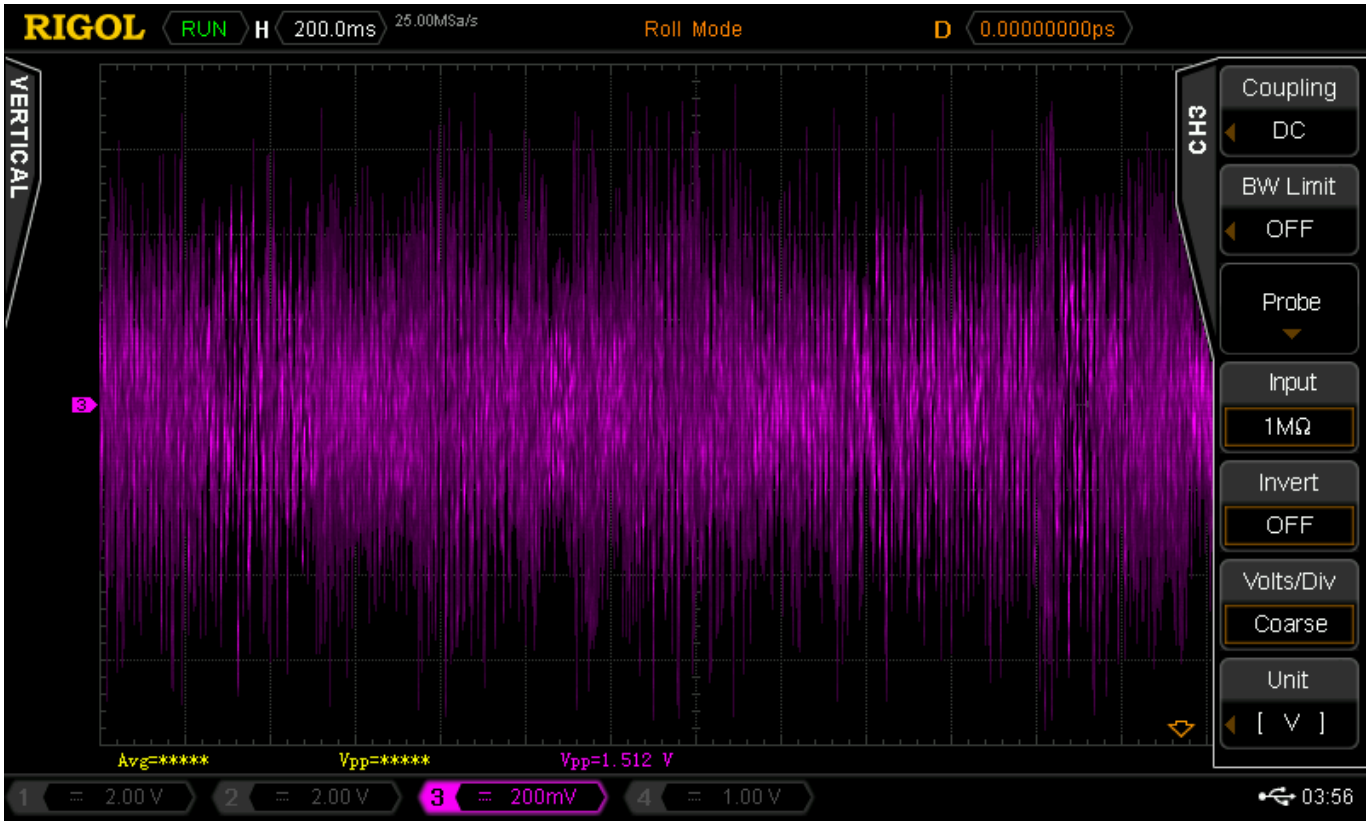
Audio output behaves like a non-ideal voltage source. If the 3.5mm jack/plug has a light load across its terminals (e.g. air or a 1MΩ oscilloscope – things with a high resistance/impedance) then you get wiggles of up to ~1V in amplitude at full volume. If the 3.5mm jack/plug has a slightly heavier load (e.g. headphones or a 50Ω oscilloscope input) then the voltage decreases a bit, and if it has a very heavy load (e.g. 8Ω speakers without an amplifier or a piece of tinfoil across the 3.5mm plug) then the voltage all but vanishes.

Dell Laptop 3.5mm Headphone Jack (6mA max)



We can't drive an estim circuit directly from audio output – it can barely reach 1V at max volume let alone 100V+ – but can we use audio output to drive an off-the-shelf amplifier which in turn drives an estim? Here we measure the DROK TDA7297 12V amplifier. True to its name, it can boost ~1V audio to 12V: