

# 10 Channel LM317 driver using CD4017

Using a 10 channel decoded decade counter CD4017, and a 7414 Schmidt Inverter to flip-flop toggle the ENABLE and RESET pins on the decade counter, which allows controlling a specific number of sequential channels activated, each train. The downside, is that no Gate Off Time is possible, as the counter just restarts at channel 1 during the cycle.

CD4017 10 channels directly drive 10 - H11D1 opto-couplers. At +5V REG TTL, 82R nets 60mA max current for the photo-diode. 2nd stage pots are then used to attenuate the pulldown current of the LM317 in sequenced order.

Attenuation can be linear, as in consecutive 10% increments, or any combination desired to achieve various waveshapes

LM317 Power supply adapted from Max Miller's board design.

Duty cycle is strictly limited to 50%.

LM317 Modulated Variable-Supply.png  
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Revision #2

Created 26 June 2022 03:46:23 by Chris Bake

Updated 2 July 2022 02:54:27 by Chris Bake