



Back cover for GraLab Model 300 Photography/ Darkroom Timer



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Summary

Replacement rear door for vintage GraLab dark room timers, allowing easy battery access and wall hanging.

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With mechanical dark room timers mostly a relic these days, I've converted a few into functional clocks. The original metal back cover leaves no access for time-setting or battery replacement, so I created a replacement.

This new rear door lines up with the original holes and allows for easy wall-hanging and battery changes.

I designed this to fit both GraLab timers I own - a Model 168 from the 50s and a Model 300 from the 80s. It will likely fit most other similar models. The 80s unit used plastic pins that can be re-used with this model, but the 50s one needs replacement screws - M3 machine screws or similar.

For those interested in the actual clock conversion:

I used generic clock modules from Amazon - the style with the minute

hand secured by a nut to a threaded metal shaft, not the “press-fit” plastic type. Like [this](#), [this](#), or [this](#). (They are available in many different lengths. I bought the cheapest which happened to be the longest, and printed a spacer to take up the extra length behind the clock face.)

These timers have two hands, both of which can be moved to set a specific number of MINUTES and SECONDS. A useful clock needs HOURS and MINUTES, so the original second hand now displays minutes, and the minute hand shows hours.

Unlike the original timer, modern clock modules do not appreciate their hands being physically adjusted. Also the original minutes hand (now Hours) was longer than the seconds hand (now Minutes). So I replaced it with a shorter and more “hour-hand-looking” one from the wide selection included in the clock kit. Was originally a long decorative scroll, gold colored. Flipping it over revealed bare aluminum, and a pair of scissors snipped it down to a suitable length and basic rectangular shape.

To fit the original second hand as the new minute hand, I sanded down the minute-hand threaded metal mount until it fit into the timer's second hand. The existing setscrew secures it.

Model files



[gralab_timer_back_cover.stl](#)

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