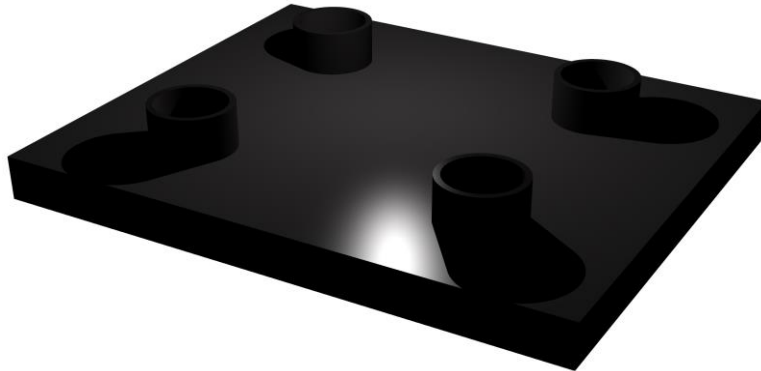


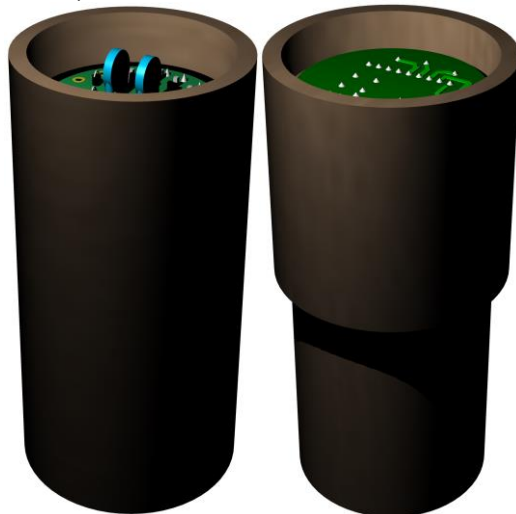
## Monkey Box Testing

### Supplies Needed

Monkey Box



At Least Four Untested PMTs (With Cords Attached)

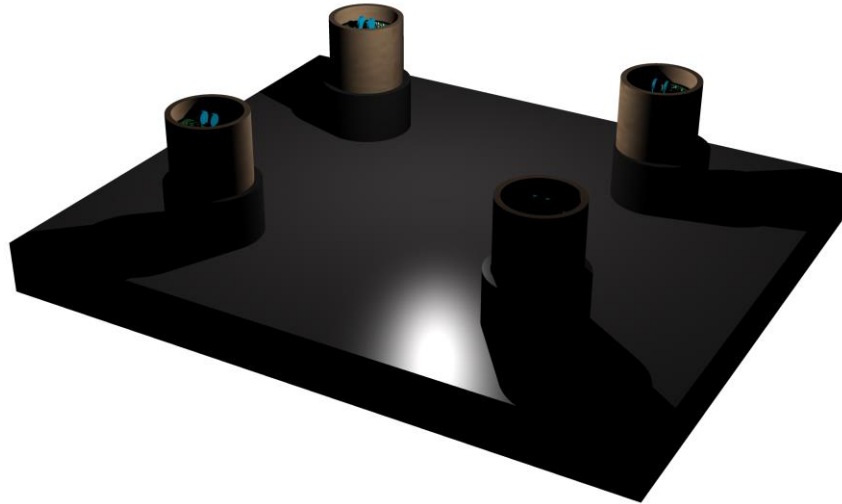


Power Supply



Notes: This is one of the most frustrating and tedious jobs that we do. You test four of the PMTs at a time. The smallest light leak in any of the collars (or tape attaching the collars to the PMTs) will make it such that you have to retest all four PMTs, even if you have already done three of them.

1. Place four PMTs in the monkey box. Make sure their bottoms rest flat against the base of the monkey box.
2. Tape the PMTs to collars, carefully in order to not to let in any light leaks.



3. Set 20.0mV/div and 25 ns/div, then judge noise level and adjust Trigger level to 20-100mV range until a rate between 60-100 Hz.
4. Reset scale to see full pulses (about 100 mV/div). Estimate typical range of pulses.
5. Lower sensitivity to 2.0mv/div and turn to 5 $\mu$ s/div. Find width of noise in volts.

You want:

- Small trigger/threshold level (about 60mV)
- Large pulse heights (100-200mV)
- Small noise band (1.0mV)