Raspberry Pi LED **Light Schroeder** Piano - Schematic 2.kfisher@gmail.com 100 Ohm Each LED aligned to each LDR below 25 Ohm (4x100 Ohm or Raspberry Pi Mod B, rev 2 NOTES: potentiometer) to adjust -01: 3.3V 5V: 02-6" max distance with 1" spacing between LDR and LED brightness 5V: 04 LED with narrow beam LED as light bleeds 03: GPIO2 Resistor 05: GPIO3 GND: 06between (1/4" tube to hold LDR and LED) placed (19pcs) 100 Ohm w/ LED -07: GPIO4 in 1" whole of 1"x2" trim GPIO14: 08-(15pcs) 47kOhm w/ LDR 09: GND GPIO15: 10⁻⁷ Dark background around LED helps remove -11: GPIO17 GPIO18: 12ambient light <0.8 Volts with not light; >2.0 Volts with light .13: GPIO27 GND: 14 (15pcs) PhotoResistor (LDR: 15: GPIO22 GPIO23: 16 15 LED/LDR pairs (12 Notes for full Octave, 1 Light Dependent Resistor) 17: 3.3V GPIO24: 18-Octave Up, 1 Octave Down, 1 Menu) 19: GPIO10 GND: 20 LED common ground resistor can tune LED -21: GPIO9 GPIO25: 22brightness and current draw 23: GPIO11 GPI08: 24-Do not enable pullup/pulldown on GPIO (15pcs) LED Bright, LDR >50k Ohm w/o light, <10k Ohm w/ light 25: GND GPI07: 26 Focus/Narrow Beam (2pcs) LED for status 5V of Raspberry Pi has more current/power to drive brighter LEDs (optional) Align LDR with Center of LED Light Each LDR aligned to each LED above 47k Ohm **≤**