2022 OSU Make Ohio AEP Challenge Pseudo Wind Tower

Example Set-up and Wiring



Circuit/Hook-up

Plastic Bracket with LED and Phototransistor.
1) 220ohm resistor for 5V power.
2) 10K resistor as "pull-up" for phototransistor.
3) If you trim the leads, keep the one shorter so you know pinouts.

Technical

Wave form of phototransistor, collector pin. When phototransistor is active, the circuit is pulled down. The bracket allows the IR to shoot across the blades and provide a very strong signal. The interrupt triggers on a "falling" pulse.

If a "side by side" reflection method is tried, the signal will be weaker. Some experimenting may be necessary for a good reflective target and alignment for a signal sufficient to trigger. A transistor could be added to provide a clean switching function.

