

# Enhanced Optical Position Detector

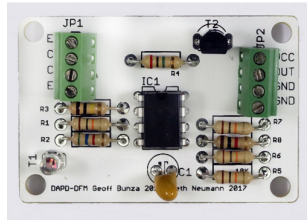


Figure 1 – Enhanced Optical Position Detector

Optical Position Detectors are useful when precise position detection is required (clearing a staging throat, for example), when the area to be detected is small (an "OS" section in a CTC system) or where resistance wheel sets cannot be applied and current detection can't be used. The Enhanced Optical Position Detector is based on [Geoff Bunza's DAPD](#) and provides a fixed turn-on and turn-off delay and high power output stage similar to Bruce Chubb's DCC-OD (so if you need an optical detector that's electrically compatible with a cpOD or DCC-OD, EOPD is for you!).

- No need to adjust for ambient light level. (Note the circuit won't work in the dark unless you substitute infrared photo transistors and provide an infrared illumination source)
- The supply voltage range is 5-15 volts
- The output is a negative-true open collector which will sink up to 600 mA at up to 40VDC.
- Size is 1.15" x 1.75 x 0.5" high"
- Turn on/Turn off factory set at 2 Seconds
- All connectors at 0.100 spacing for maximum choice of connectors

Either 2 PT-19 photo transistors or “Da Fingah” are provided. a reference and another to be placed between the rails. You may solder the reference onto the board if the board will be mounted where is has the same illumination as the track or both may be mounted remotely.

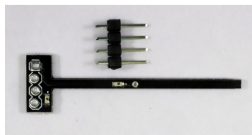


Figure 2 - Da Fingah surface mounted sensor assembly

Da Fingah is a surface mount assembly intended to be inserted between two ties and has both the sensor and reference photo

The EOPD is a compatible [Modular Signaling System \(MSS\) Optical Detector](#)