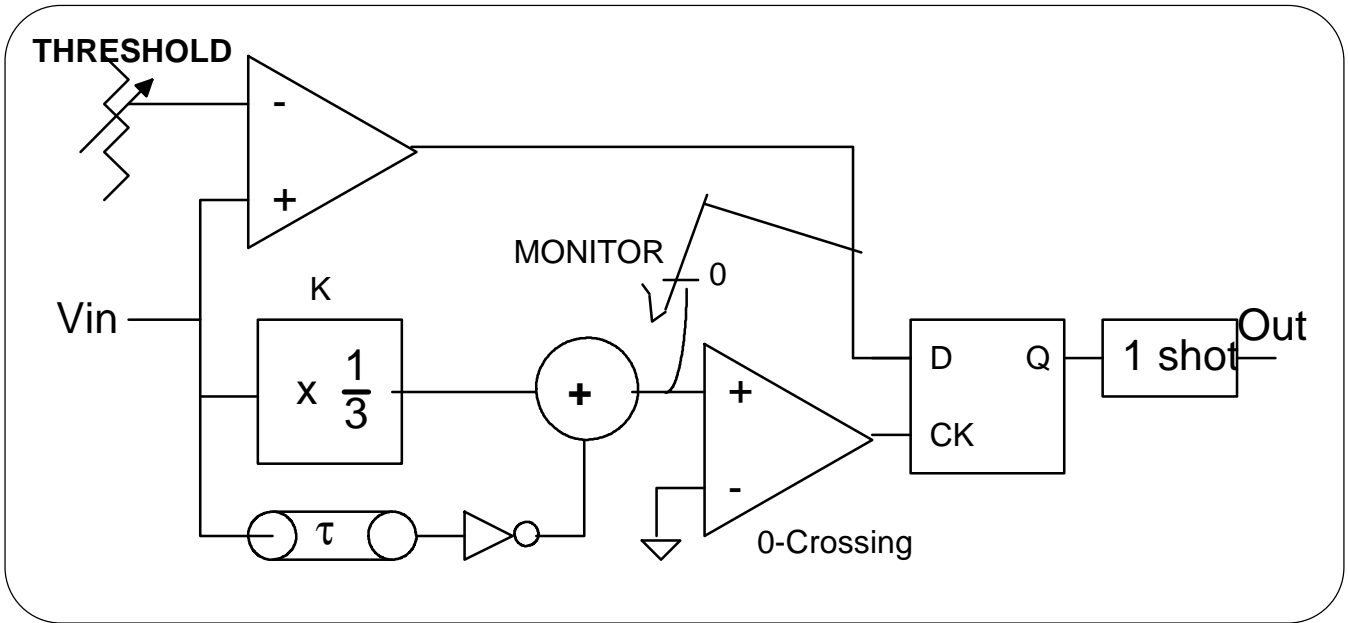


Operation of Model 715/6915

Constant Fraction Discriminator (CFD)



Let $V_{in} = A t$, delay = τ , attenuator = K . Assume tail slope = 0.

The 0-crossing will occur @:

$$A(t-\tau) = K A t$$

$$t = \frac{\tau}{1-K}$$

Note that A dropped out of the equation. The 0-crossing is strictly a function of the delay and attenuation.

In Phillips Scientific modules, $K = \frac{1}{3}$.