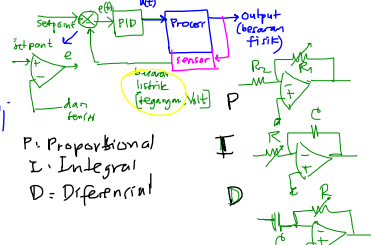


ANALOG

50 Tomboi

PID Controller



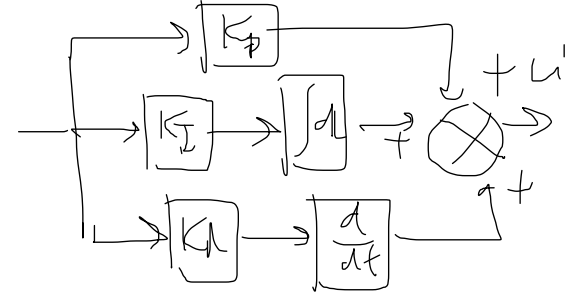
P $e \rightarrow K_p \rightarrow u = K_p e$

PI $e \rightarrow K_p \rightarrow K_p e$
 $e \rightarrow K_i \rightarrow \int e dt \rightarrow K_i \int e dt$
 $u = K_p e + K_i \int e dt$

PD

$e \rightarrow K_p \rightarrow K_p e$
 $e \rightarrow K_d \rightarrow \frac{d e}{dt} \rightarrow K_d \frac{d e}{dt}$
 $u = K_p e + K_d \frac{d e}{dt}$

PID



DIGITAL

