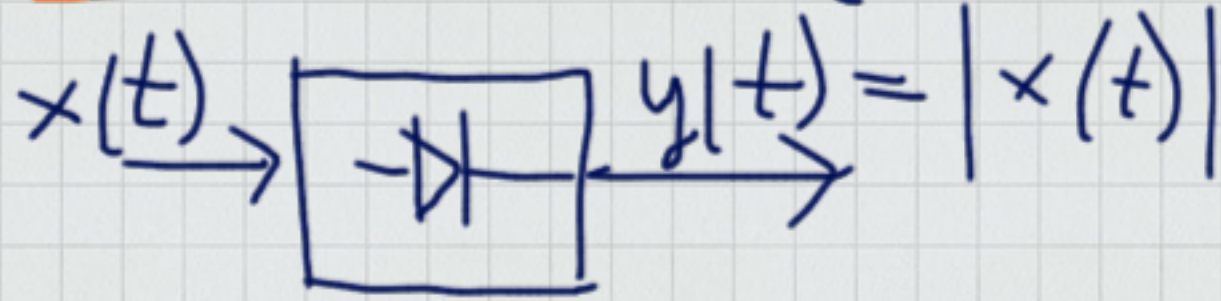


* Penyearah (Rectifier)



Tunjukkan penyearah ini sistem tak linier!

Bukti:

SALAH

Masukan

Keluaran

Pilih $x_1 = 1 \rightarrow y_1 = |x_1| = 1$
 $x_2 = 2 \rightarrow y_2 = |x_2| = 2$

Pilih $\alpha_1 = 3$, $\alpha_2 = 4$ $\rightarrow$ Kombinasi linier
Kombinasi linier
Isyarat masukan: $\alpha_1 y_1 + \alpha_2 y_2 = 3(1) + 4(2) = 11$

$x(t) = \alpha_1 x_1 + \alpha_2 x_2$
 $= 3(1) + 4(2) = 11 \rightarrow y(t) = |x(t)| = 11$

$y(t) = \alpha_1 y_1 + \alpha_2 y_2$