Final

#Delta Modulation

Digital Data ⟶ Analog Sygnal

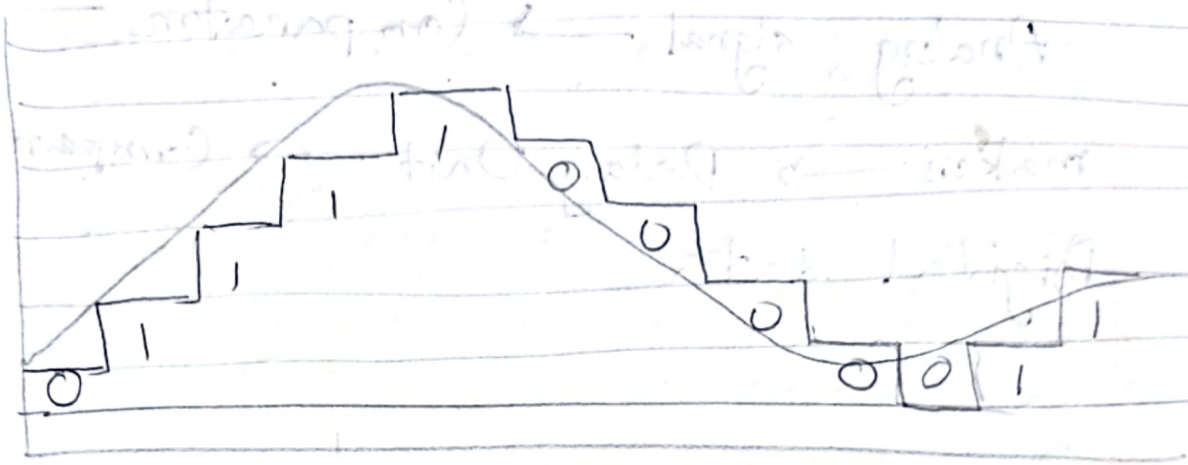
* Use DM to reduce the complexity of PCM
* PCM finds the value for the signal amplitude whenes DM calculates the change.
* There are no codewords here; bits are generated one by one.

$\delta \geq 0$; 1

$\delta < 0$; 1

Next encoden = 1 δ /

——————— : 0 δ \



- To improve the performance of PCM (Reduce complexity)
- Analog input is approximated by a staircase function.
- Move up when $\delta = 1$; down when $\delta = 0$

Delta modulation Component

Analo

Delta Modulation Components

Analog signal → Comparaton → Staircase maker → Delay Unit → Comparaton → Digital data

Delta Demodulation Components

Digital data → Staircase Maker → low-pass fiftter → Delay Unit → Analog Signal