EIC-501

UNIT-1 (Lecture-3)

Types of Feedback Control Systems

Major Types of Feedback Used

Position Feedback

 Used when the output is a linear distance or angular measurement.

Rate & Acceleration Feedback

- Feeds back rate of motion or rate of change of motion (acceleration)
- Motion smoothing
- Uses a electrical/mechanical device call an accelerometer

- Closed-loop (feedback) control system a system in which the output variable is compared with an input parameter, and any difference between the two is used to drive the output into agreement with the input
- 2. Open-loop control system operates without the feedback loop
 - Simpler and less expensive
 - Risk that the actuator will not have the intended effect

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Advantages of a Closed-Loop Feedback System Increased Accuracy

Increased ability to reproduce output with varied input.

Reduced Sensitivity to Disturbance

By self correcting it minimizes effects of system changes.

Smoothing and Filtering

- System induced noise and distortion are reduced.

Increased Bandwidth

Produces sat. response to increased range of input changes.

CONTROL SYSTEM-I



Negative Feedback Control System

