

AI Evaluation Bridge – The Limiter Analogy

Concept Overview

In audio engineering, a limiter prevents sound levels from exceeding a certain threshold to avoid distortion. In AI evaluation, a similar concept applies: evaluators set clear criteria and boundaries so that AI outputs do not exceed acceptable limits of reasoning, accuracy, or format.

The Audio Example

- Audio meters measure signal strength.
- If the signal rises above 0 dB, the sound clips and becomes distorted.
- A limiter stops the signal from exceeding a safe threshold, often set just below 0 dB.

The AI Evaluation Parallel

- The prompt defines the task and expected output.
- The rubric sets the limits of acceptable reasoning and correctness.
- Dependencies ensure steps occur in the proper order.
- Weights determine which criteria matter most.
- The golden response represents the ideal reference point.

Why the Limiter Analogy Works

- It shows how evaluation prevents uncontrolled or incorrect outputs.
- It demonstrates that evaluation frameworks protect quality.
- It helps learners visualize how criteria constrain AI behavior.

Key Insight

Just as a limiter keeps audio signals within a safe range, evaluation frameworks keep AI responses within the boundaries of correctness, logic, and reliability.