

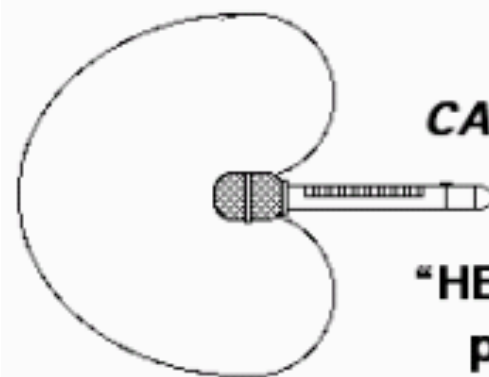
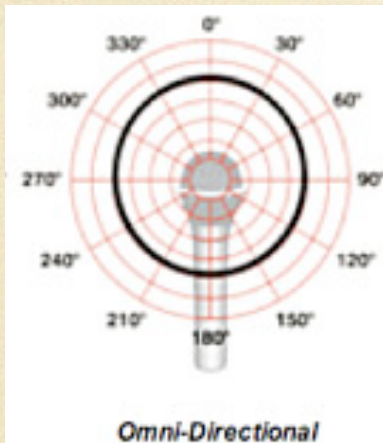
# Audio For Film

## Session 3

"Films are 50 percent visual and 50 percent sound.  
Sometimes sound even overplays the visual."

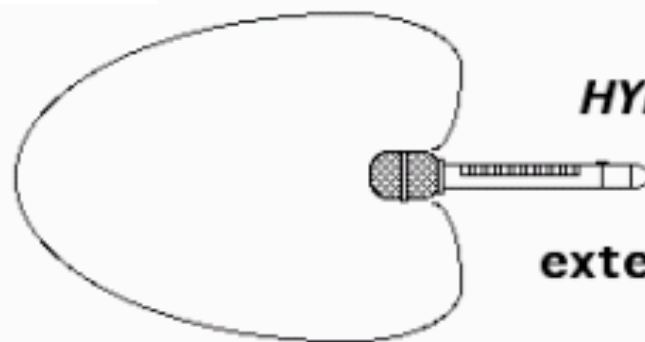
David Lynch, [www.britishfilm.org.uk/lynch/intro.html](http://www.britishfilm.org.uk/lynch/intro.html)

# Pick-up Patterns



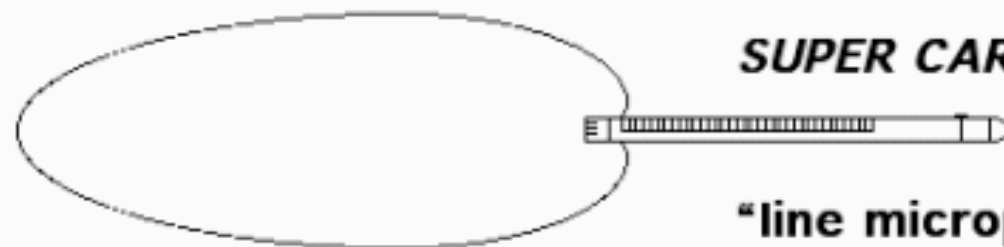
**CARDIOID**

**"HEART" shaped  
pick-up pattern**



**HYPER-CARDIOID**

**extended pattern**



**SUPER CARDIOID**

**"line microphone"  
aka the "shotgun"  
highly directional pattern**

# Softie Kit



# Windshield Kit



# Radio Mic



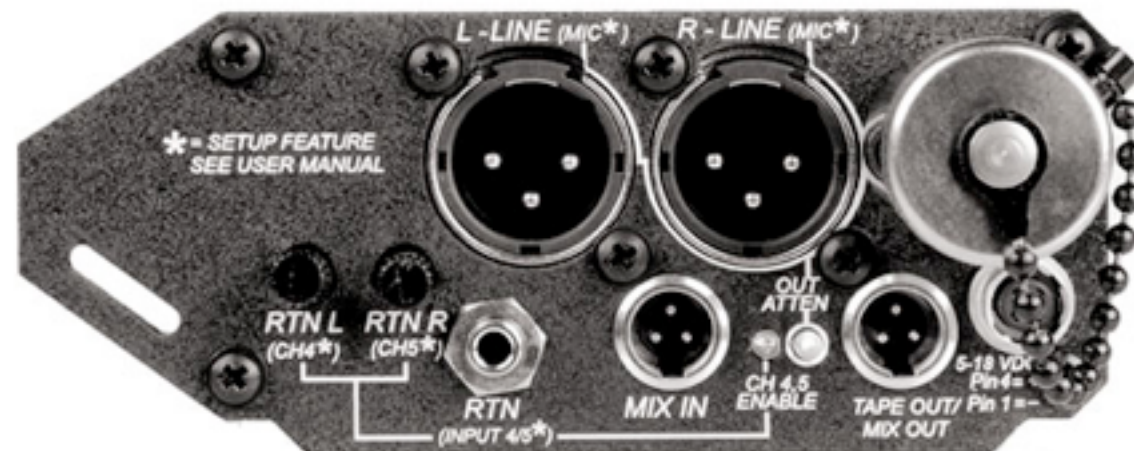
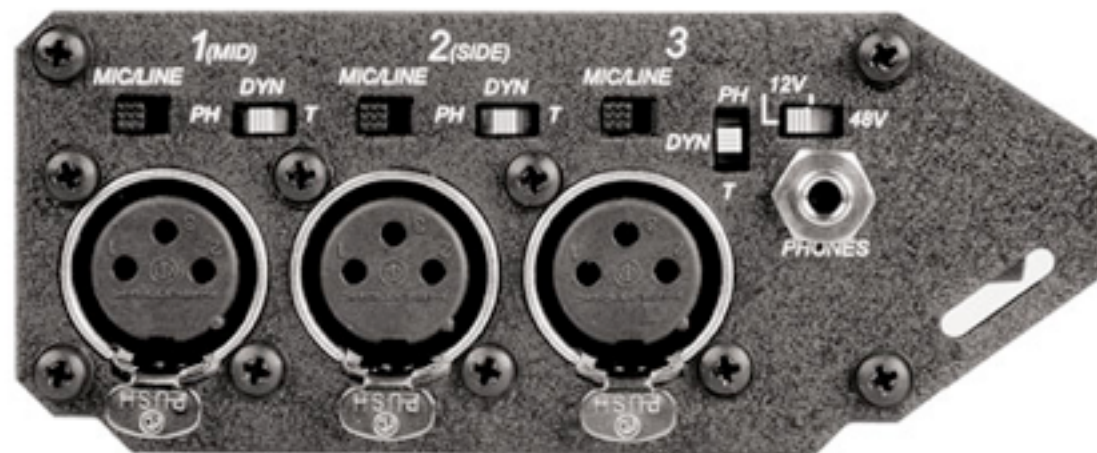
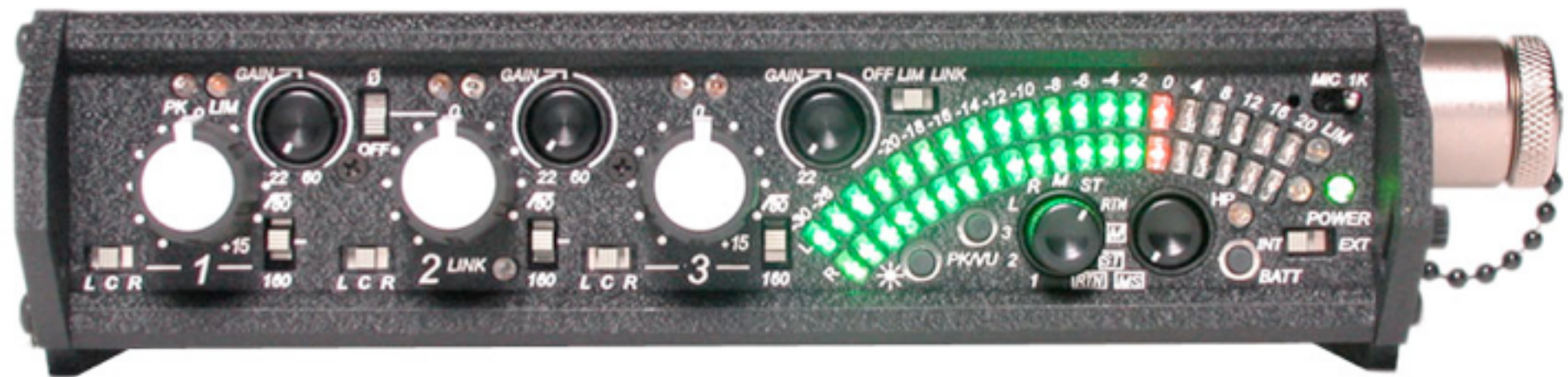
# Shotgun Mic



# Boom Use



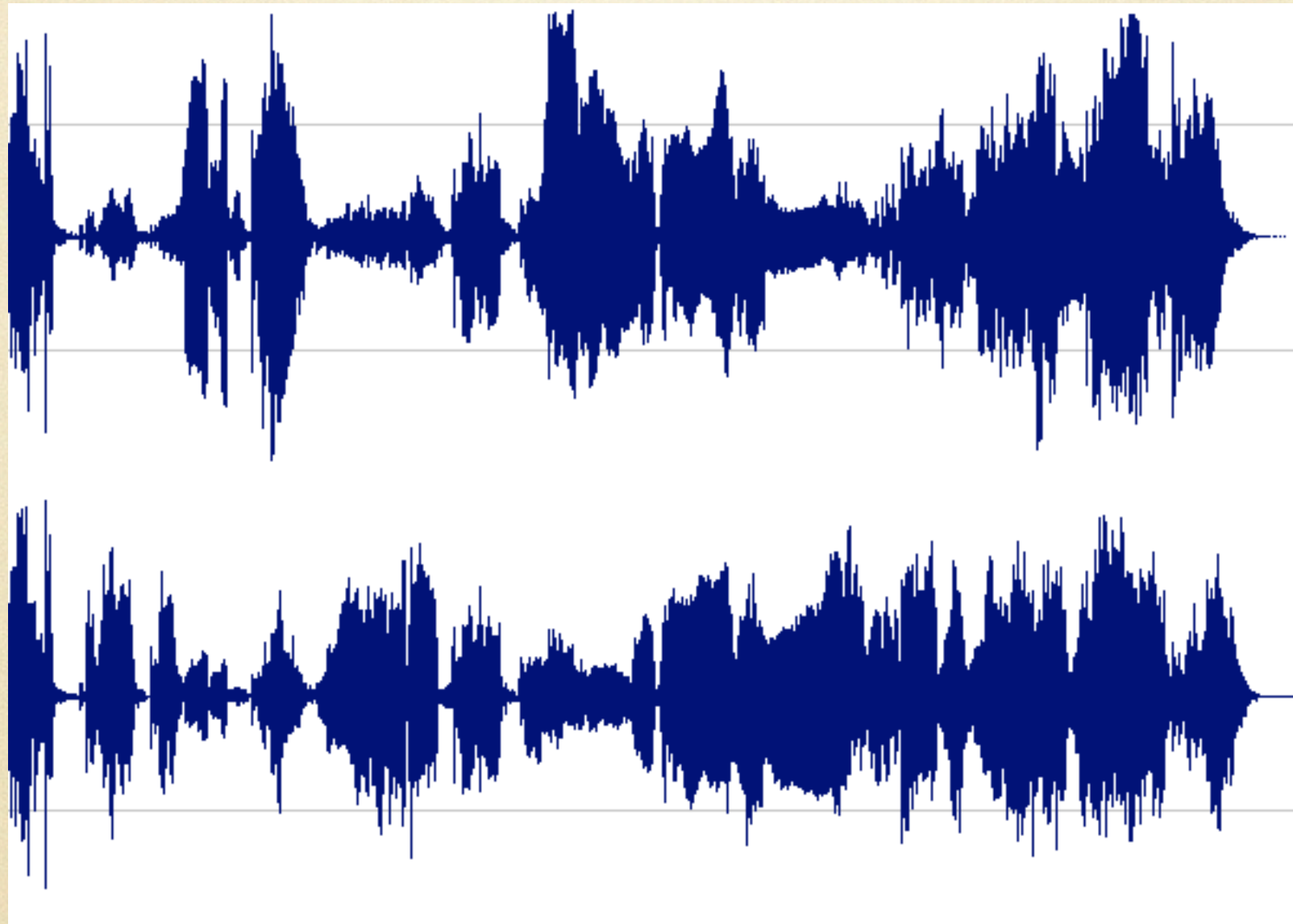
# 302 Field Mixer



# Separate Audio Recording



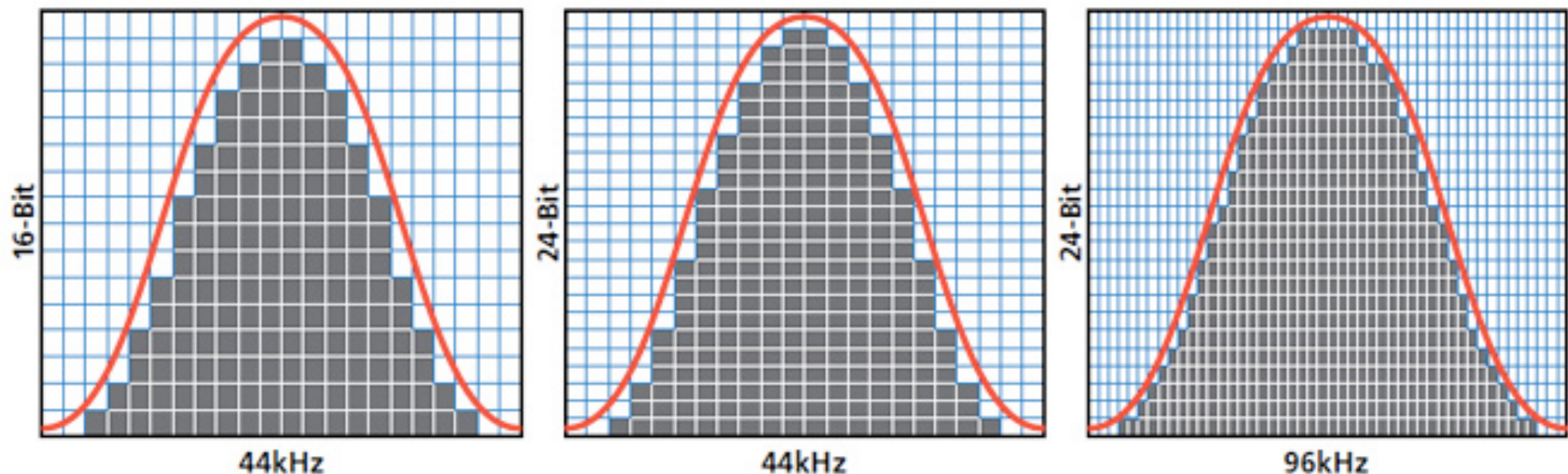
# Audio Waveform



- Dynamic Range- The difference between the highest and lowest point of the waveform.

# Sample Rate and Bit Depth

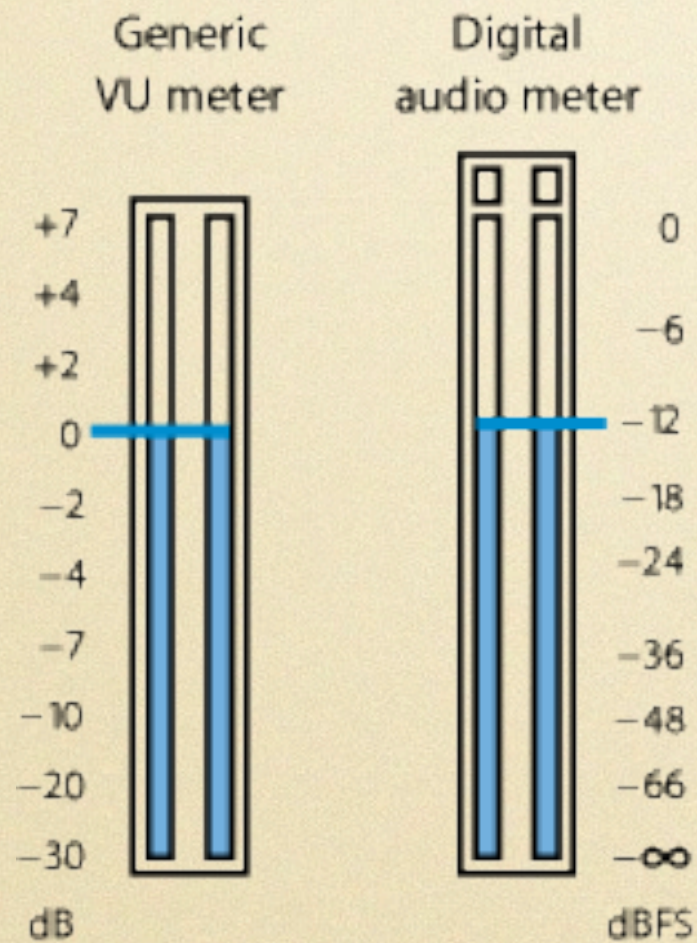
- 44.1kHz= CD quality
- 48kHz= Filming Quality
- 96kHz= HD Master Audio (Blu-ray)



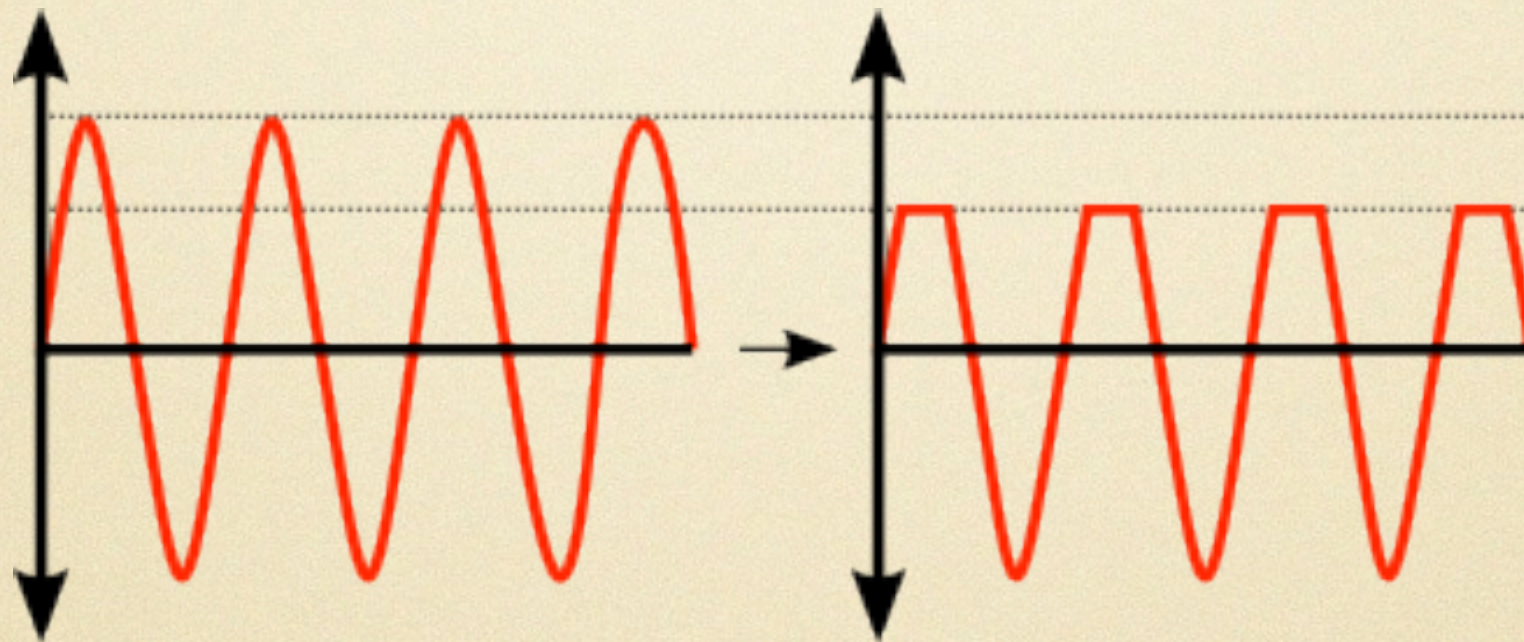
*As bit depth and sample rate increase, more information is captured—resulting in higher-quality audio*

# Audio Meter

- -12dB Target Level



# Audio Clipping



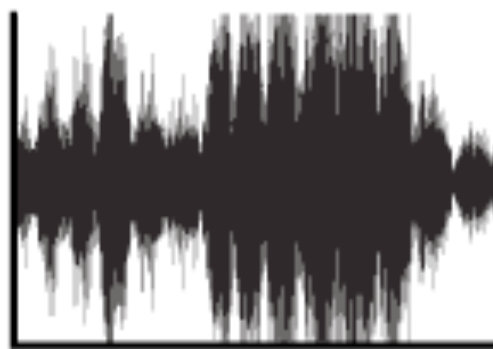
# Gain Clipping

0 dBFS



Original

0 dBFS



Too much gain  
causes clipping.

0 dBFS



Clipping remains  
after gain is reduced.