



Chapter Three

Recording Sound

OUTLINE

- Slating Audio
- Stereo or Mono?
- Microphones
- Recording Accessories
- Side address/ Top Address
- Axis

- Distance/ Proximity Effect
- Feedback
- Phasing
- Input Gain
- Stereo Miking
- Proxemics

Slating

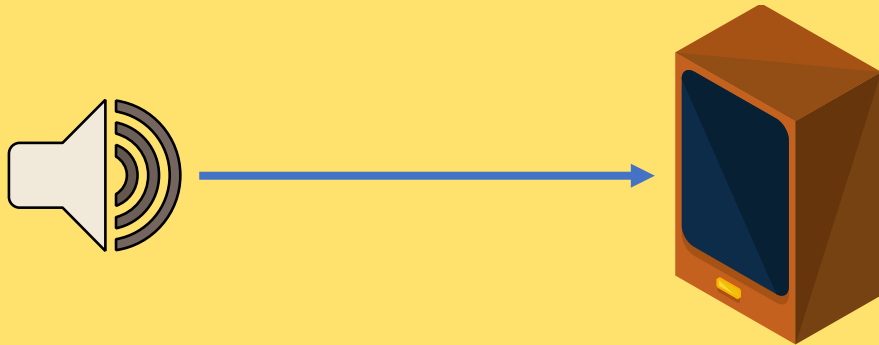


Hollywoodclapperboards.com

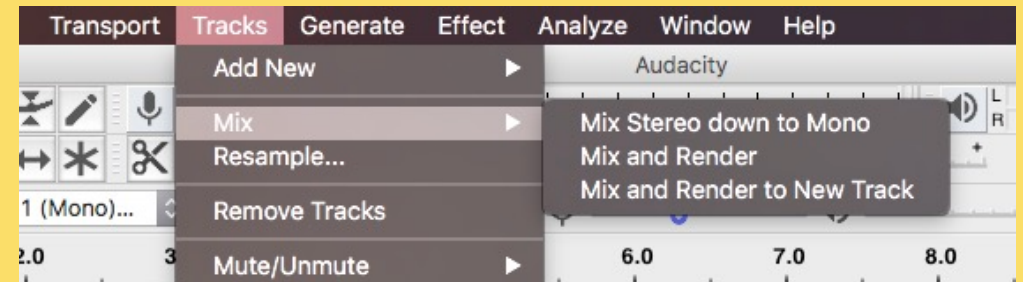
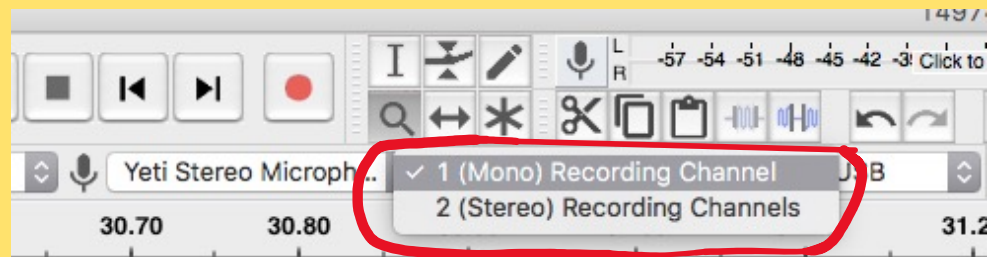
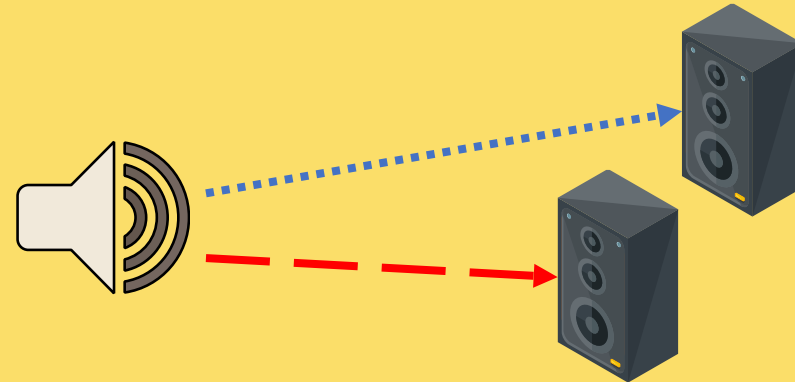
- Date & Time of Day
 - location
 - Temperature/wind/weather (if relevant)
 - Subject being recorded
 - Gear being used
- 2 seconds top and tail

Stereo or Mono?

Mono: one channel, one + speakers

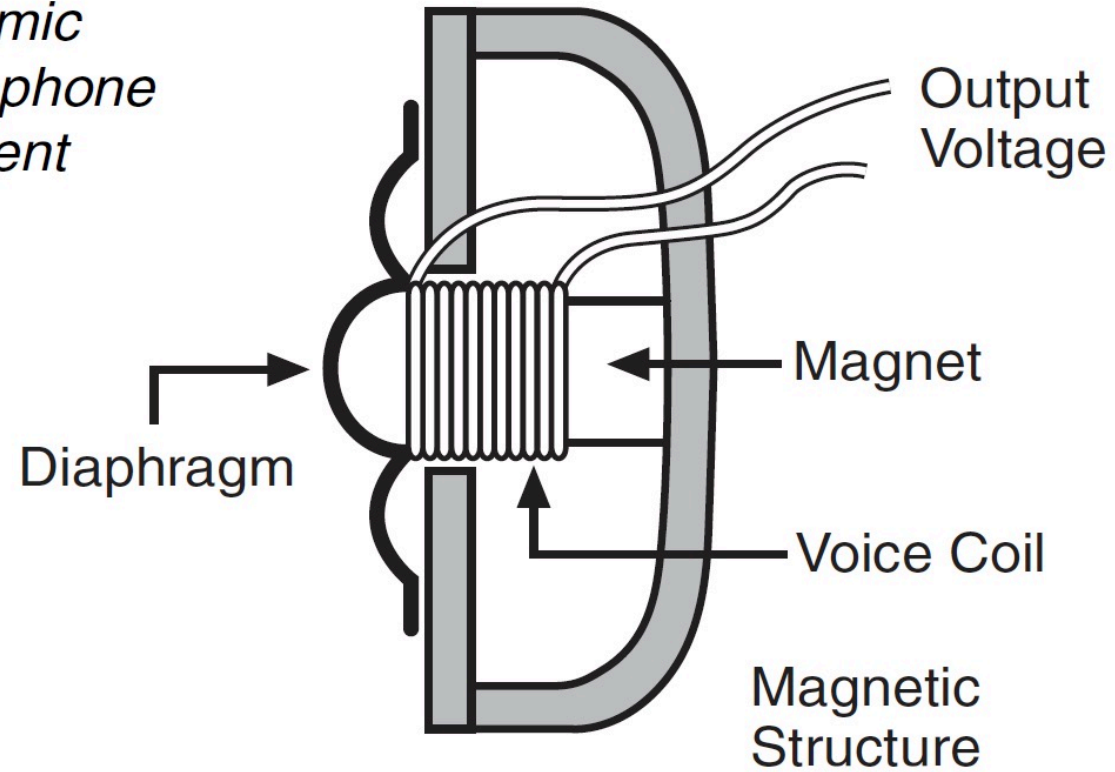


Stereo: two channels, two + speakers



Microphones: Dynamic

Figure 1
Dynamic
Microphone
Element



Microphones: Dynamic

- Shure SM57 & 58

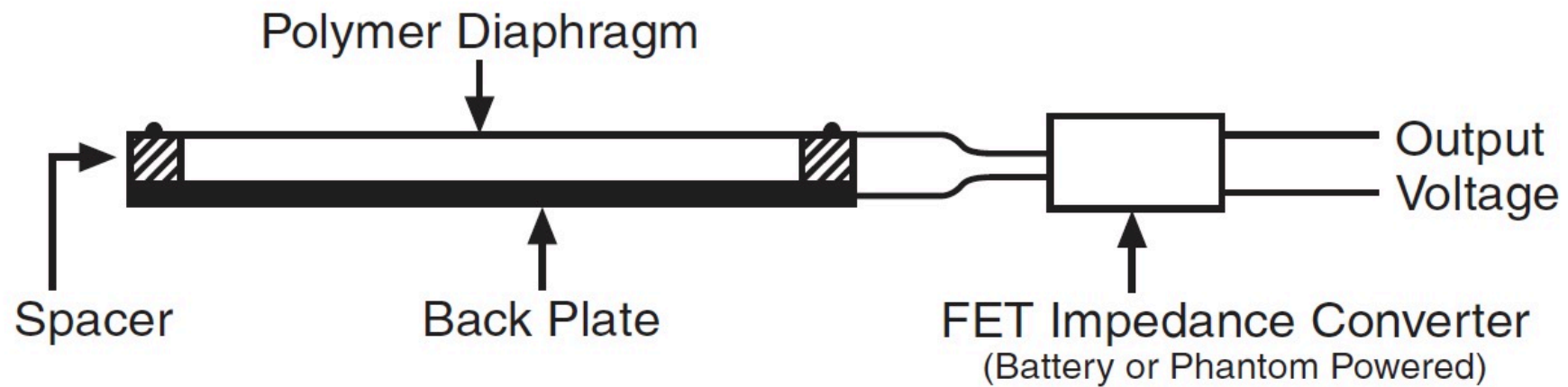


All photos in this section from manufacturers

- No external power needed
- Good signal/noise
- Rugged
- Affordable (comparatively)
- Not as fast transient response

Microphones: Condenser

Figure 2
Electret Condenser Element



Audio Technica's Brief Guide to Mics

Microphones: Condenser

Neumann U87



- External power often needed
- More uniform response
- More delicate
- Better High frequency & soft sounds
- fast transient response

Other Types of Microphones



RIBBON MIC

MXL R77 Classic Ribbon Microphone



STEREO MIC*

usually condenser

Rode NT4



USB MIC*

*usually condenser

Blue Yeti



BINAURAL MIC*

*usually condenser

3Dio FS Pro II

Other Types of Microphones



SURROUND MIC*

usually condenser

Holophone



CONTACT MIC

Schertler Dyn-Uni-P48

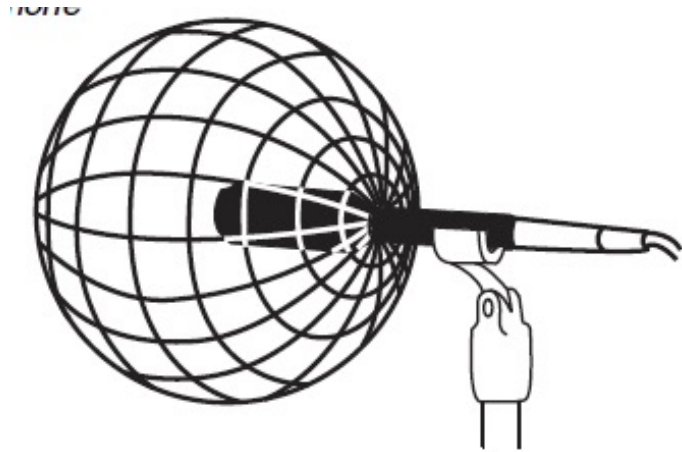


LAVALIER MIC*

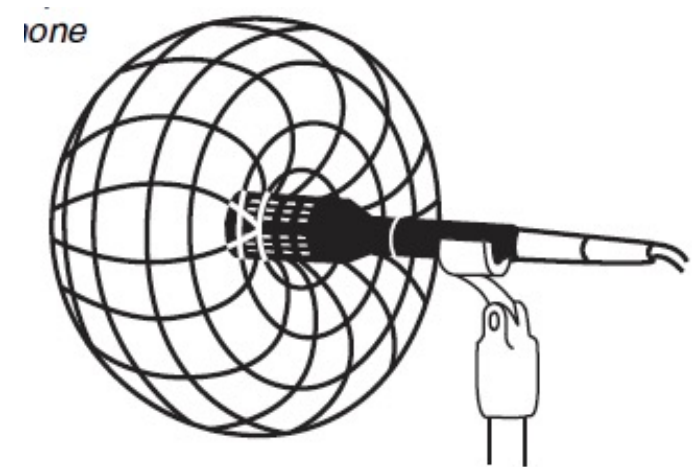
*usually condenser

Audio Technica AT899c

POLAR PATTERNS



OMNI

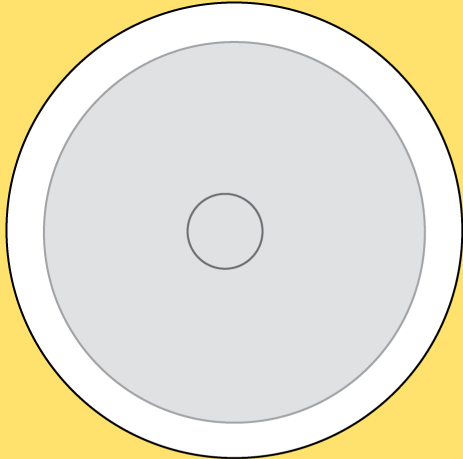


CARDIOID

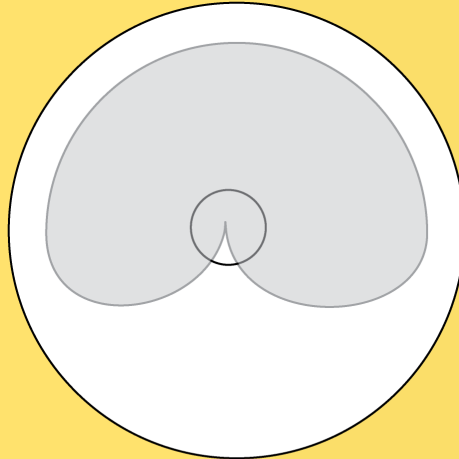
Images: AudioTechnica Brief Guide to Mics

Polar Patterns

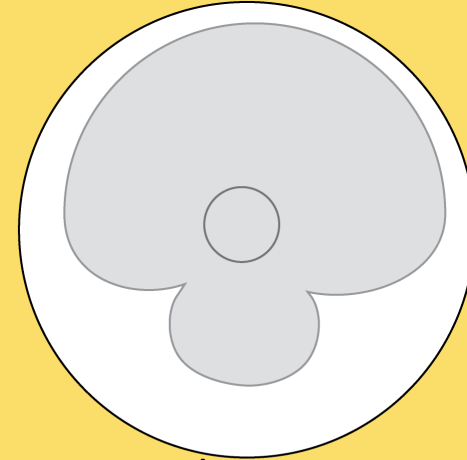
Omni



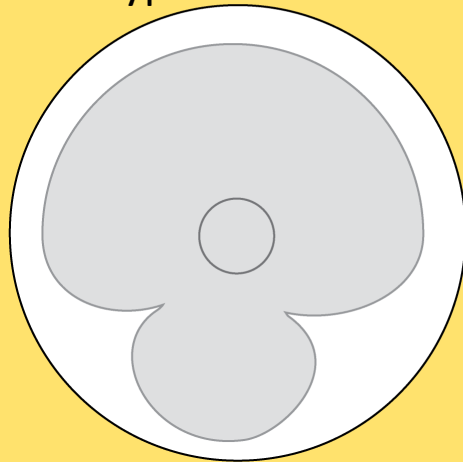
Cardioid



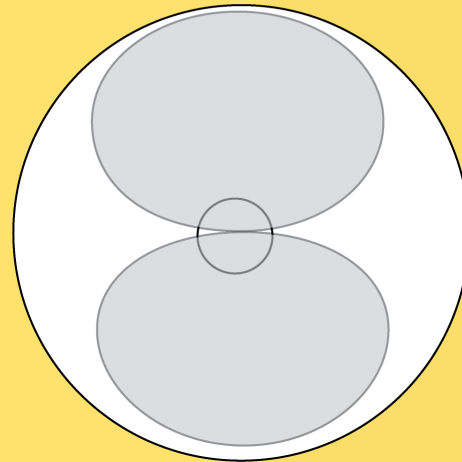
Supercardioid



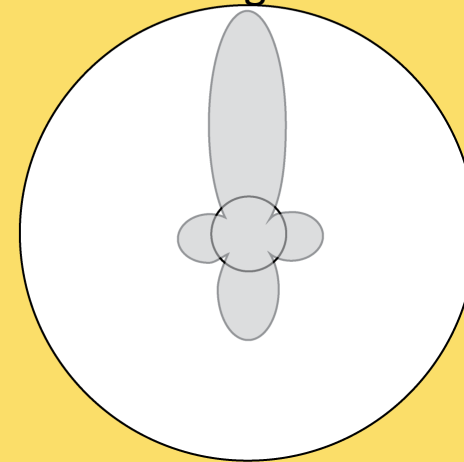
Hypercardioid



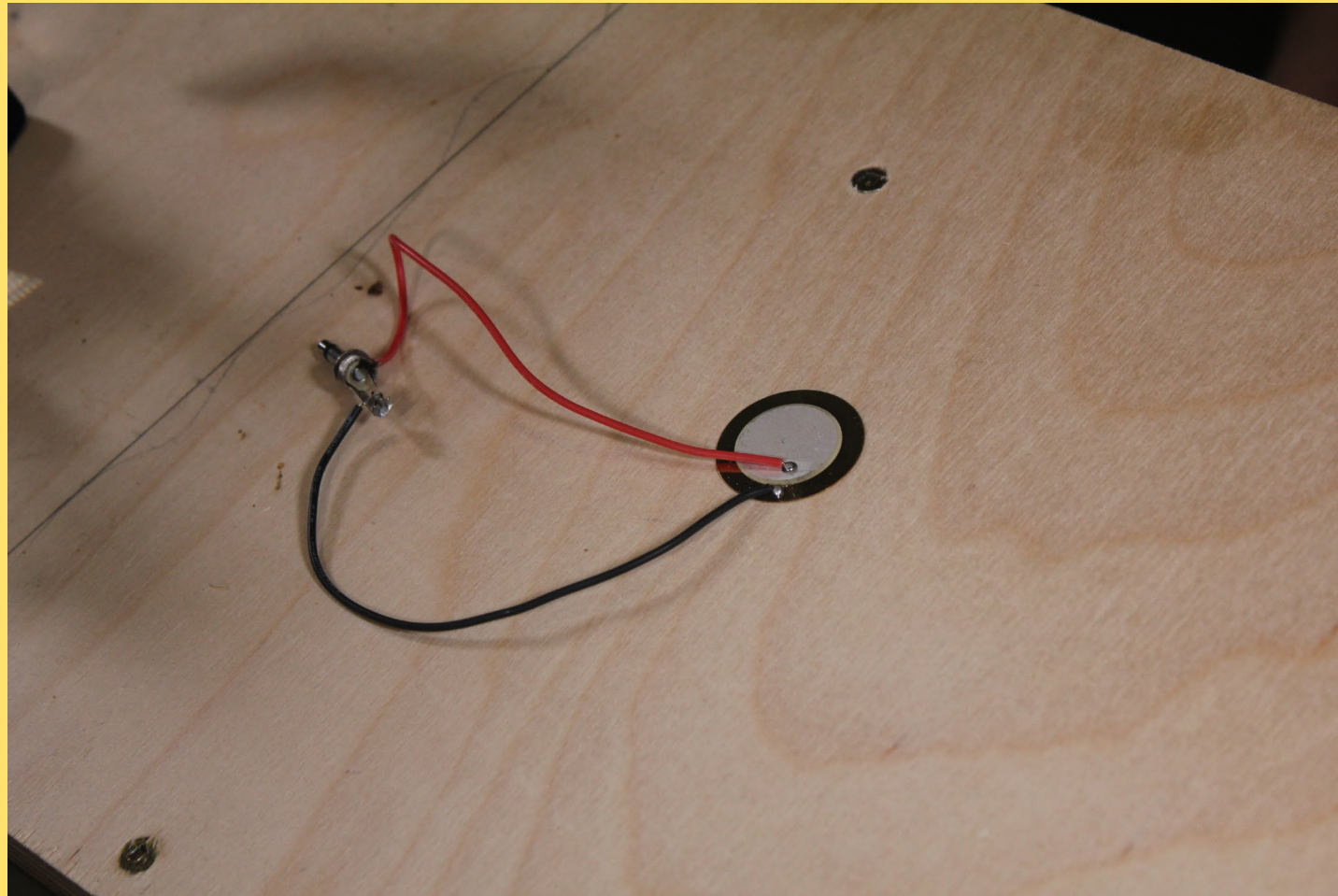
Bidirectional



Shotgun



Build a Contact Microphone



Recording Accessories



Boom Pole



Mic Stand



Shock Mounts

Recording Accessories



Windscreens



Pop Filter



Pad

Recording Accessories



Phantom Power



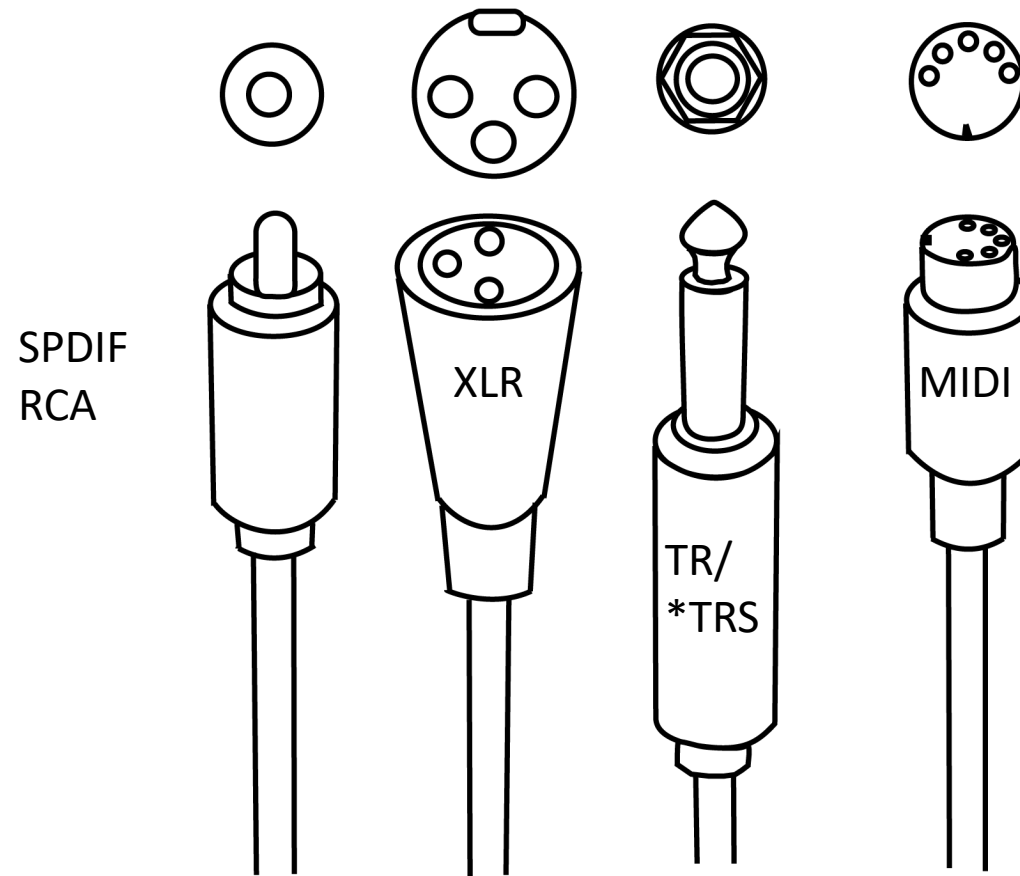
Pre-Amp



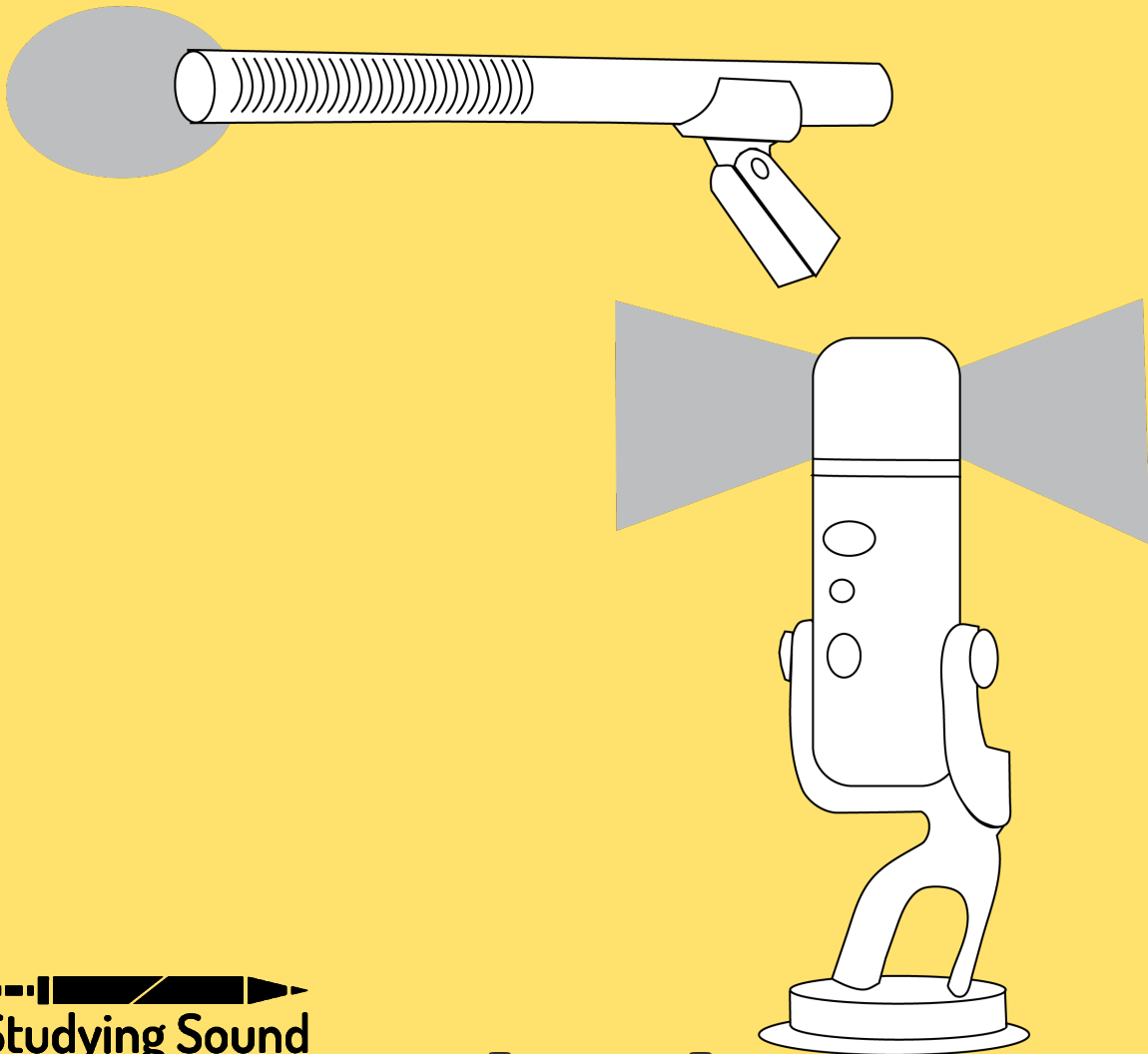
Recorders



Cables



Side/ Top Address Mics



DO

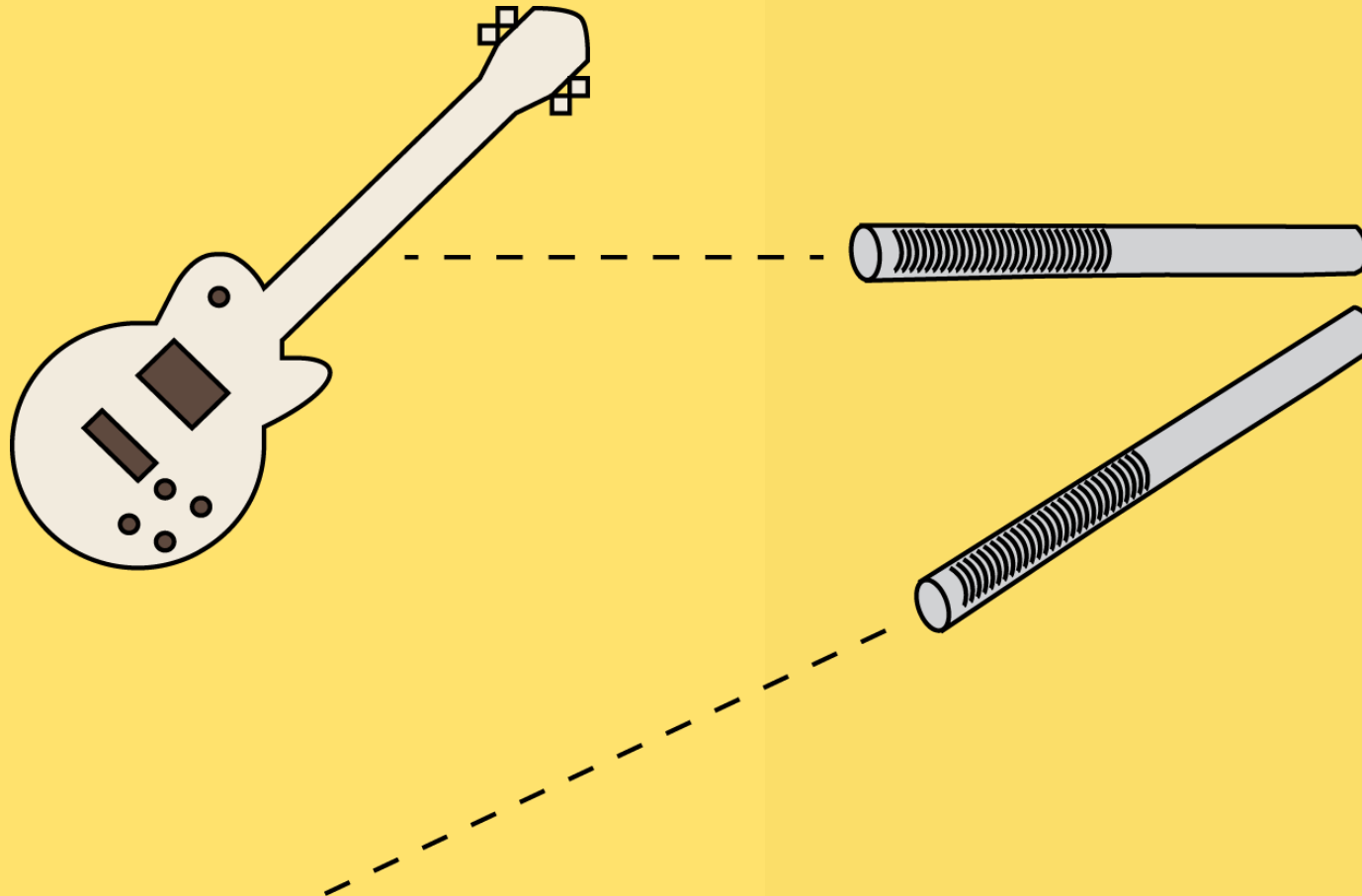


DON'T

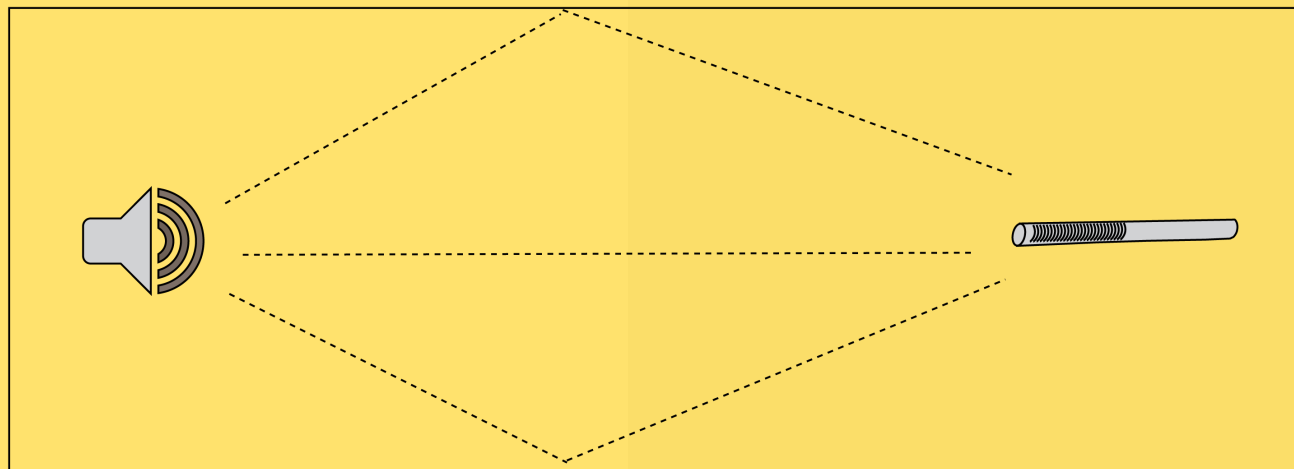
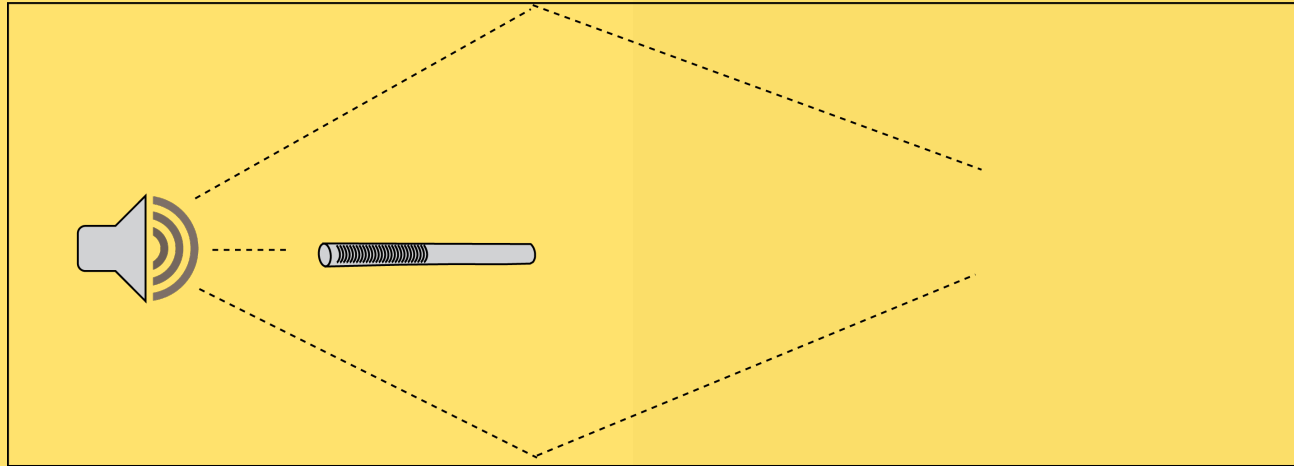


bluedesigns.com

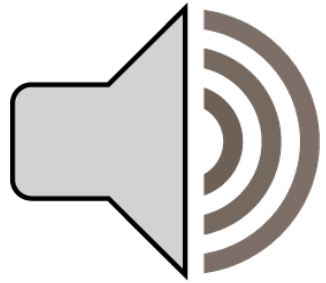
Microphone Axis



Distance



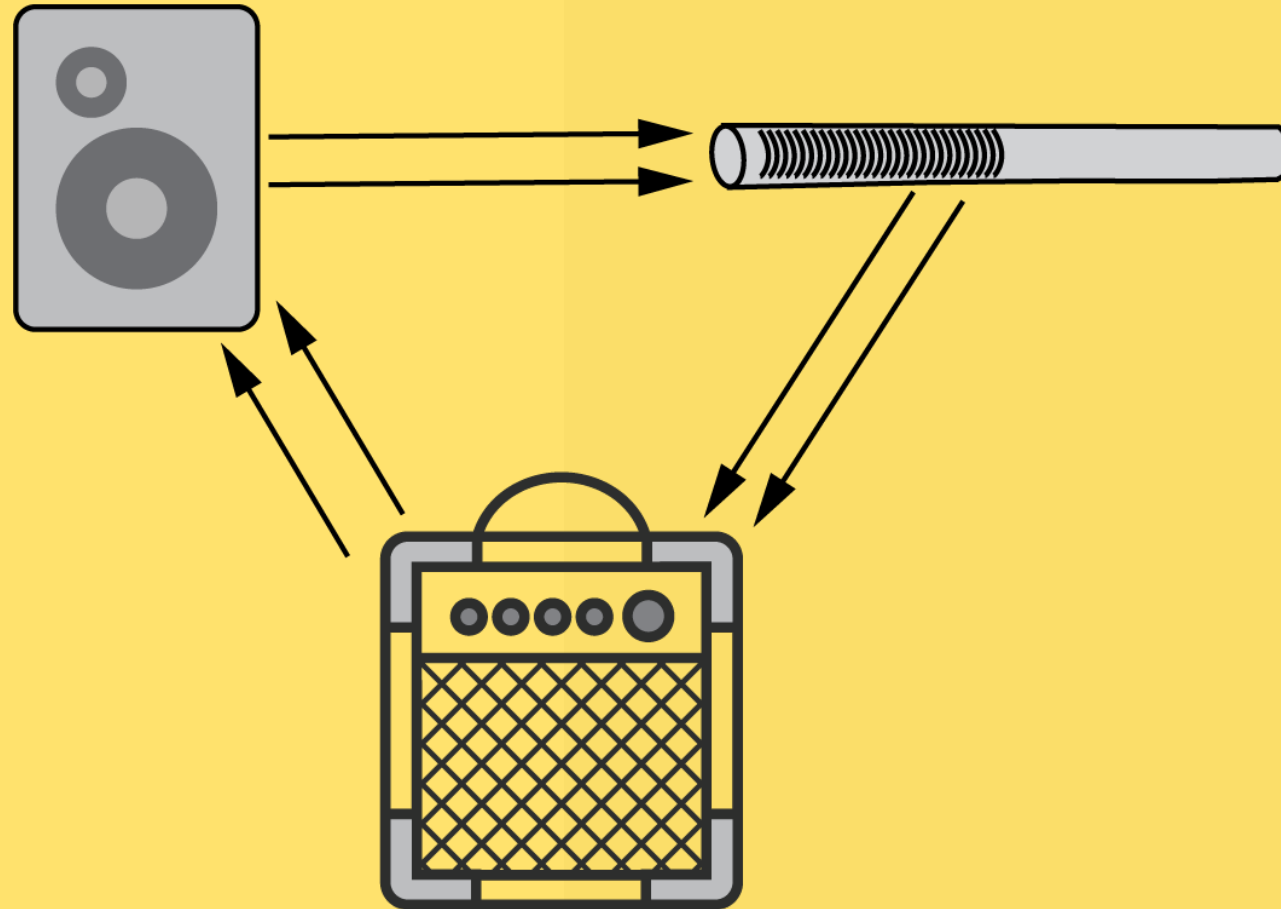
Proximity Effect



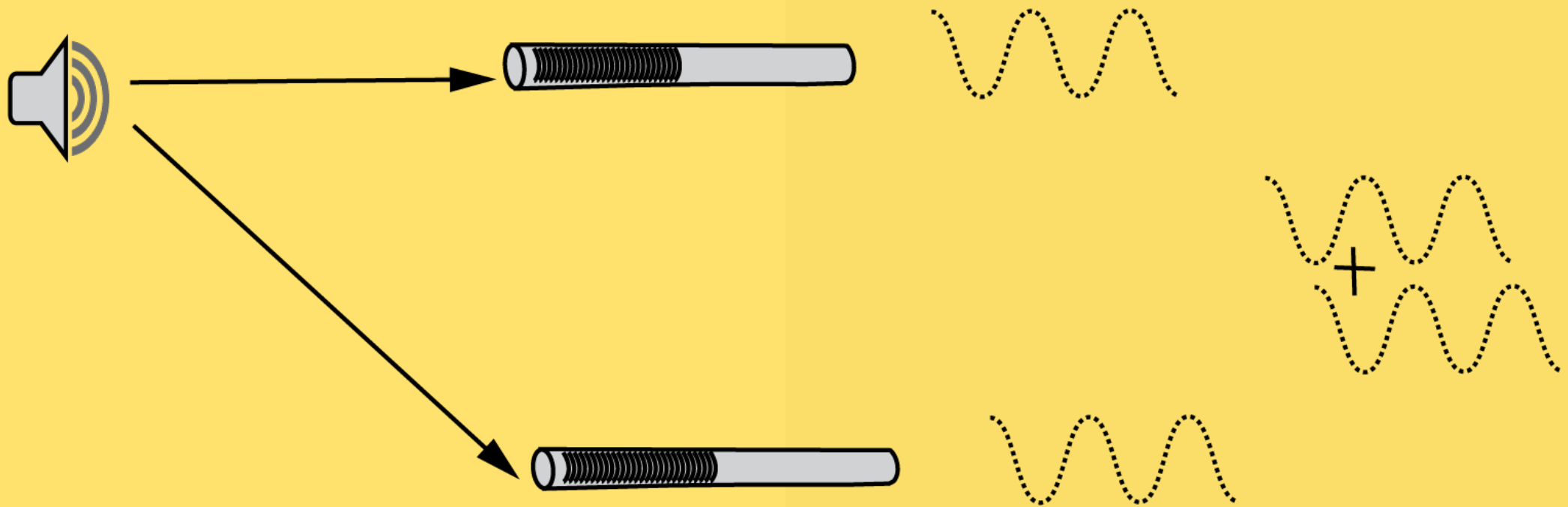
< 30 cm

Increase < 200 Hz

Feedback



Phasing

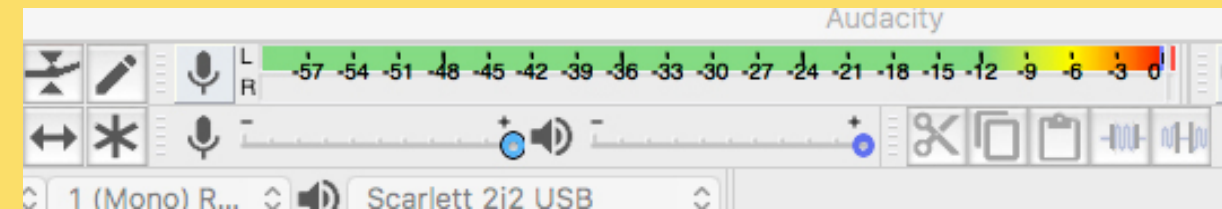


Input Gain

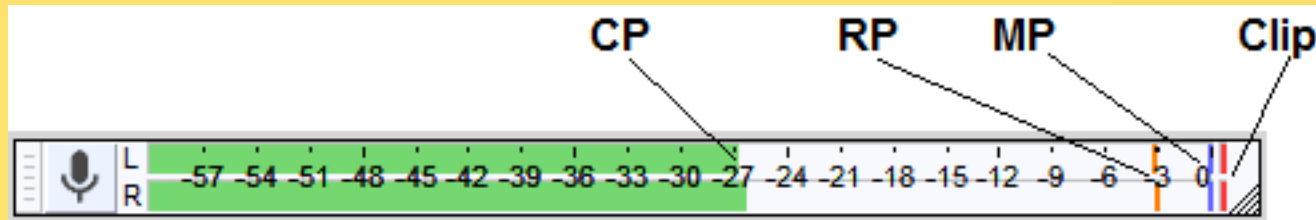
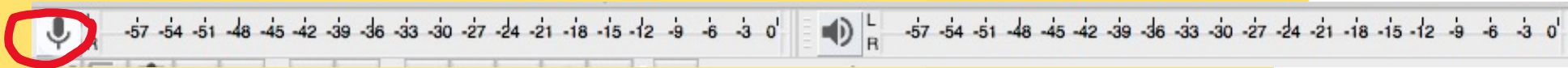


<https://alisocreek.net/vo-blog/wp-content/uploads/2016/05/yeti-gain.jpg>

“Gain” versus “Volume”



Input Gain: Audacity



Manual.audacityteam.org

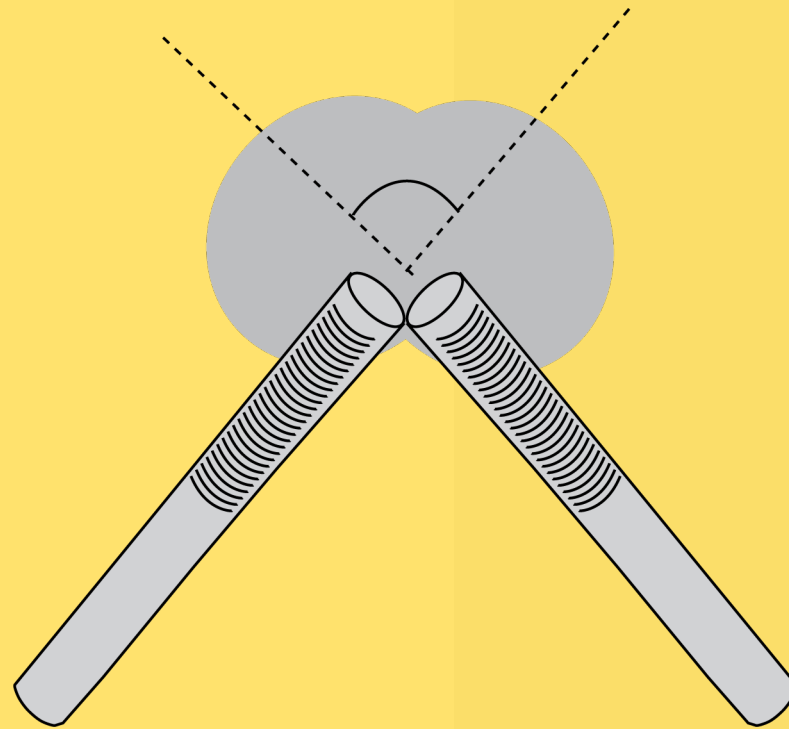
CP: current peak

RP: recent peak

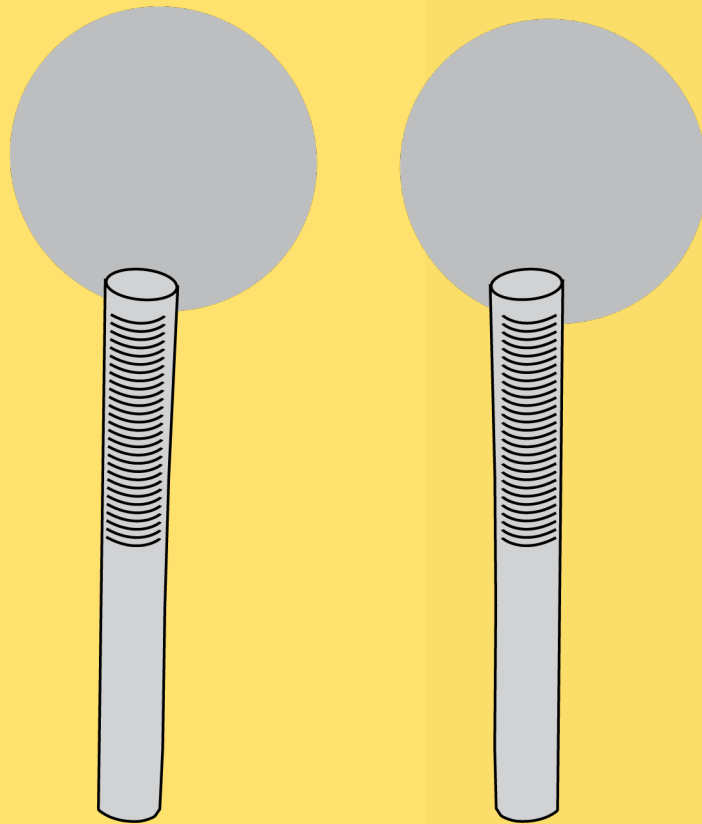
MP: Maximum peak

CLIP: Clipping indicator

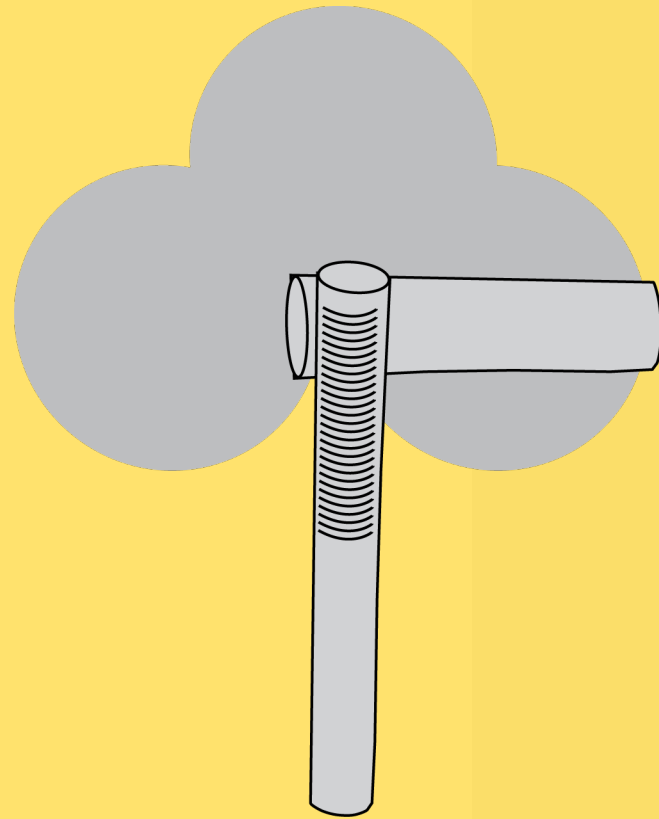
Stereo Recording: XY



Stereo Recording: AB



Stereo Recording: MS



Proxemics

