

music 174a - winter2021

recording 1 - mic positions

week five

mus174a - mic positions

- **distance** matters. close mics emphasize detail, highs, lows, transients. medium distance gives overall “picture” of instrument. greater distance emphasizes room and natural reverb.
- **position of microphone** influences what part of the instrument dominates the sound. other considerations: bass from floor reflection, noise from musician or instrument.
- **multiple** microphones are needed whenever more parts of the instrument are wanted or a bigger sound is desired. more bass, more space. 3:1 “rule”.

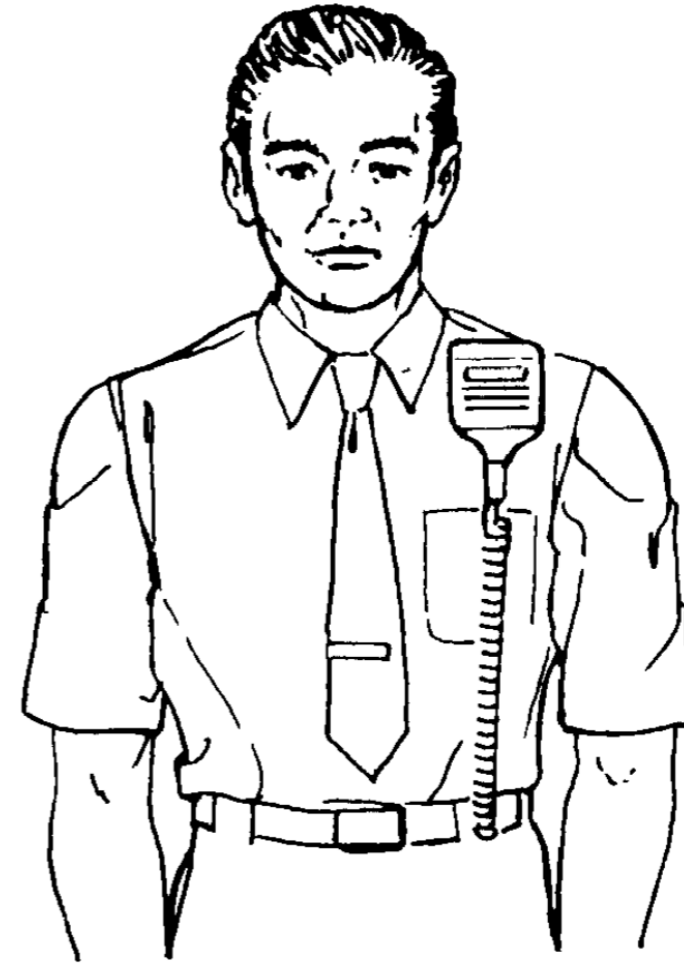


Figure 3-1. Ideal Microphone Position

- **angle** can change the freq. response of the signal
- **position of instrument** as or more important than position of microphone
- **overall spatial goal** should be considered

mus174a - mic experiment...

- find a large space to record in
- perform from a spot about 2/3 across both room dimensions
- place mic 1 foot away, wear headphones while recording.
- move instrument or voice on axis and off, if instrument, move so mic picks up different parts of instrument. if instrument can't be moved, move mic.
- move closer and further from mic. try to find the best close sound and distant sound. make a doubled recording (same music, different position), close and distant.

mus174a - plucked

- acoustic guitar
- classical guitar (examp. liang - journey)
- ukulele
- banjo
- SDC preferred

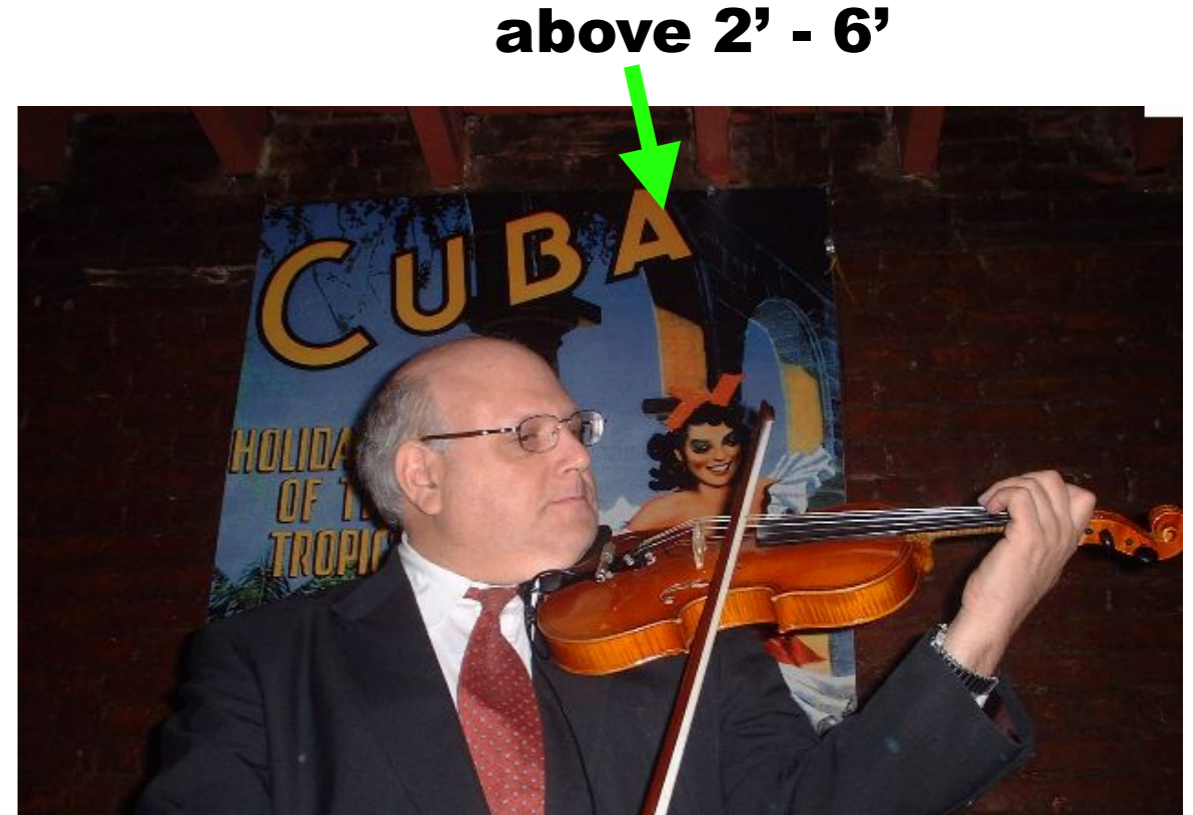


**lower bout
sound hole
12th fret**

edge of head

mus174a - bowed

- violin, viola (ex. erickson duo)
ribbon, SDC
- cello, LDC
- double bass (ex. dresser solo),
LDC

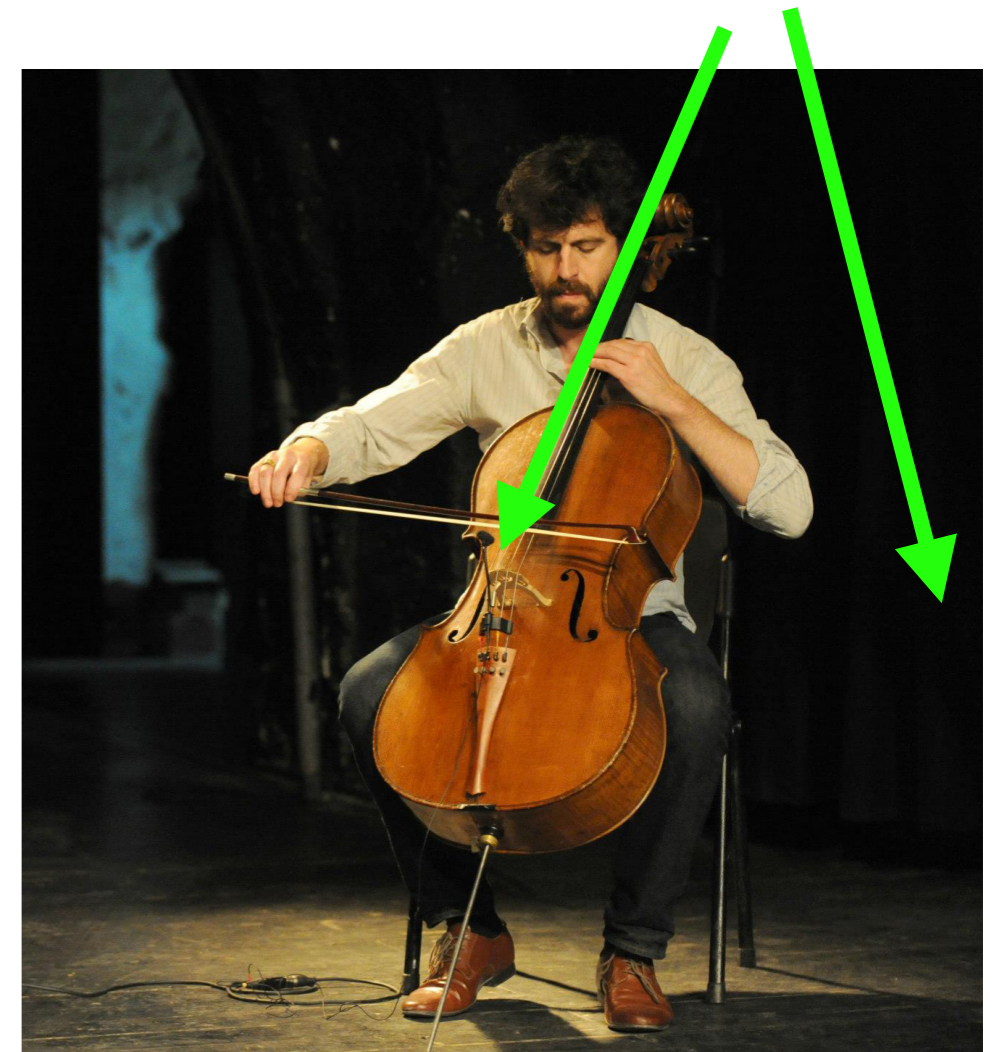


above 2' - 6'

bridge

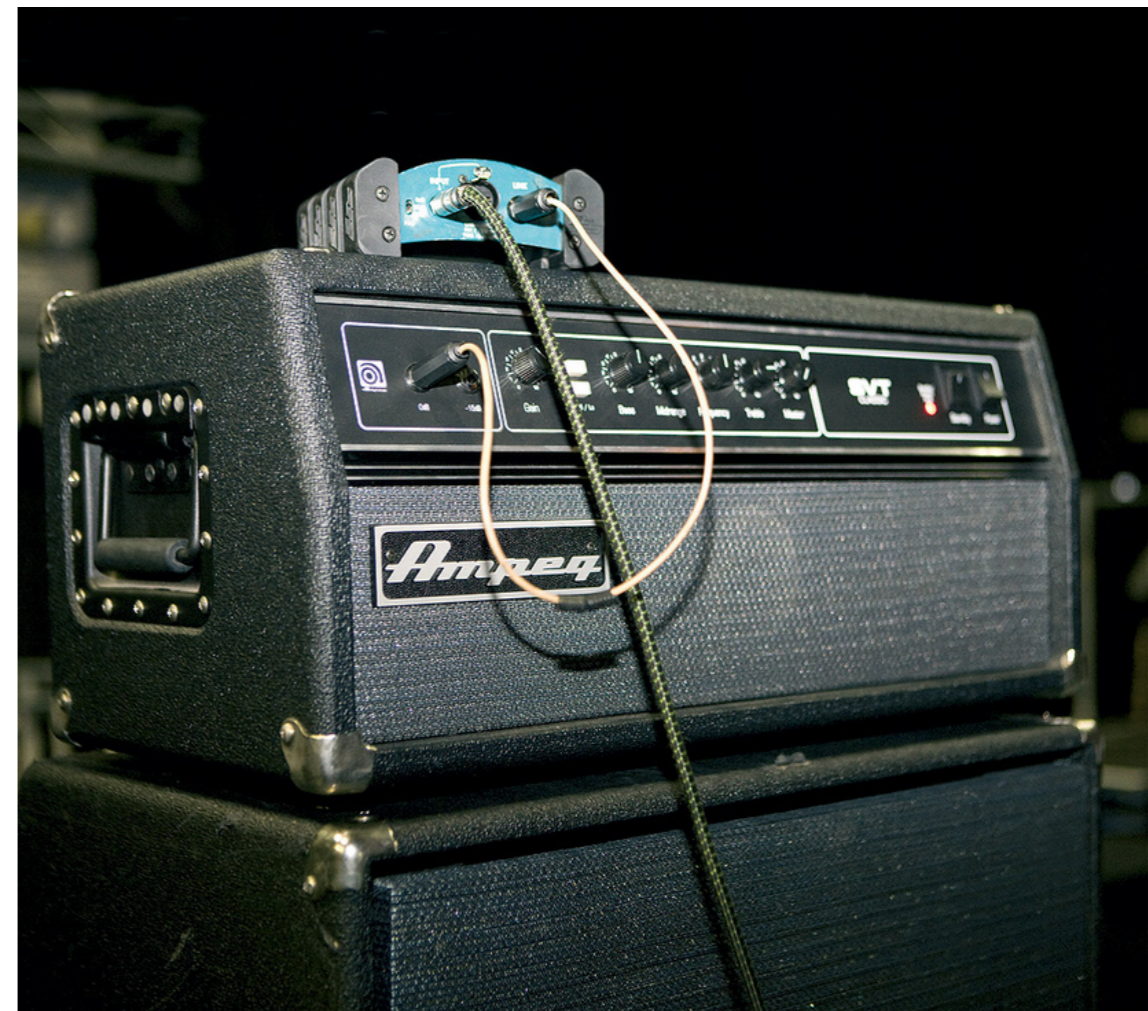


from bridge to 6'



mus174a - amplified

- guitar amps (ex. curtis), SM57 classic, condenser
- bass amp w/ direct box, MD421 (dynamic), kick mic
- organ or keys with leslie, stereo SDC

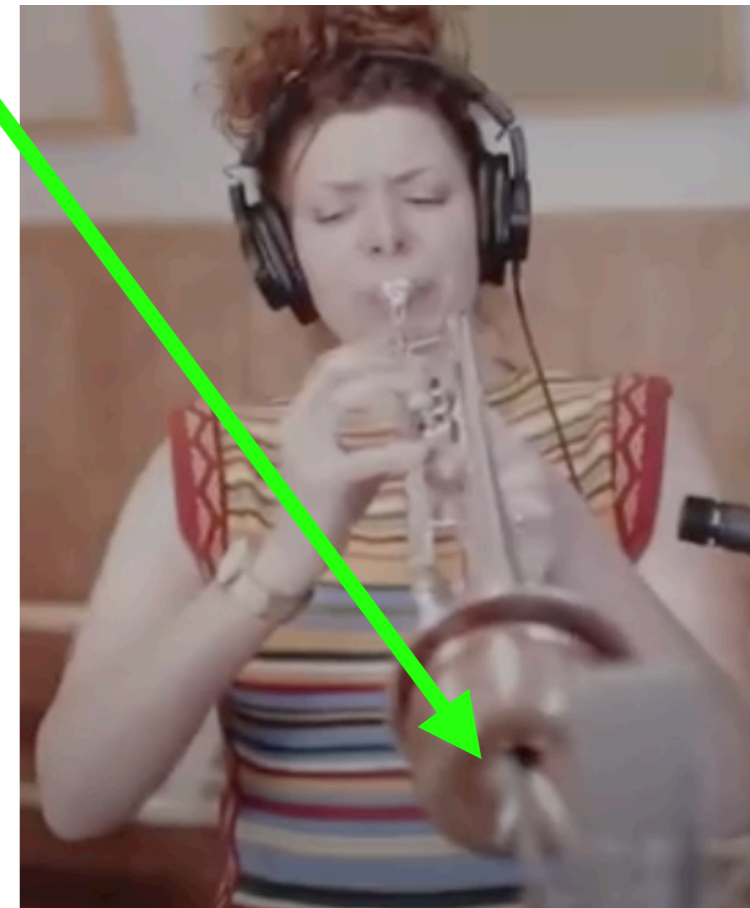


mus174a - brass+wind

- trumpet (ex. erickson fives), LDC, ribbon
- trombone - Dyn or LDC
- french horn
- flute, piccolo (ex. feldman)
- oboe
- clarinet
- bassoon
- saxophone - horn - LDC
- woodwinds - SDC

middle

bell



middle

mus174a - struck

- vibraphone, marimba (ex. nordensen)
- xylophone, glockenspiel
- drum kit
- hand drums
- gongs, bells, *chimes*, SDC
- metal: SDC, skin: dynamic



mus174a - keys

- piano
- harpsichord, clavichord
- celesta
- accordion



mus174a - voice

- distance
- volume
- plosives, sibilance
- pop filter
- position
- LDC

