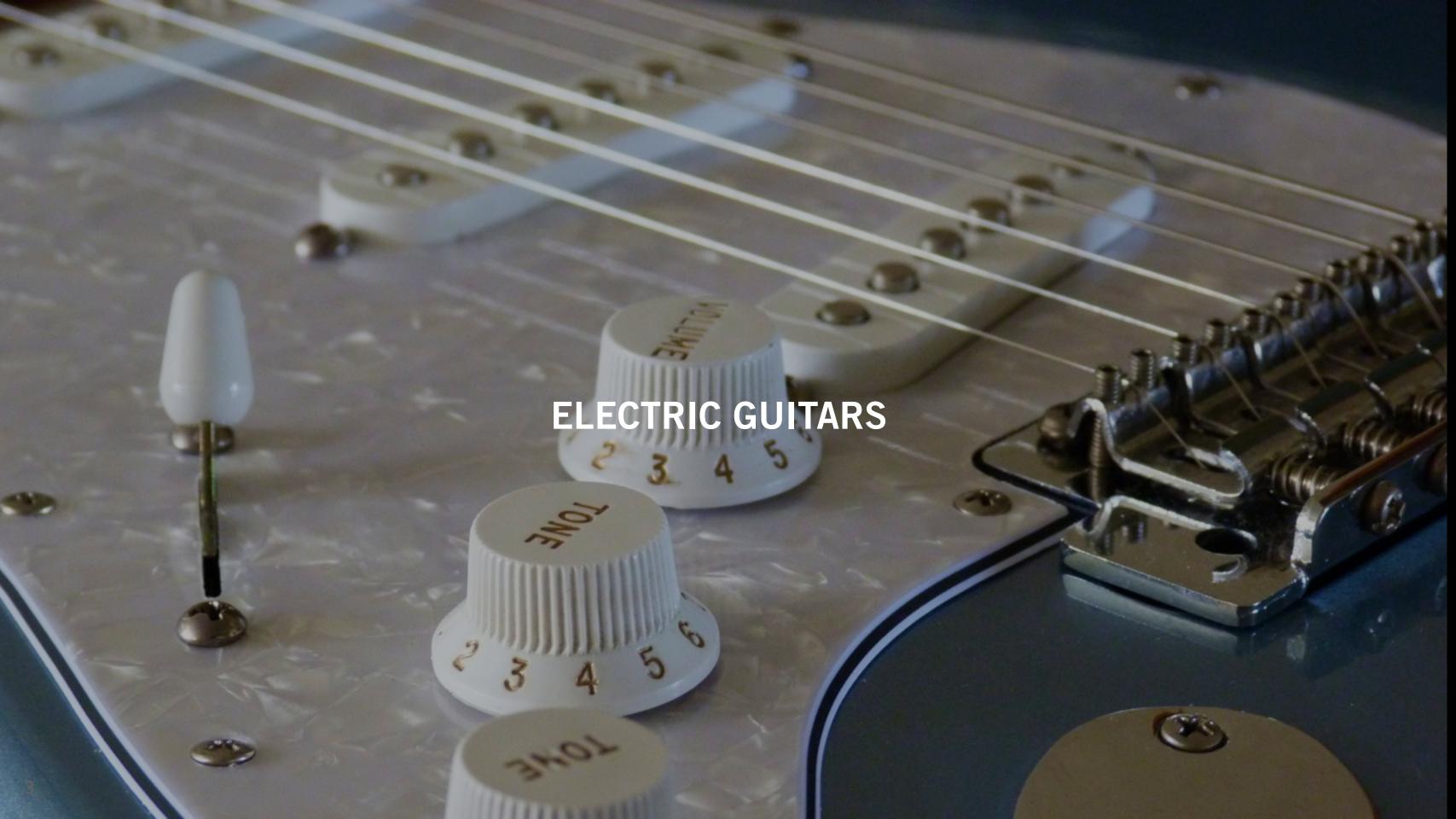


notetaker needed

http://yukon.accessiblelearning.com/virginia/ApplicationNotetaker.aspx



THE "FRYING PAN"

RICKENBACKER ELECTRO A-22

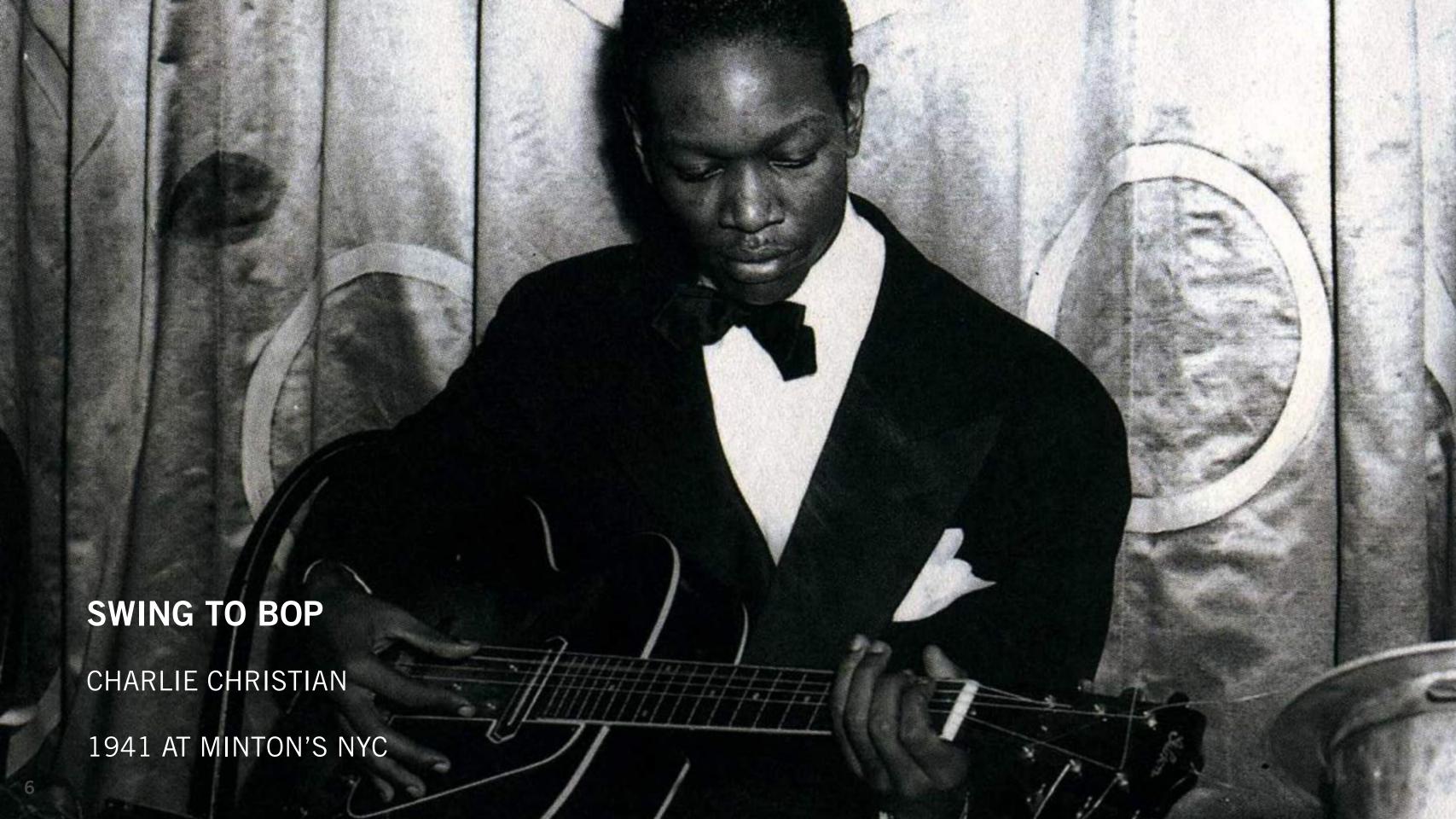
INVENTED BY GEORGE BEAUCHAMP & PRODUCED BY ADOLPH RICKENBACKER IN 1931



EARLY ELECTRIC GUITARS (1930-1945ish)

ELECTRIFIED 'SPANISH STYLE' ACOUSTIC GUITARS







SOLID BODY ELECTRIC GUITARS

LES PAUL INVENTS "THE LOG" IN 1940



LES PAUL INVENTS "THE LOG" IN 1940











FENDER TELECASTER 1950

GIBSON LES PAUL 1951

GRETSCH WHITE FALCON 1955

GIBSON SG 1961

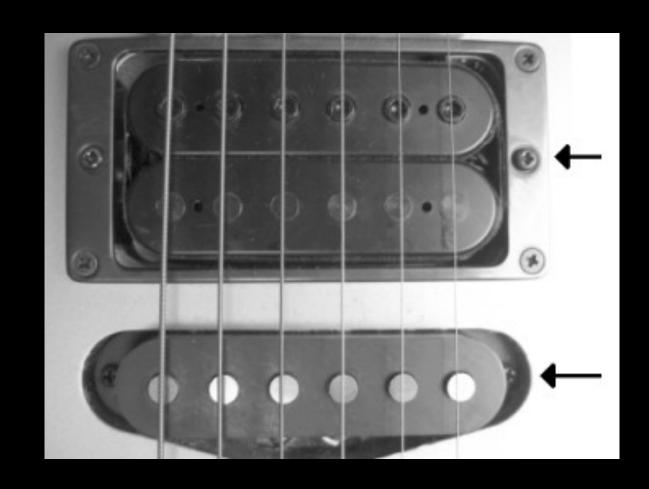


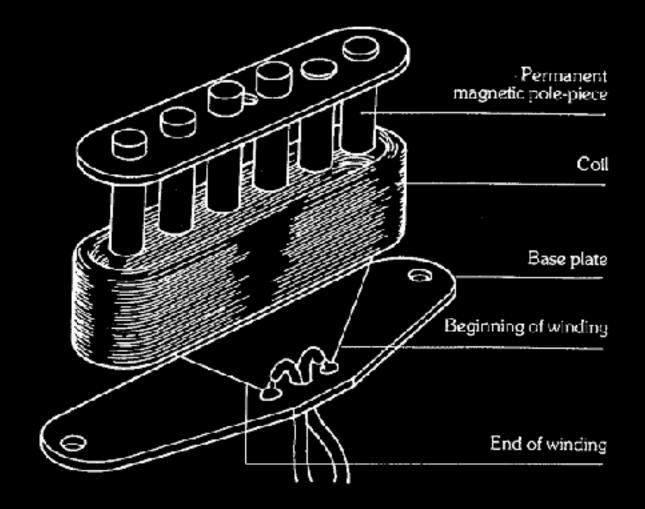




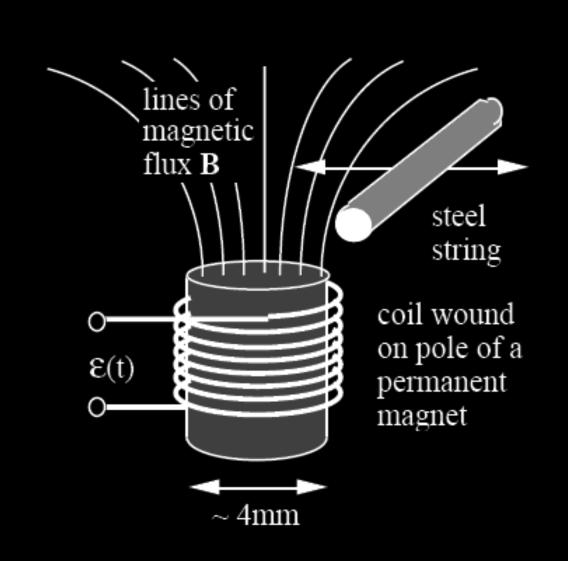
HOW DO GUITAR PICKUPS WORK?

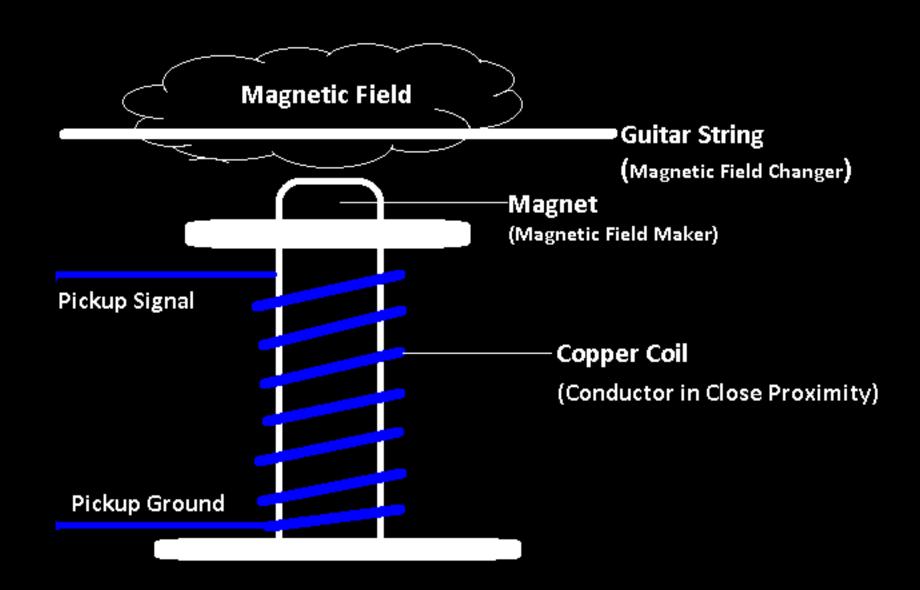
Faraday's Law - a changing magnetic field will generate electricity in a conductive wire



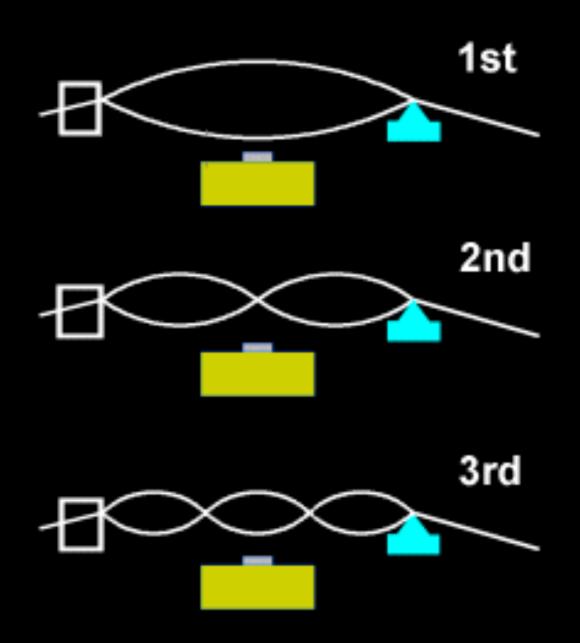


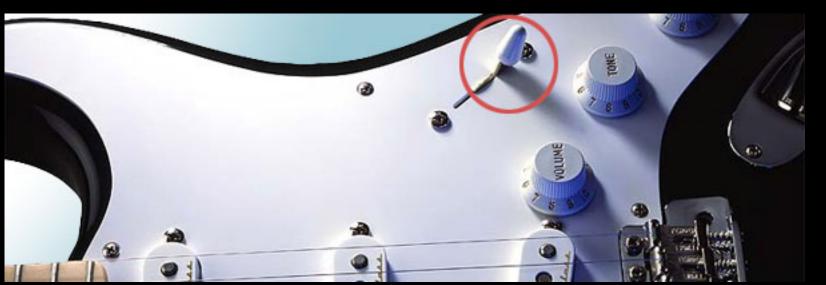
HOW DO GUITAR PICKUPS WORK?

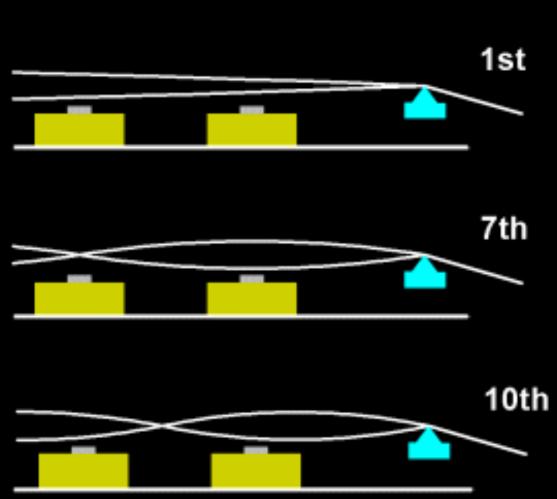




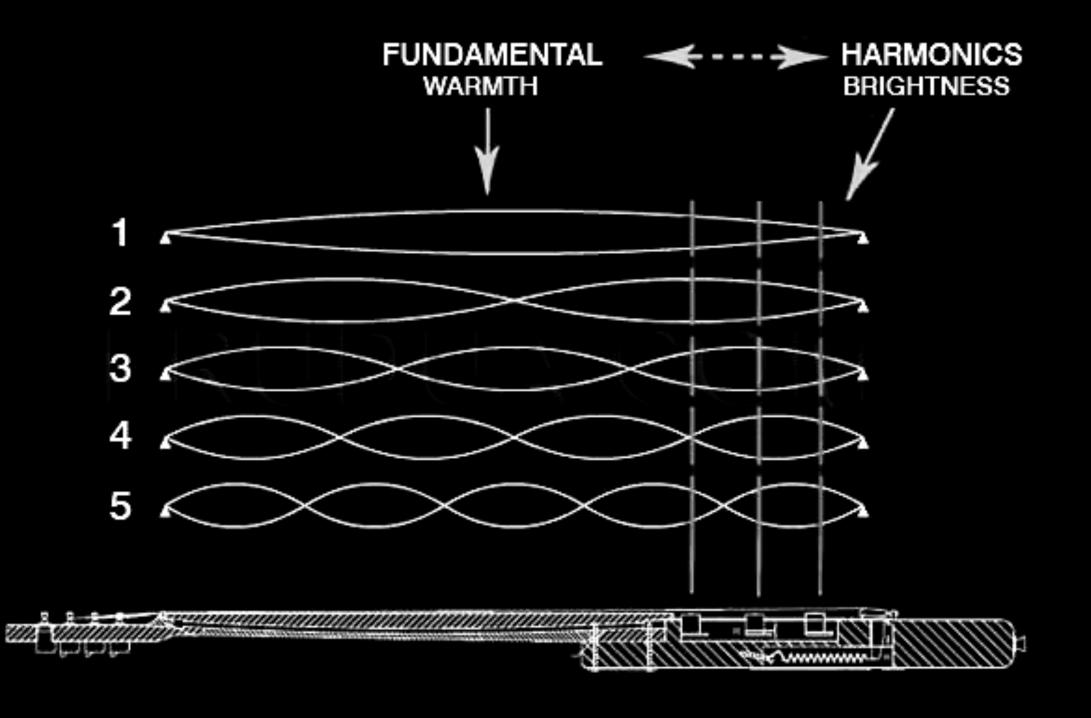
PICKUP SWITCH



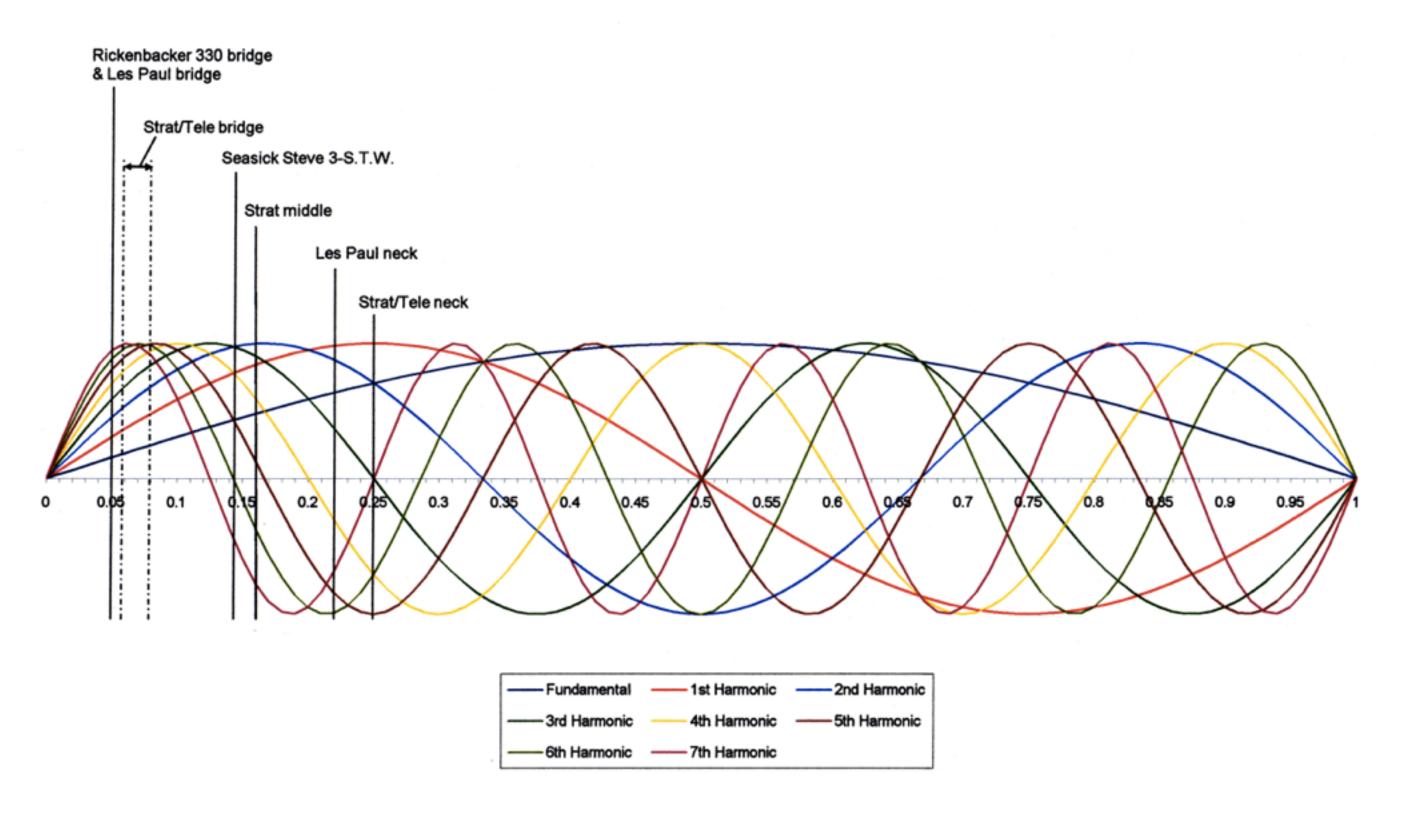




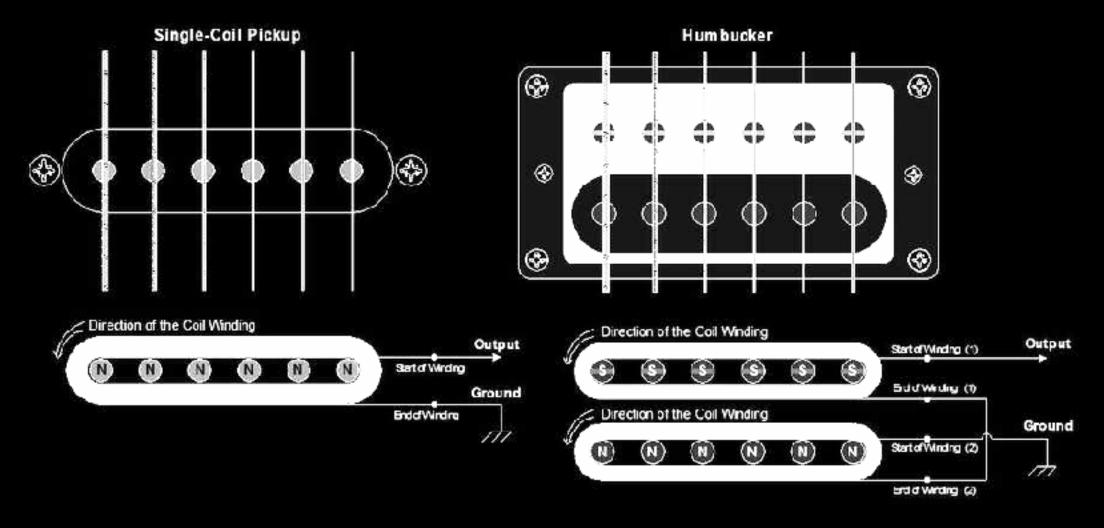
PICKUP PLACEMENT



PICKUP POSITIONS ON FAMOUS ELECTRONIC GUITARS



SINGLE COIL VS. HUMBUCKER



DIFFERENTIAL SIGNAL





MULTITRACK TAPE

Late 50s and 60s

8 tracks recorded to 1 inch or 2 inch tape

Allowed for non-destructive overdubbing

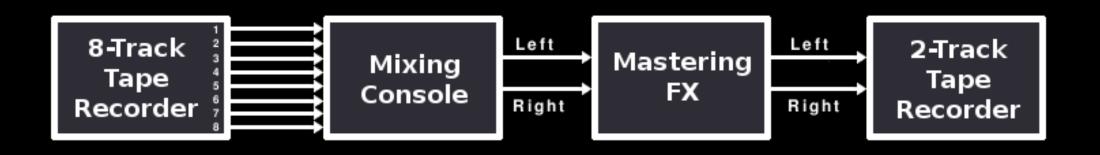
no mechanical sync problems

creative bouncing



BOUNCING & MASTERING TAPE





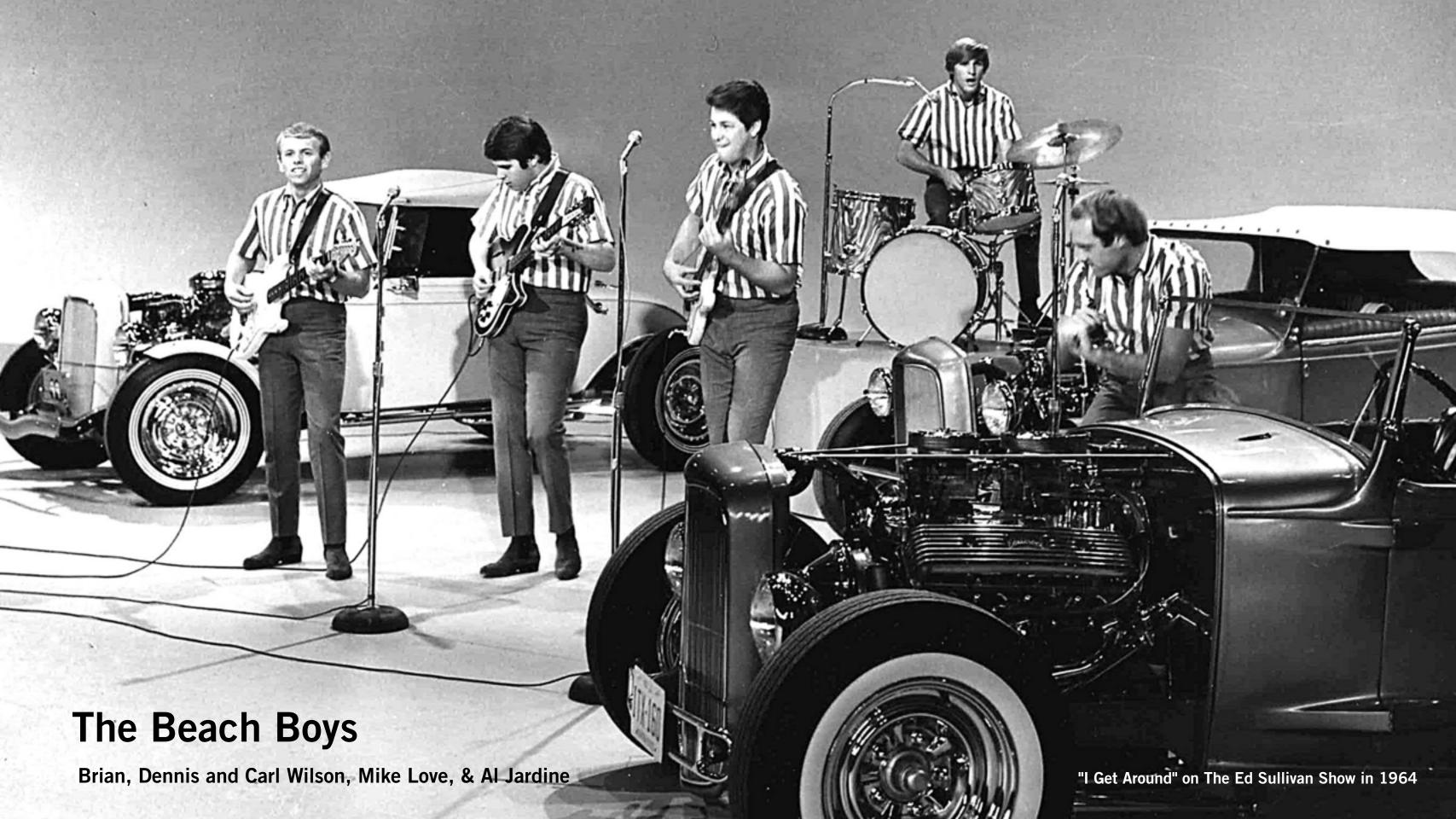
NEW FORMS

Concept Album: conceived as a single composition more than a collection of songs.

Studio Album: studio techniques and instrumental forces that could not be reproduced on stage.

NEW ELEMENTS

Synthesized sounds, surrealist collage, tape manipulation, echo, extreme panning, vocal processing, feedback, sound effects (everyday sounds), spatial effects, orchestral effects.



Brian Wilson

songwriter, producer & studio perfectionist

- **★** studio arrangements were "impossible to perform live"
- **★** why mono?
- **★** the studio as an instrument, a compositional tool







PET SOUNDS (1966)







LISTEN "GOD ONLY KNOWS"

THE BEATLES

formed in 1960 in Liverpool, England

over 1 billion records sold

stopped touring in 1966 and focused on studio production

John Lennon, George Harrison, Paul McCartney, Ringo Starr at Shea Stadium 1966



SGT. PEPPER'S LONELY HEARTS CLUB BAND





A DAY IN THE LIFE

echo, stereo panning and tape manipulation. 4 track tape

took 34 studio hours to complete.

for the orchestral parts Martin wrote out a somewhat improvisatory score starting with their lowest note and ending on their highest note.

ELECTRIC GUITAR IN THE 1960s

Pedals and Amplifiers

Distortion and Feedback

The 60s introduced effect pedals that brought signal processing to live music.

Musicians had previously experimented with distortion, often as a result of accidentally or intentionally dropped amps and damaged speaker cones.

With both distortion and feedback, what originally was conceived of as a failure is repurposed as a feature



JIMI HENDRIX

in short time, redefined the electric guitar

pioneered the use of effects pedals and feedback.

Clear overdriven tone, extreme sustain, wah & octave

played guitar for Little Richard

Moved to London in 1966

first major US appearance was the **1967 Monterey Pops Festival** (guitar burn)

studio virtuoso (Electric Ladyland, 1968)

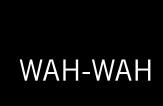
died of asphyxia at the age of 27



EFFECTS PEDALS



FUZZFACE





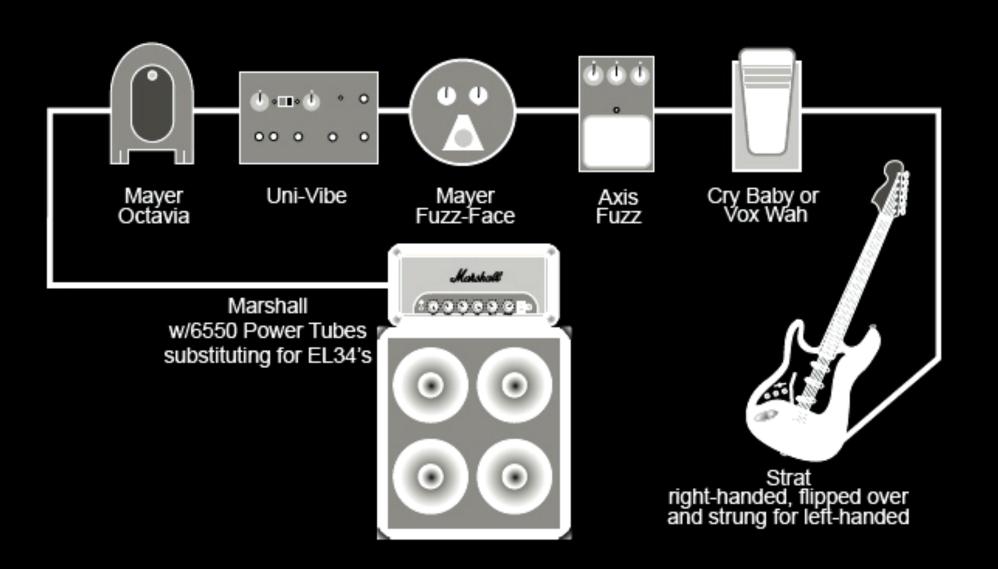
OCTAVIAN



UNI-VIBE



JIMI HENDRIX'S TYPICAL SETUP



ARE YOU EXPERIENCED?







ELECTRIC LADYLAND

Electric Ladyland (1968) was the first time Hendrix had complete control. He produced and directed the album, using a 16-track tape recorder.

Hendrix collaborated with technician/inventor Roger Mayer to create new guitar effects. Also used echo, reverb and various tape effects.

Stereo effects, phasing,

... And The Gods Made Love (Opening Track)

