



BSC

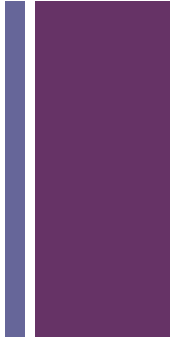
Birmingham-Southern College

4th Presentation



nued)

Performance Media:
Instruments (continued)



Brass

- Sound is produced by “buzzing” into the instrument
- The longer the tube, the lower the pitch
- Basically a piece of plumbing
 - Tube
 - Flared bell
 - Mouthpiece
 - Sometimes played using a mute



Brass

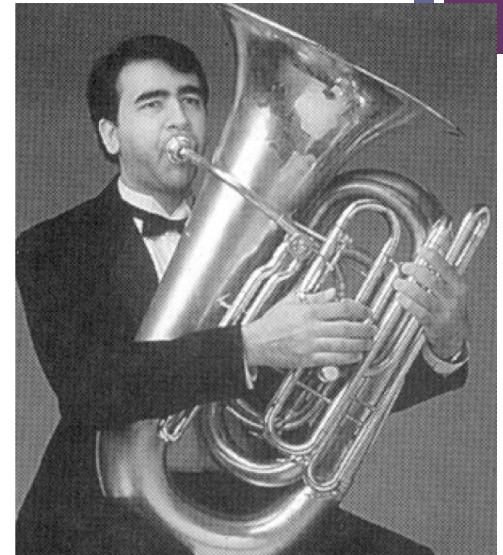
- Valves used to lengthen the tube



French
Horn



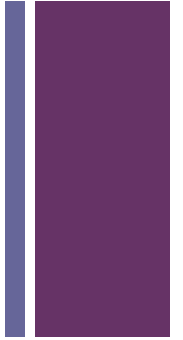
Trumpet



Tuba



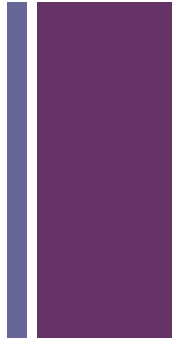
Trombone



Percussion

- Sound is (generally) produced by striking the instrument
- The larger the surface, the lower the pitch
- Two Types:
 - Definite Pitch
 - Indefinite Pitch

+ Percussion



- Definite Pitch
 - Membranophones
 - Tympani
 - Roto-toms

Tympani



+ Percussion

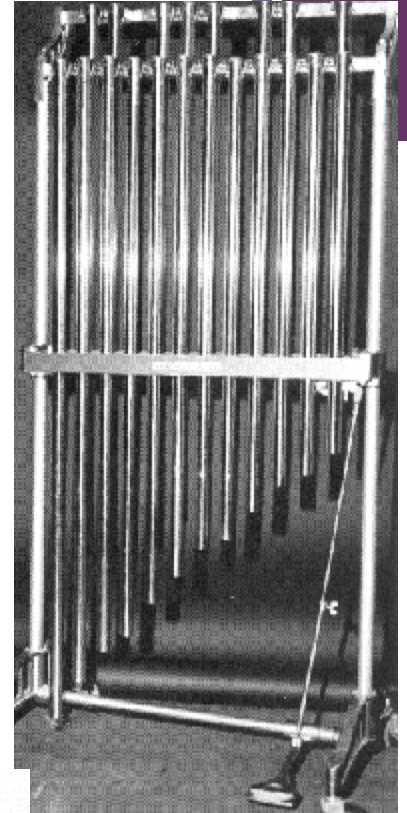
- Keyboard-type
 - Glockenspiel

- Vibraphone
- Marimba
- Xylophone
- Chimes

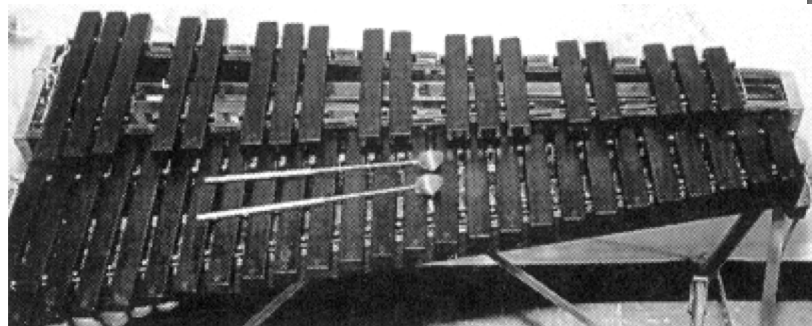
Glockenspiel



Chimes



Xylophone

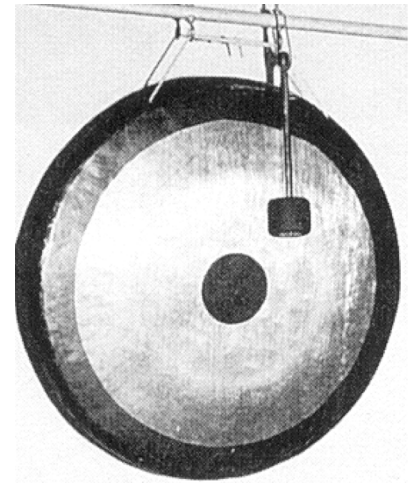
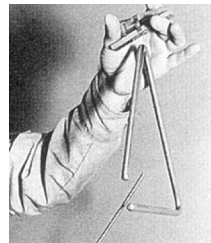
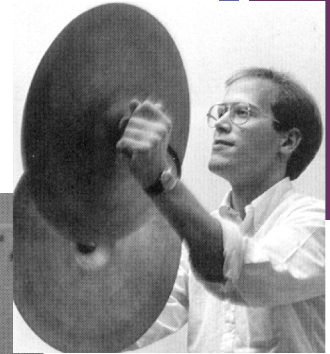
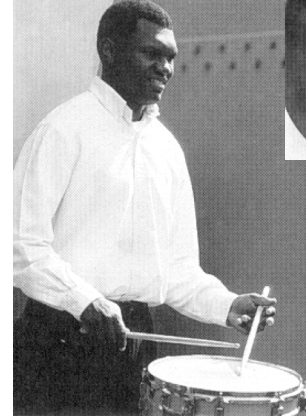


+ Percussion

■ Indefinite pitch

■ Bass drum

- Tenor drum
- Snare drum
- Tambourine
- Triangle
- Cymbals
- Gong



• Auxiliary percussion instruments

+ Keyboard Instruments

- Use piano-type keyboard for control

- Piano

- Sound production
- 88 keys

- Harpsichord

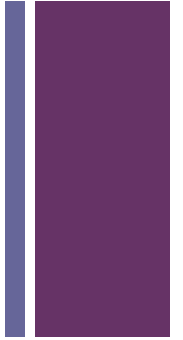
- Sound production

- Organ—sound production

- Accordion—sound production



+ Electric Instruments



- Electricity is an integral part of the sound production
- Two types:
 - Electrical instruments: utilize electricity to modify an existing acoustic sound
 - Electric Guitar
 - Electric Bass Guitar
 - Electric Violin
 - Some electric pianos
 - Other amplified instruments

+ Electric Instruments



- Electronic: use electricity to artificially create sound
 - Synthesizer
 - Theremin



The Theremin



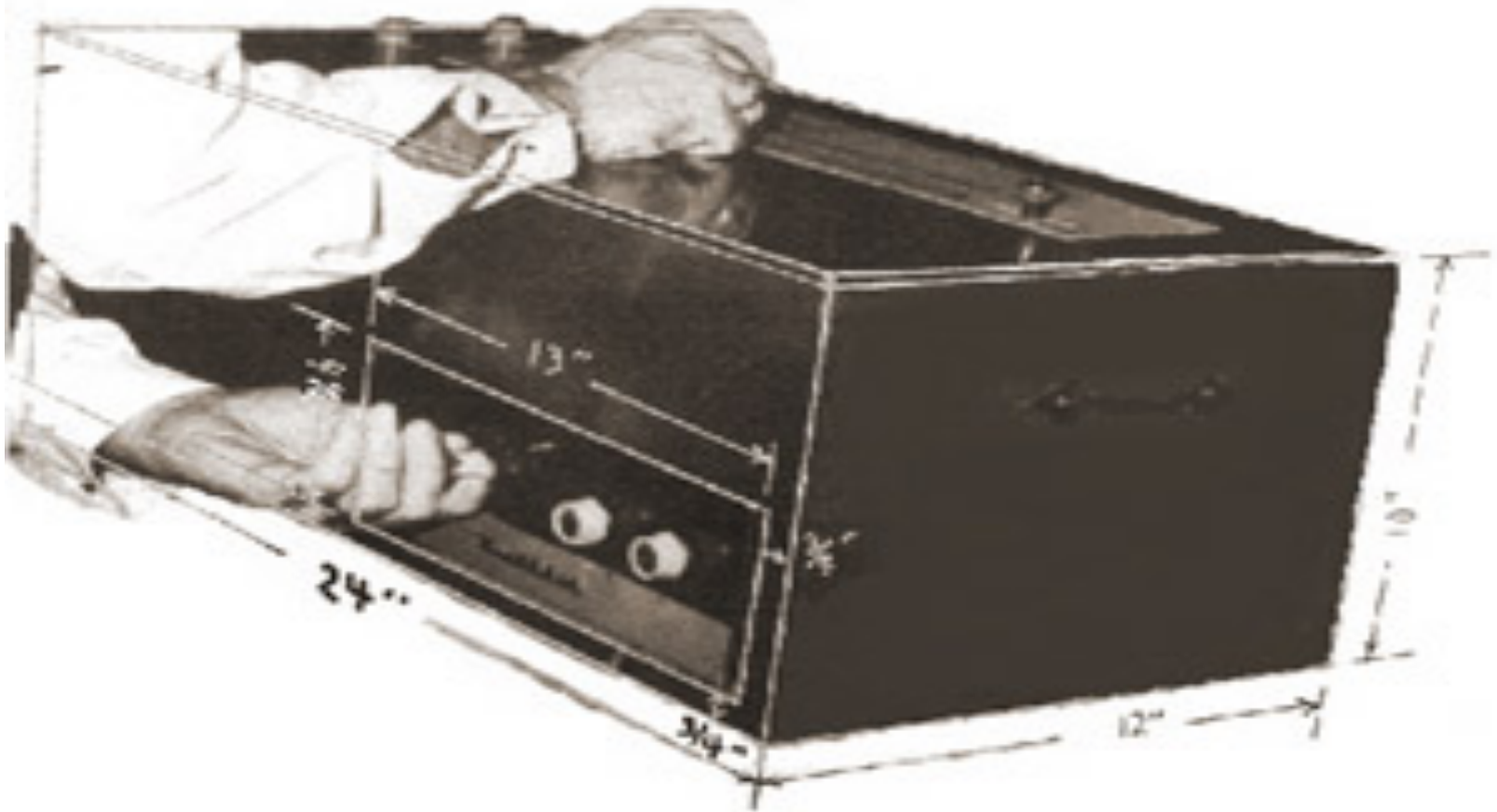
- Created by physicist Leon Theremin
 - Although he loved music he worked in military defense - also used as a motion tripwire.
 - Vertical bar controls the volume and horizontal bar controls the pitch
 - Clara Rockmore one of the few theremin virtuosos
 - Other theremin-like instruments include the ondes martinu and the electro-theramin (used by the Beach Boys on Good Vibrations)

+

Clara Rockmore and Leon Theremin



+ The Electro-theremin





The Synthesizer



- First created by Robert Moog in 1963
- First experimented making theremins
- Uses analog oscillators, wheels, knobs to change the sound
- Most modern synths are digital
-

+ Moog





End