



**Spinning Records**

**COURSE WEBSITE**

**[www.technosonics.info](http://www.technosonics.info)**

**LAB SECTIONS MEET THIS WEEK!**

## ACOUSTICS AND AUDIO

What is sound? How is it recorded? How do we process it?

## ELECTRONIC MUSIC HISTORY

specific technologies ↔ musical ideas

## COMPUTER MUSIC PRODUCTION

techniques for organizing sound using computers

**music**

**technology**





# Spinning Records

**records (and recording)...**

**musical impact**

**economic impact**

**social impact**





# PHONOGRAPH

Invented 1877





**THE  
EDISON  
NEW STANDARD  
PHONOGRAPH.**

**PRICE \$20 COMPLETE**



EDISON NEW STANDARD,	\$20.00.
" Home Phonograph,	30.00.
" Spring Motor "	75.00.
" Electric " "	75.00.

ALL GENUINE PHONOGRAPHS bear this signature:

TRADE  
*Thomas A Edison*  
MARK

*Catalogue No. 3 free from the*  
**NATIONAL PHONOGRAPH CO.,**  
St. James Building, Broadway & 26th St., New York.  
Edison records 50 cents each, \$5.00 per dozen.

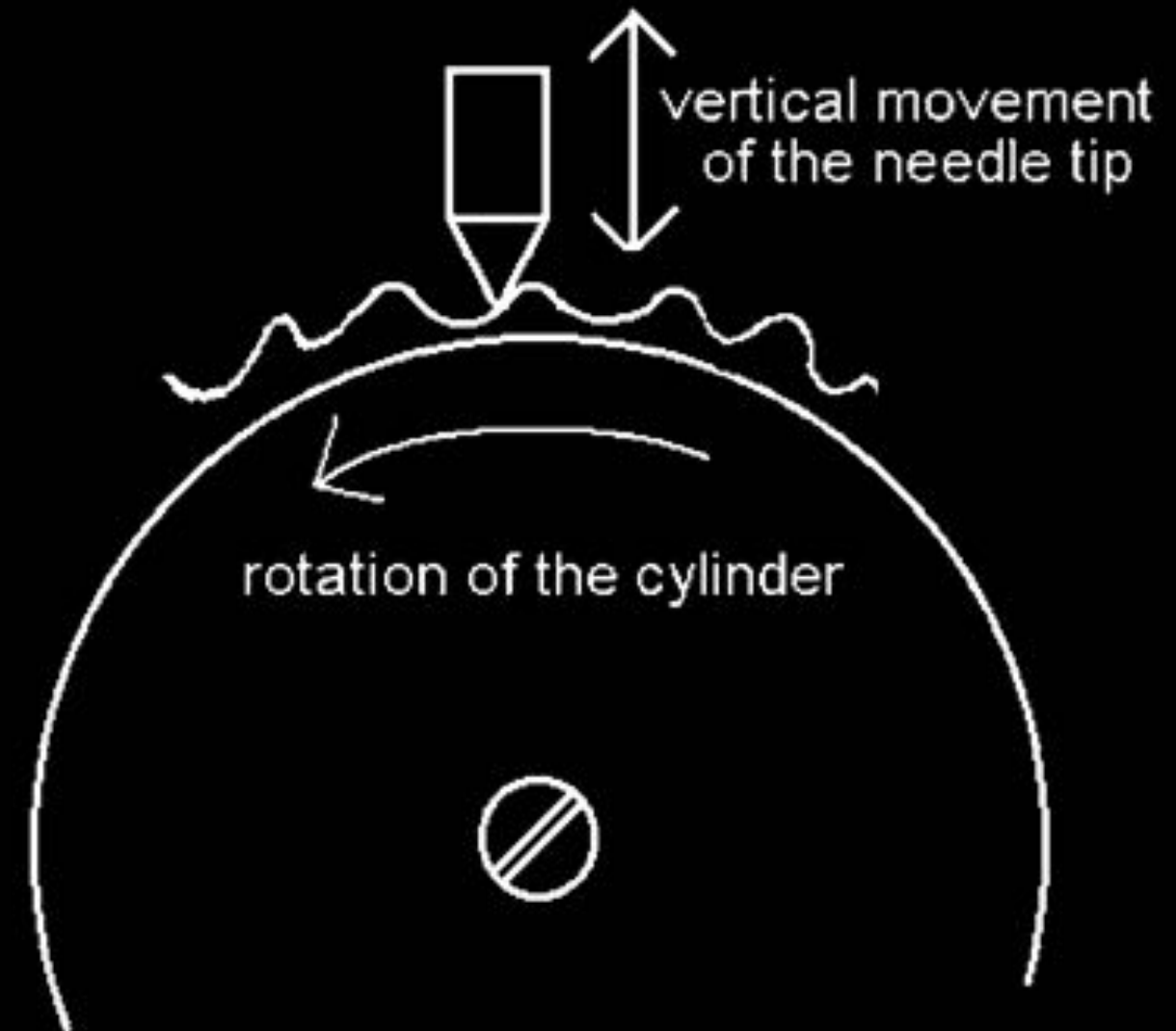
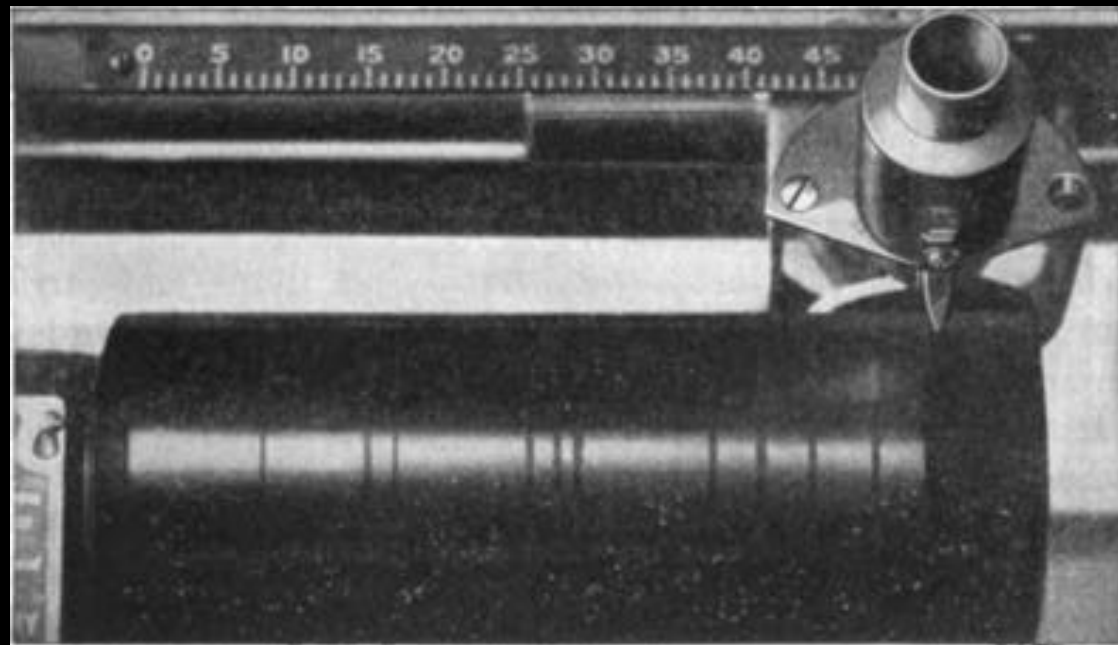
Produces the same results as the other famous models of the GENUINE EDISON PHONOGRAPH, using the same records and the same reproducer. Simplest, most durable, and cheapest talking-machine.

“...I don't want the phonograph sold for amusement purposes, it is not a toy. I want it sold for business purposes only.”

Edison

# Vertical Cuts

“Hill and Dale”







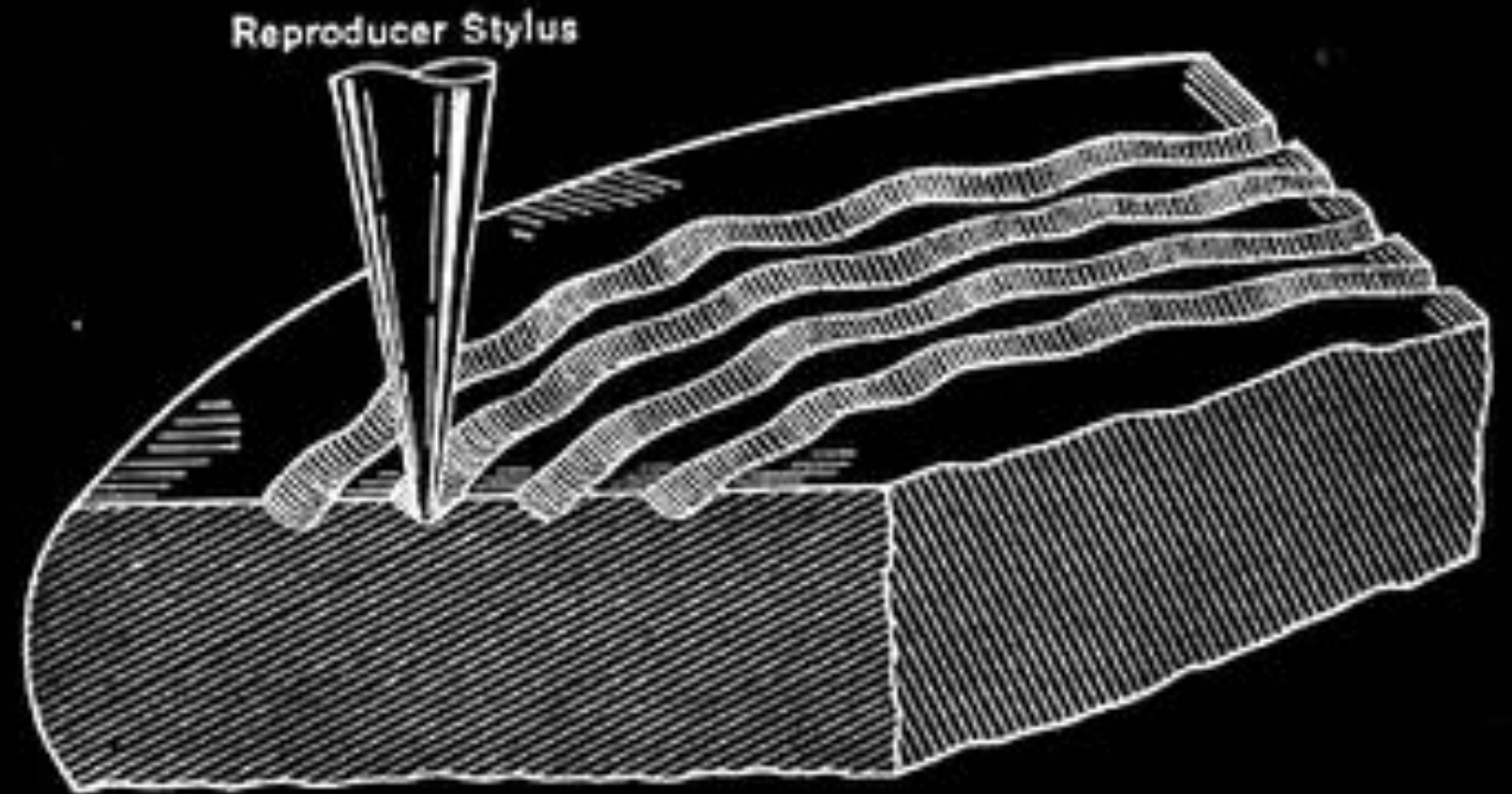
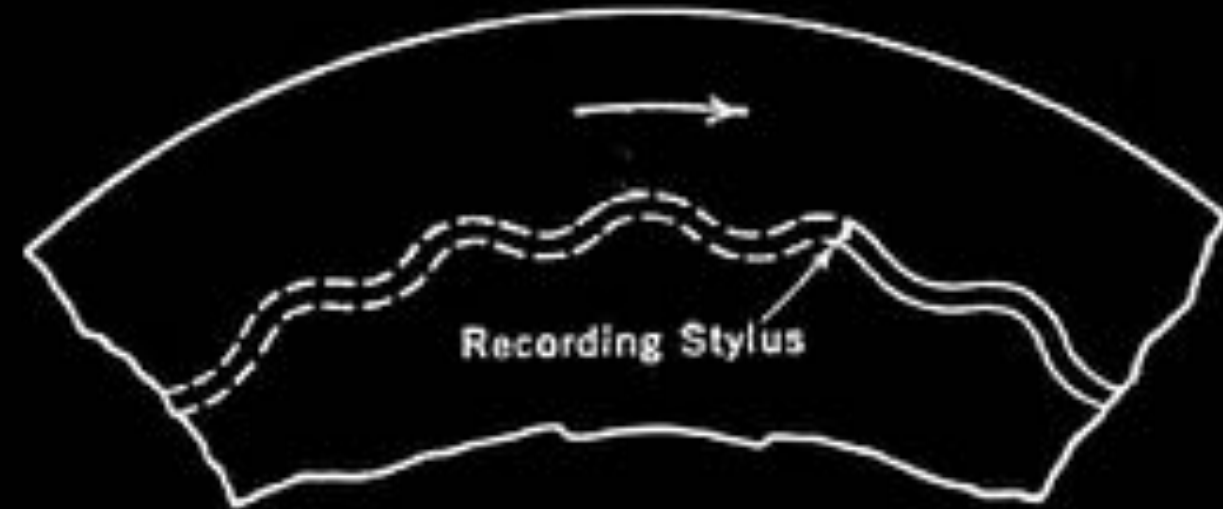
# GRAMOPHONE

Emile Berliner in 1887



# Lateral Cuts

Stylus moves horizontally







Needle

Grooves



Section of Record.

# CYLINDER VS. DISC

(PHONOGRAPH VS. GRAMOPHONE)



# RECORD FORMATS

YEARS	TYPE	RECORDING TIME	...
1888-1929	Cylinder	2-4 minutes	
1900-40s	78 rpm	3-5 min per side	
1948 -	LP (33 1/3 rpm)	15-30 mins per side	album (12")
1949	45 rpm	4-6 per side (EP 7m)	single (7")



## RECORDING PROCESS





# ELECTRICAL RECORDING

first electrically recorded discs in 1925



# JOHN CAGE



**1939 Imaginary Landscape #1** - records of audio test tones played on two variable speed turntables, with percussion and piano.





# DIRECT DRIVE TURNTABLES

**1969: Technics releases first direct drive turntable**

# 1970s DISCO DJs



Francis Grasso credited with developing a mixing technique called “slip-cueing”





# DJ KOOL HERC

mid 70s: isolating the “break” and scratching techniques







**ROCKIT**

**Herbie Hancock**

**DJ Grand Mixer D.ST**











# DIGITAL TURNTABLES

a turntable “controller”

some use ‘signal records’

scratching data







# DJ Software

Title	Artist	Album	Length	
Bad Romance	Lady Gaga	* 119.0	4:52	
Stars On 45	Global Deejays	* 129.4	4:43	
It's The Way You Love Me (Feat. Kelly Rowland)	David Guetta	* 128.0	4:52	

# Myriam Bleau / Soft revolvers



# CHRISTIAN MARCLAY







Christian Marclay

**Maria Chavez**

**Book of Abstract Turntable Techniques**





Maria Chavez

