PART 2

20 Years of MIDI

David Williams & Peter Webster
Illinois State and Northwestern University
dave.williams@ilstu.edu and pwebster@northwestern.edu

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PRW

Overview

Session 2

- Software Shift
- Hardware Shift
- Mainstream MIDI applications
- Creative MIDI performance gestures
- Remaining shortcomings of MIDI
- What is the next stage for MIDI?

Session 1

- HAPPY BIRTHDAY MIDI
- Historical timeline for audio and MIDI
- 3 things MIDI does well
- Most memorable MIDI event?

3 Things MIDI Does Well

	1983	Then	Now
Control	keyboard-to-keyboard, keyboard-to-computers	sync, MTC, SMPTE, more channels (32+)	virtual patching, trigger soft events
Gesture	keyboard and drum gestures	string, guitar, wind, pitch-to-MIDI, etc	any gesture can be captured
Sound	unique devices (no GM), FM synth dominant	GM, soundfonts, external digital sounds	GM2, DLS, computer-centric digital audio

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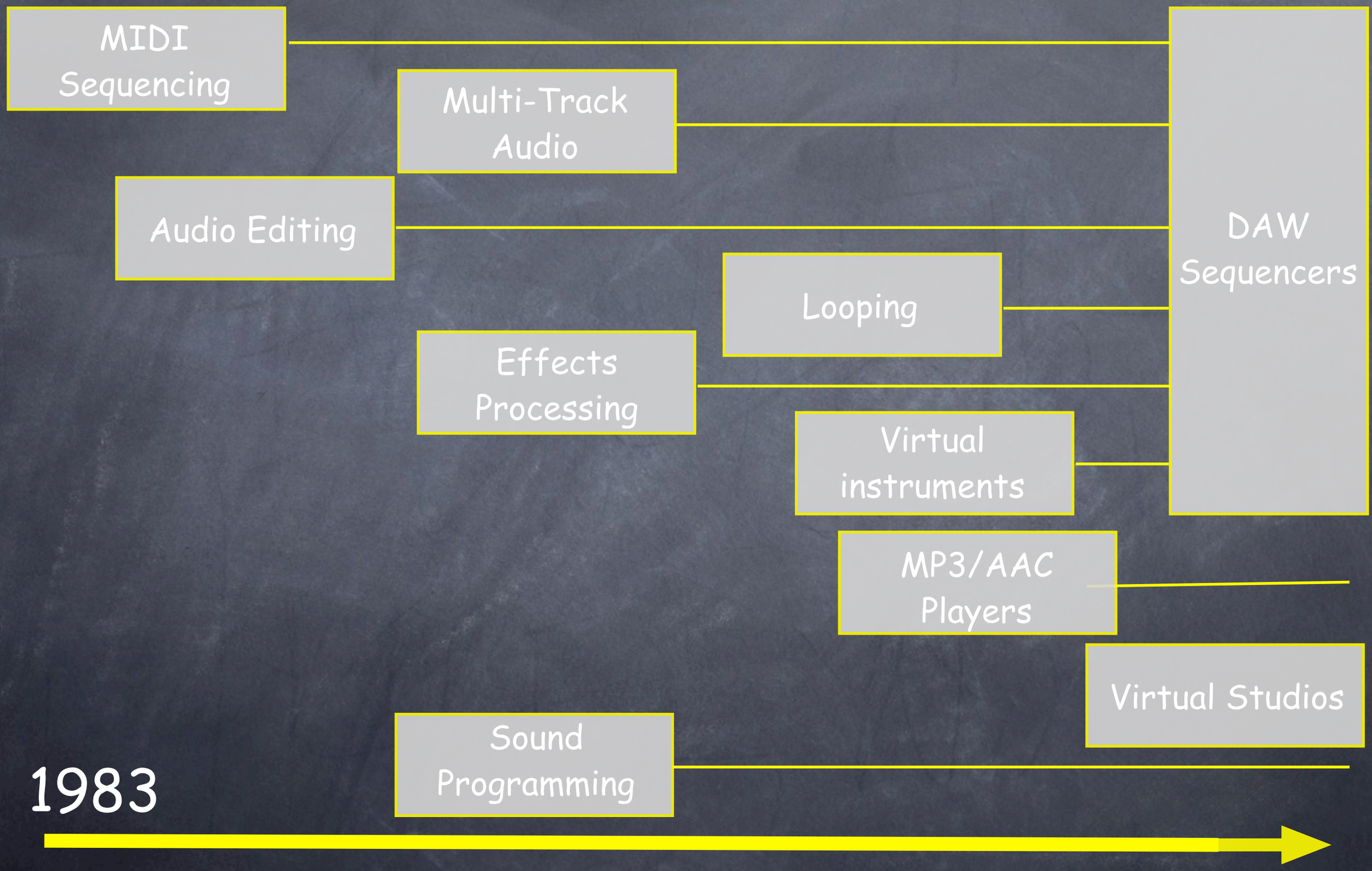
Software Shift



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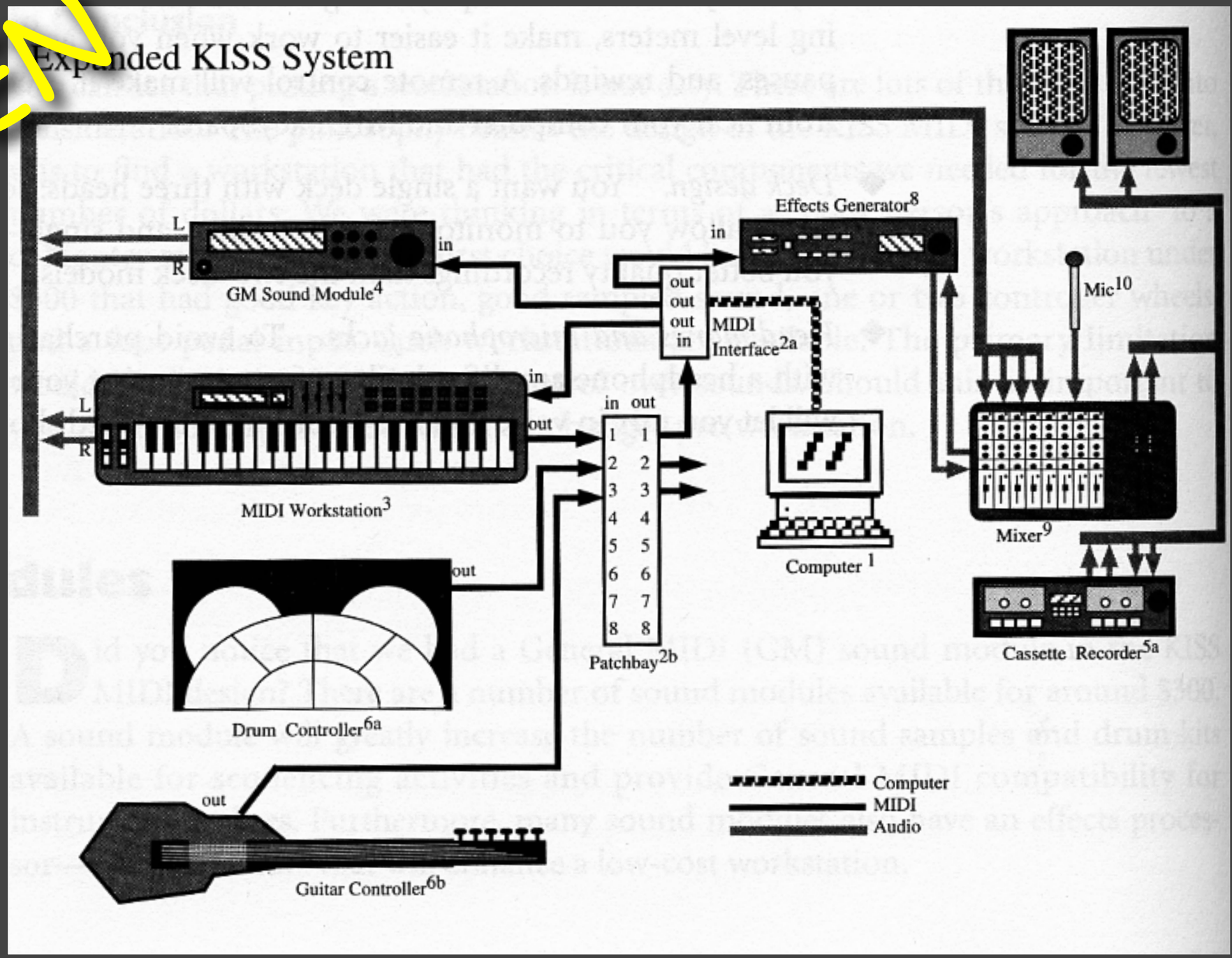
Hardware Shift

THEN



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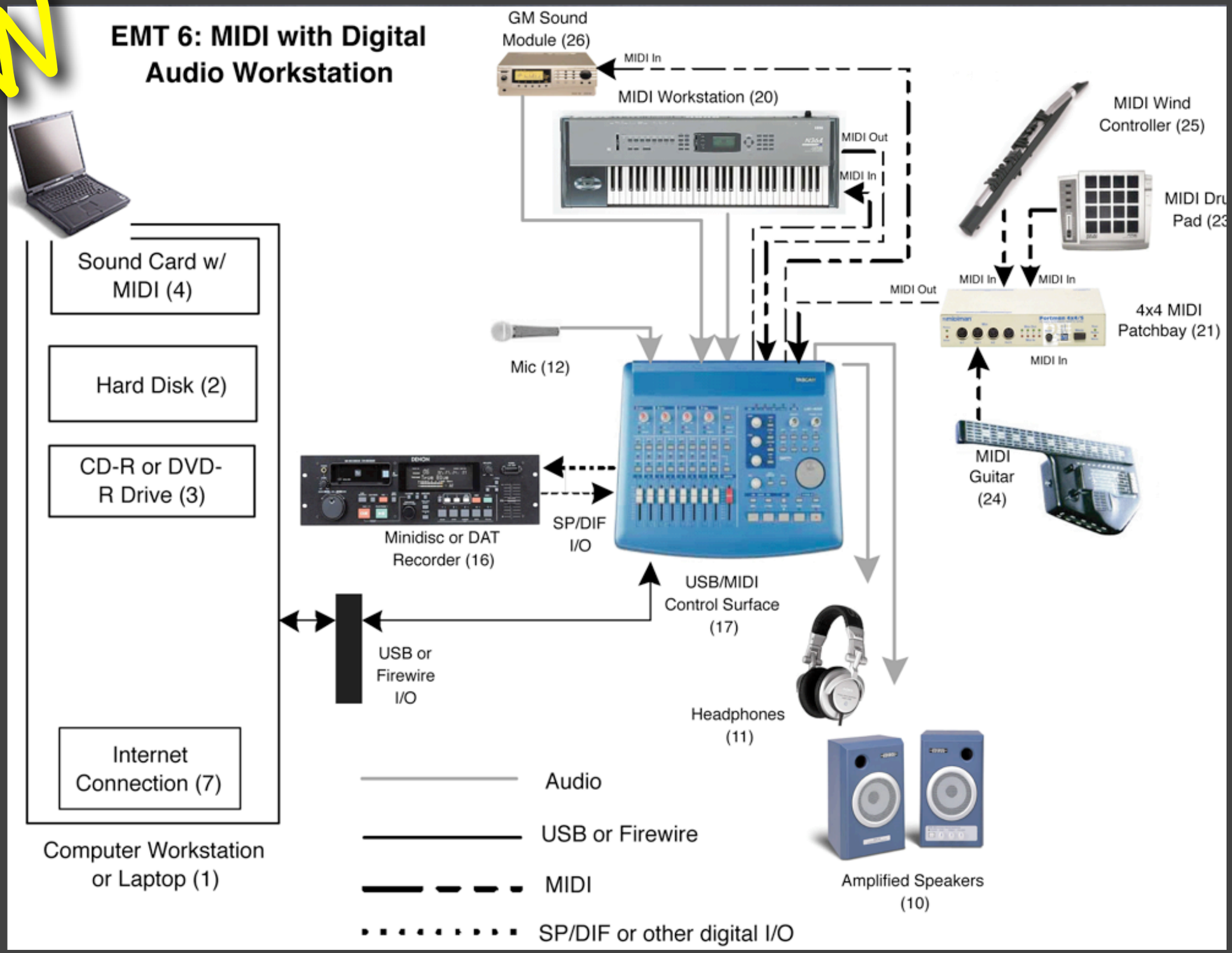
Hardware Shift

NOW



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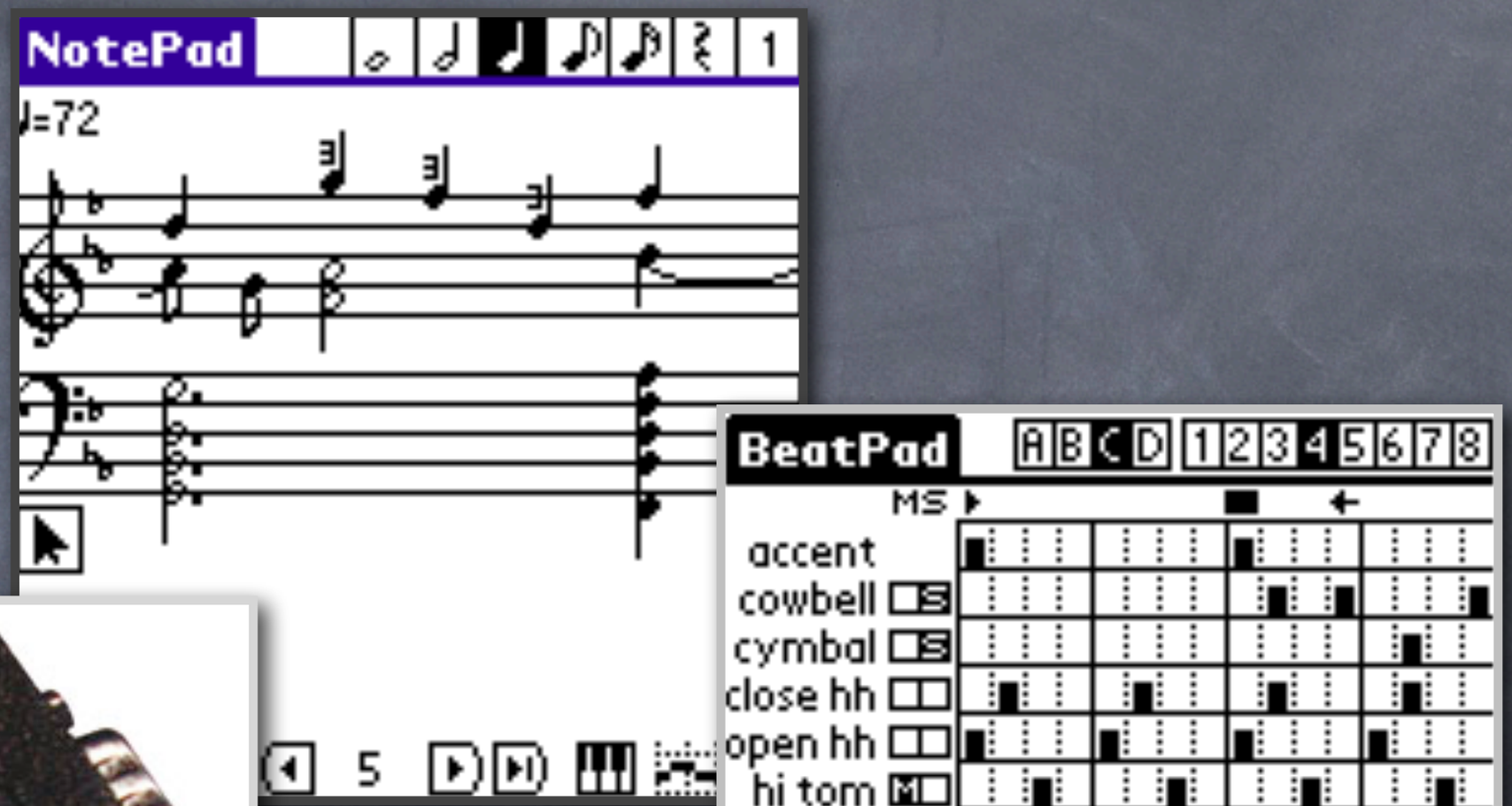
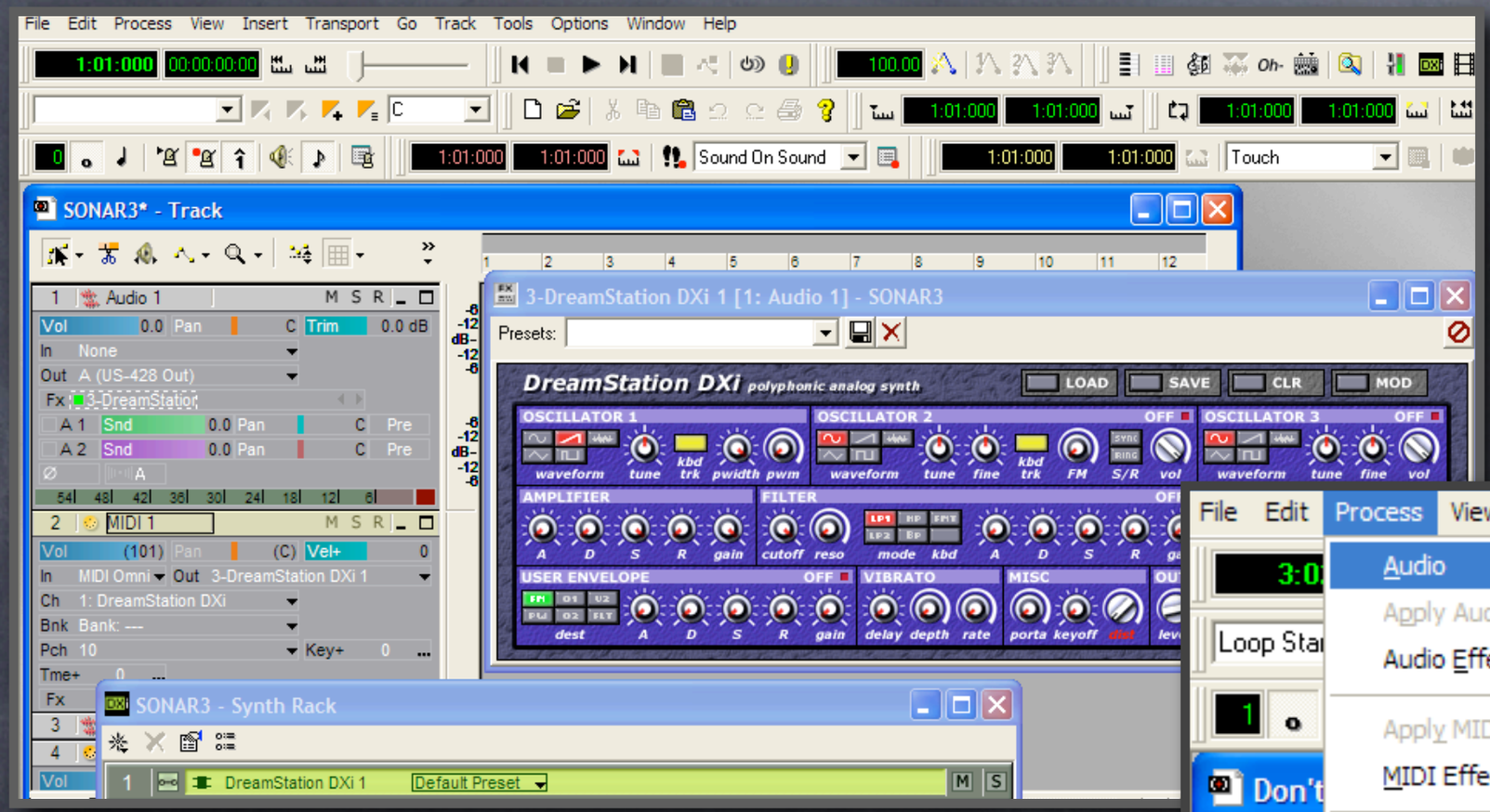
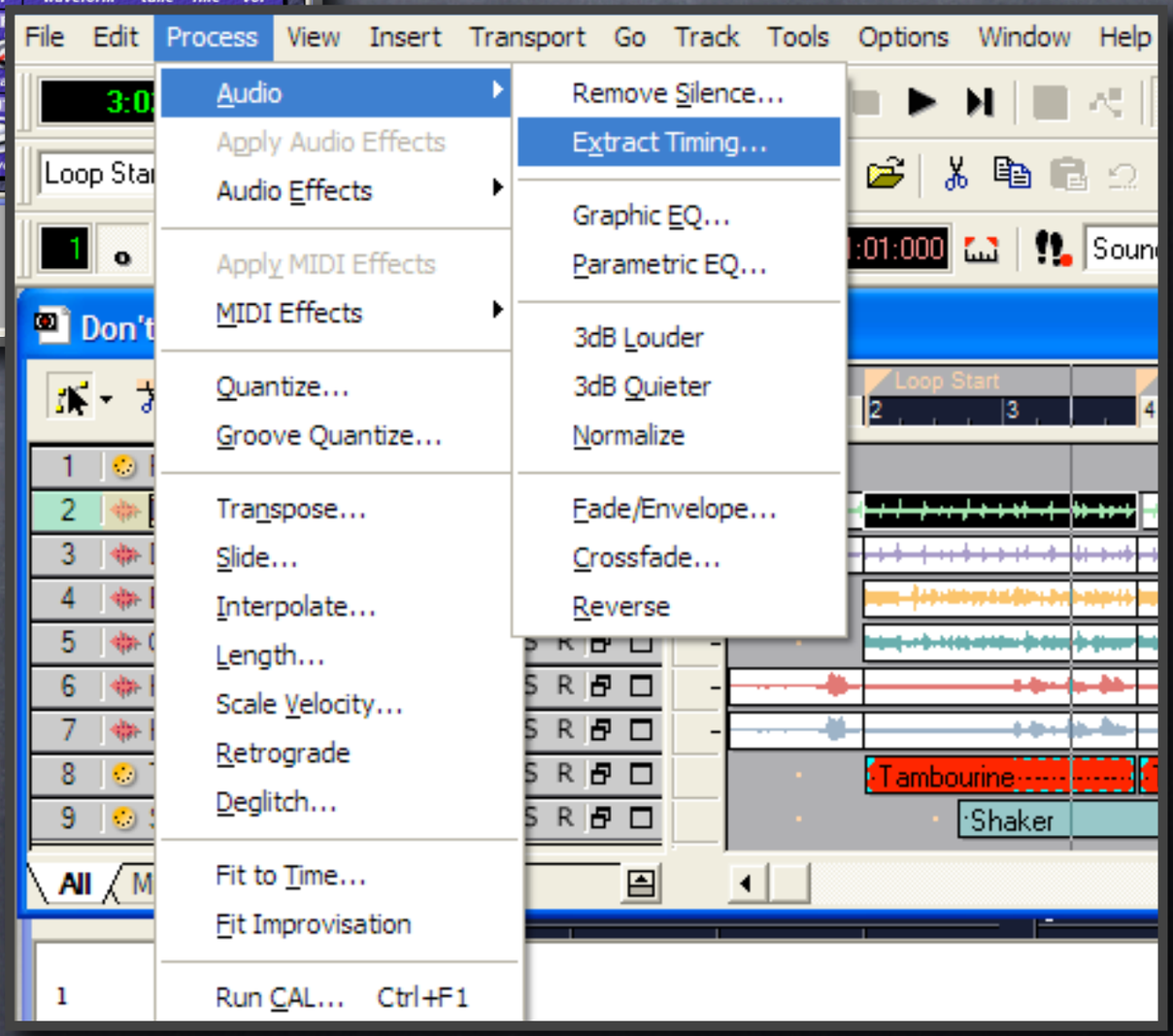
MIDI and Mobile



MIDI to DA to MIDI

Sonar (PC)





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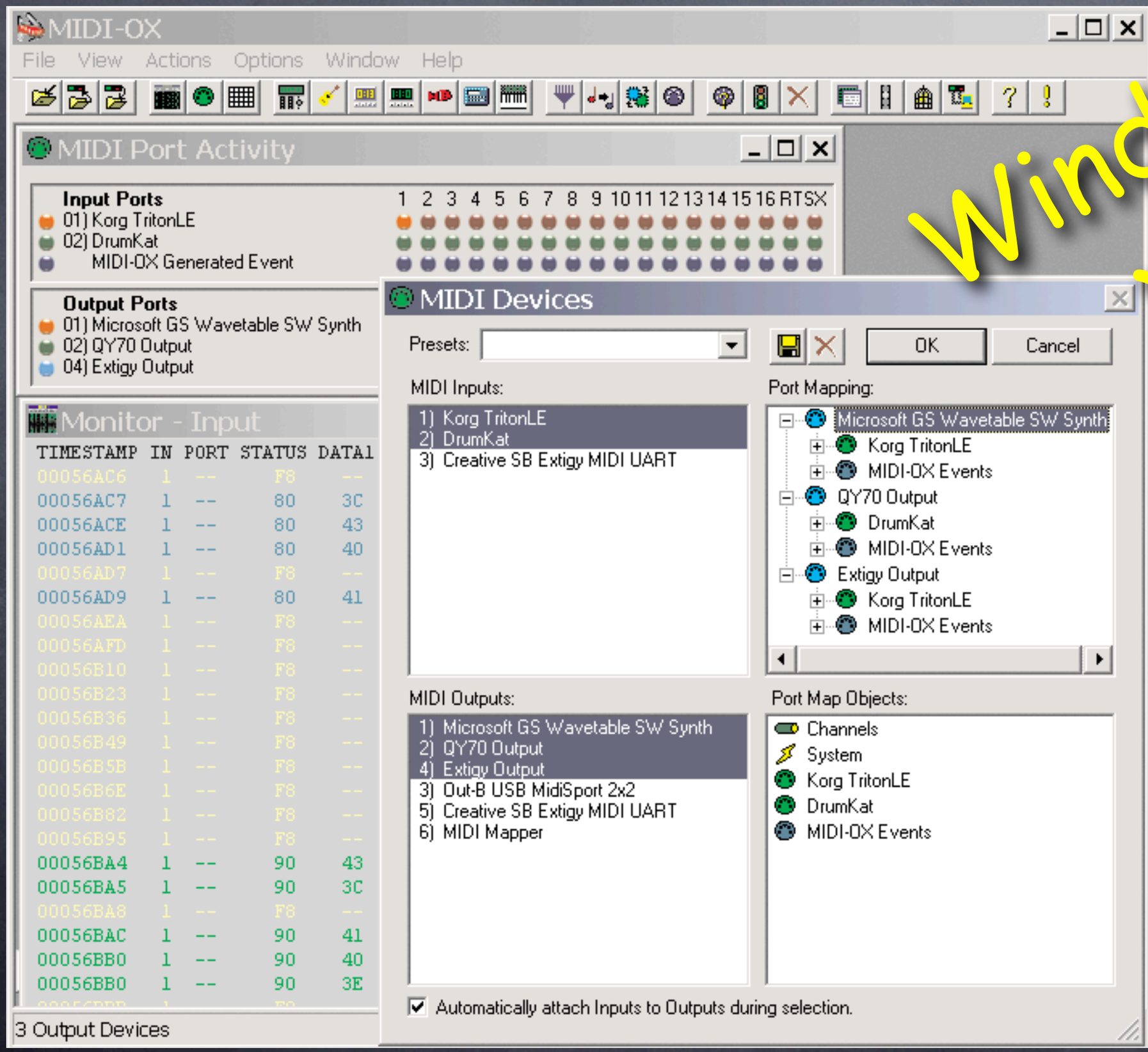
Virtual MIDI Patching



Windows XP

MIDI Yoke

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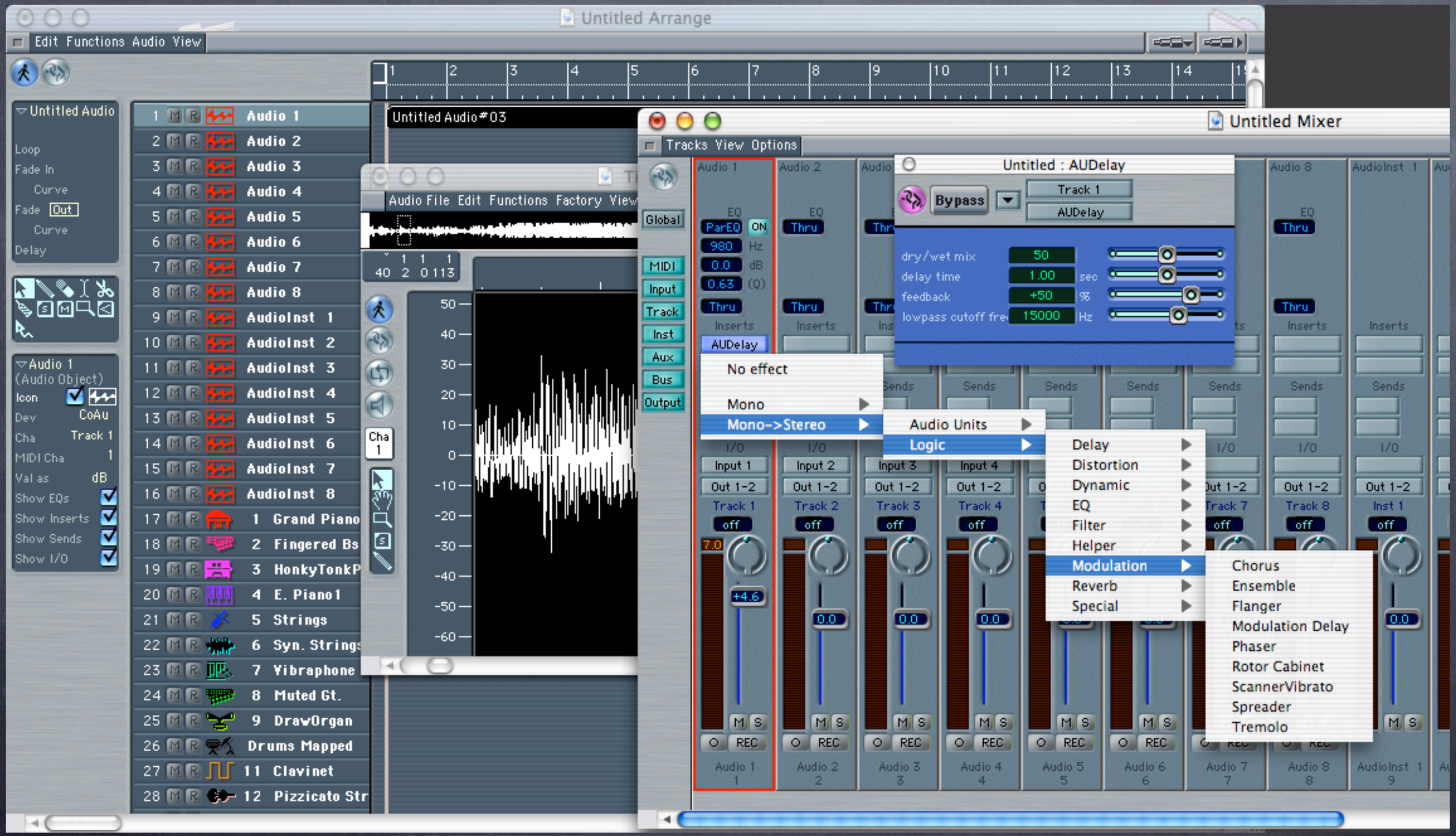
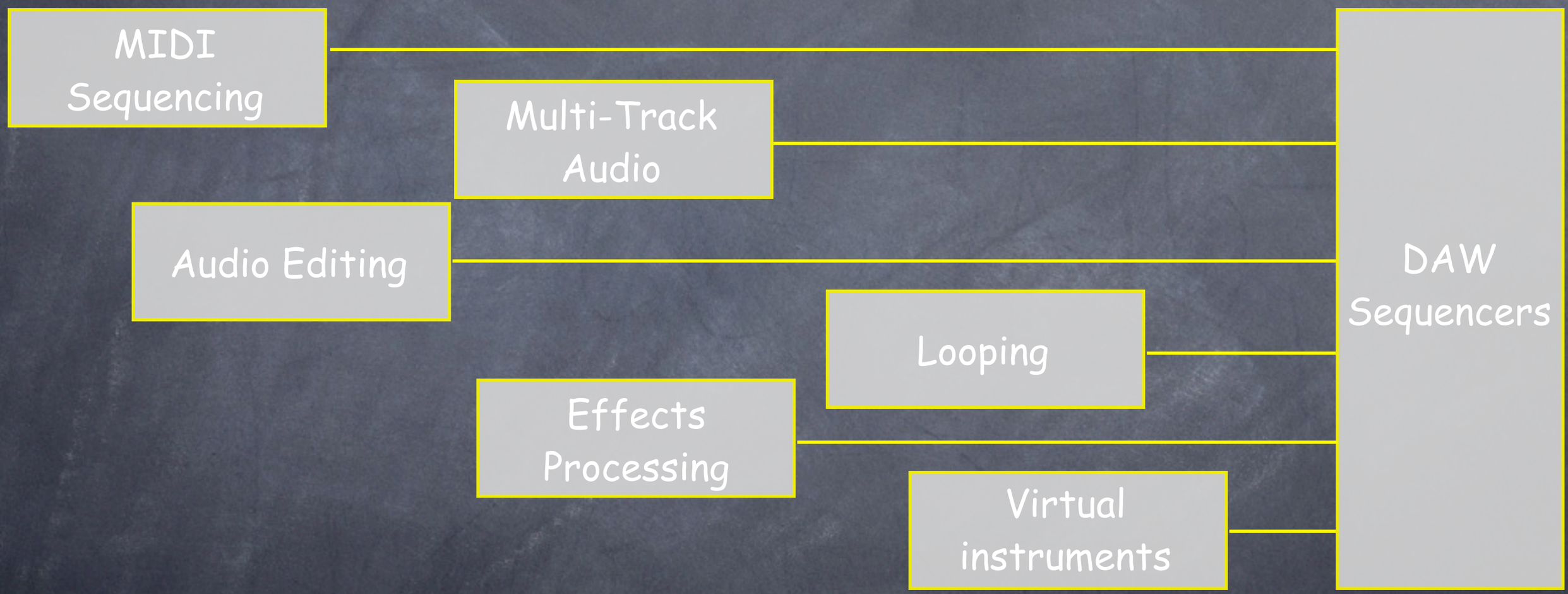
Logic Education Demo



Logic Education Demo



Reason/ Cubase

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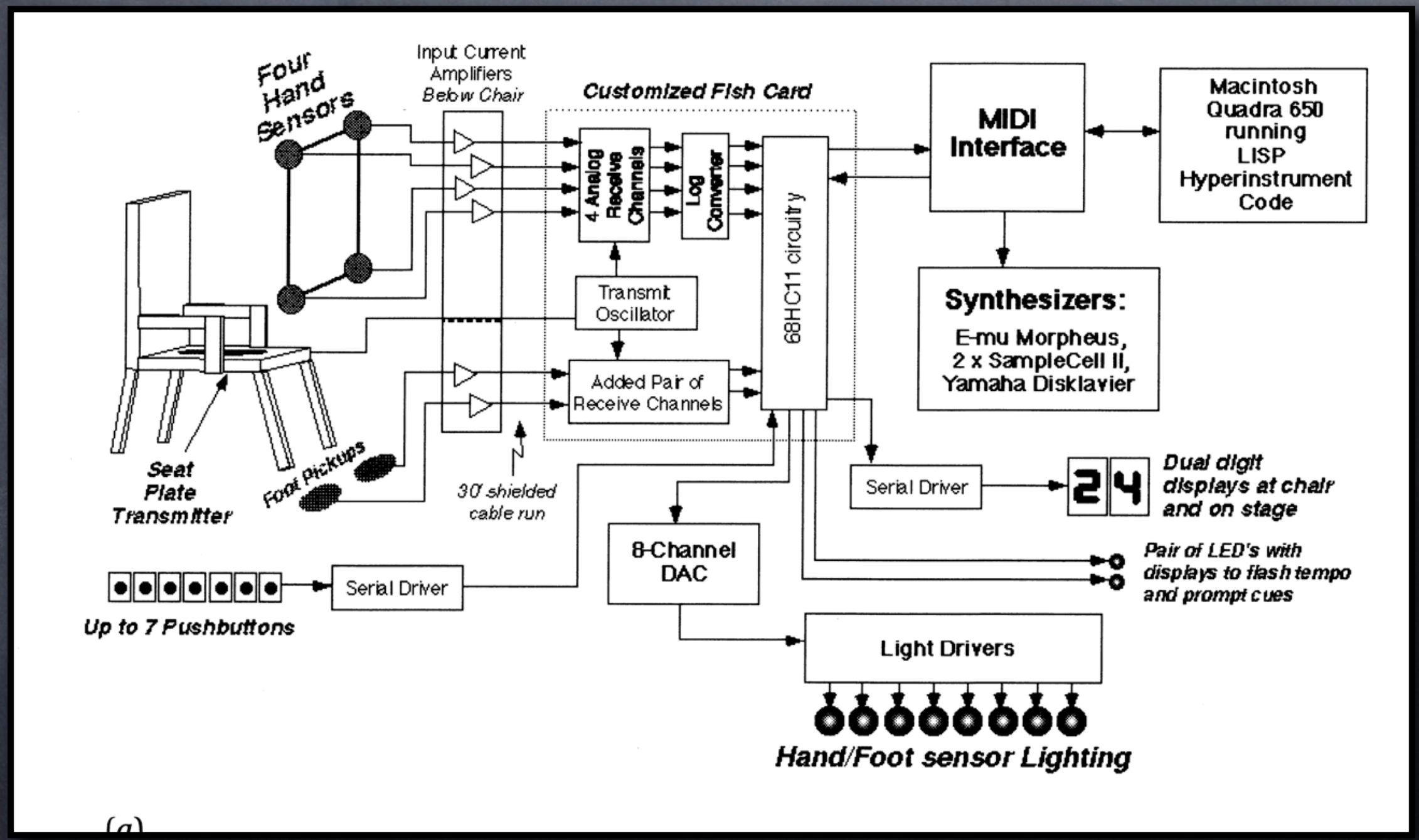
MIDI Gestures: Sensor Chair



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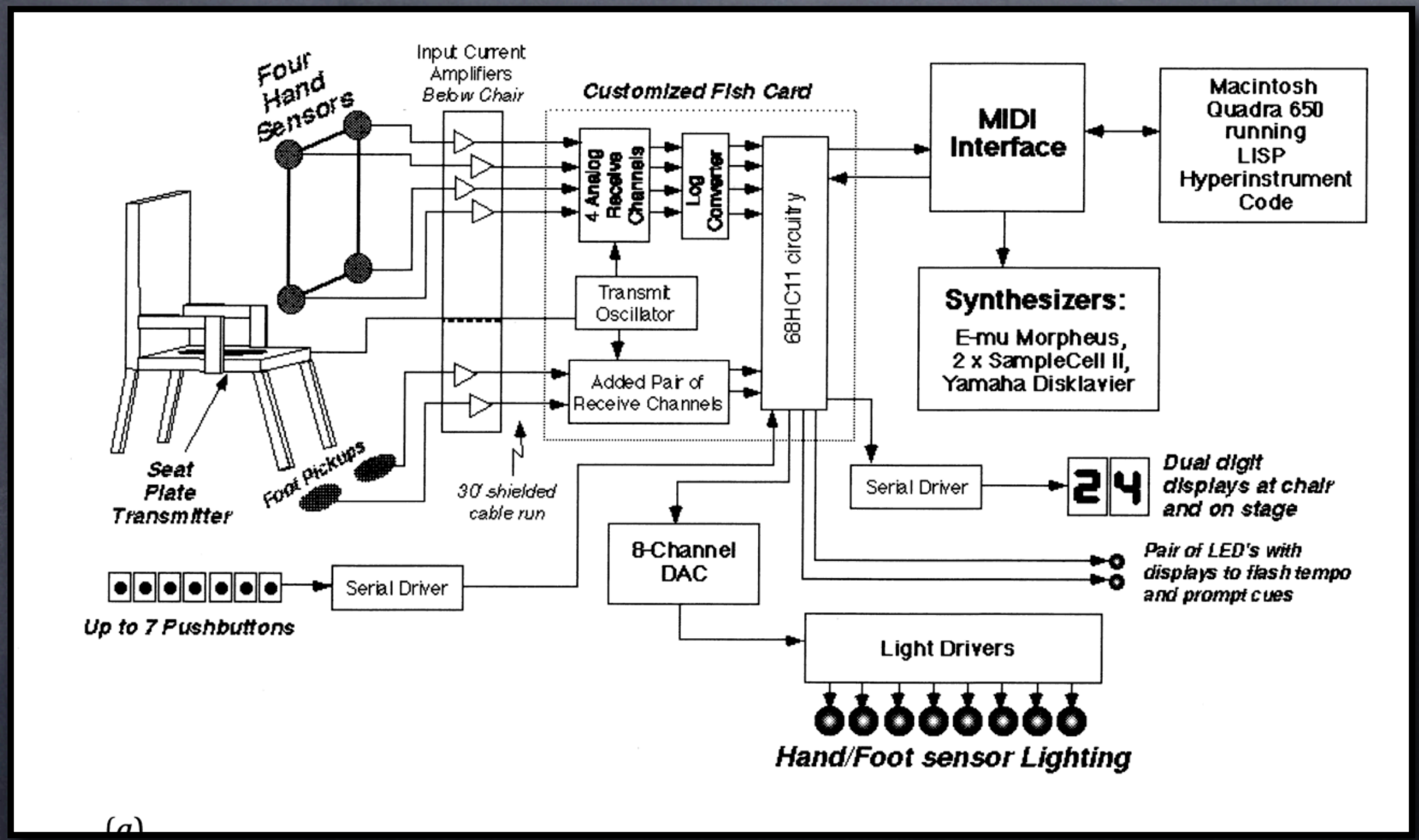
MIDI Gestures: Sensor Chair



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MIDI Gestures: Plaid Jacket

Jacket design by James Bond, UMass Lowell; finger MIDI pad concept by Frank Clark, Georgia Tech

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MIDI Shortcomings

- Spagetti MIDI cabling
- 16-channel barrier and speed
- Lack of bank-select standards
- Overuse of SysEX, RPNs, and NPRNs
- Lack of plug-and-play "smart" MIDI
- Poor GM2 adoption
- Compatibility issues between DLS/SoundFonts
- Lack of expressive/notation elements to SMF files
- MIDI codes independent of digital audio

Where is MIDI going next?

www.arts.ilstu.edu/emtbook/atmi2003