

0/70

the p5  
glove controller

with

audio processing  
free sound  
software



# not a nintendo powerglove



but similar

- IR instead of ultrasound
- 5 versus 4 fingers
- improved flex resolution
- pitch, yaw, and roll
- usb



# essential reality p5 glove </background>

- **siggraph 2001**
- **initial retail ~ \$100-\$150**
- **targeted at gamers**
- **tanked**
- **company gone(??)**



# essential reality p5 glove [[[[[object]]]]

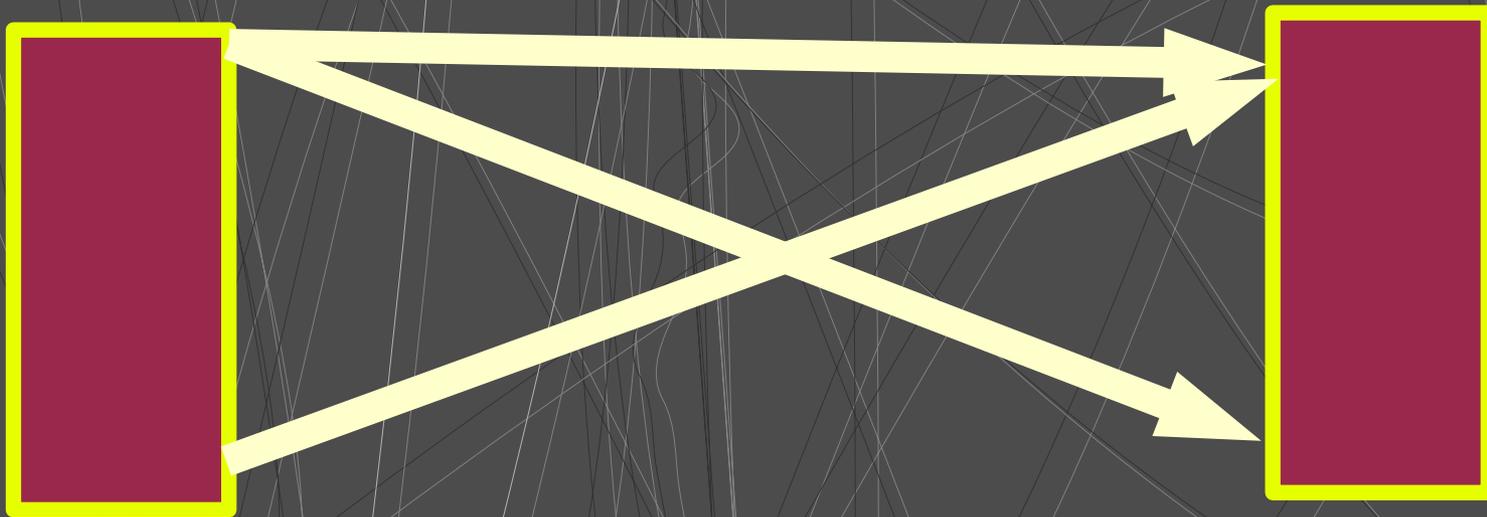


- 5 finger bend
- 3D position  
(X,Y,Z)
- roll/pitch/yaw
  - 4 buttons
- usb powered



# essential reality p5 glove [[[[[object]]]]

- uses IR
- multiple emitters
- multiple (embedded) receivers
- math



# essential reality p5 glove software

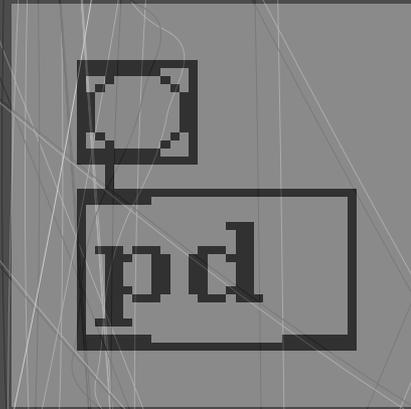
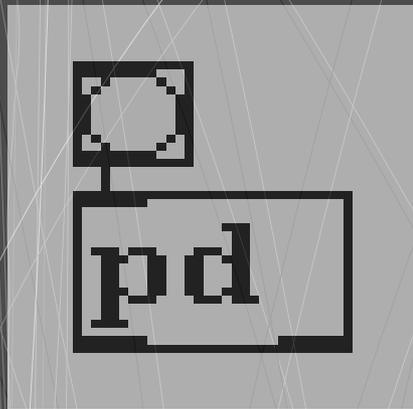
- spotty ER Linux support
- community grown drivers and tools!
  - (better than the vendor's ./././duh)
  - jason mcmullan wrote libp5glove [for libusb]
- yahoo group (but lin/win ratio is low)
- <http://www.simulus.org/p5glove/>



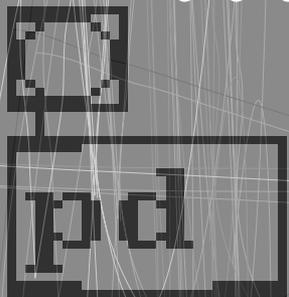
essential reality p5 glove

software

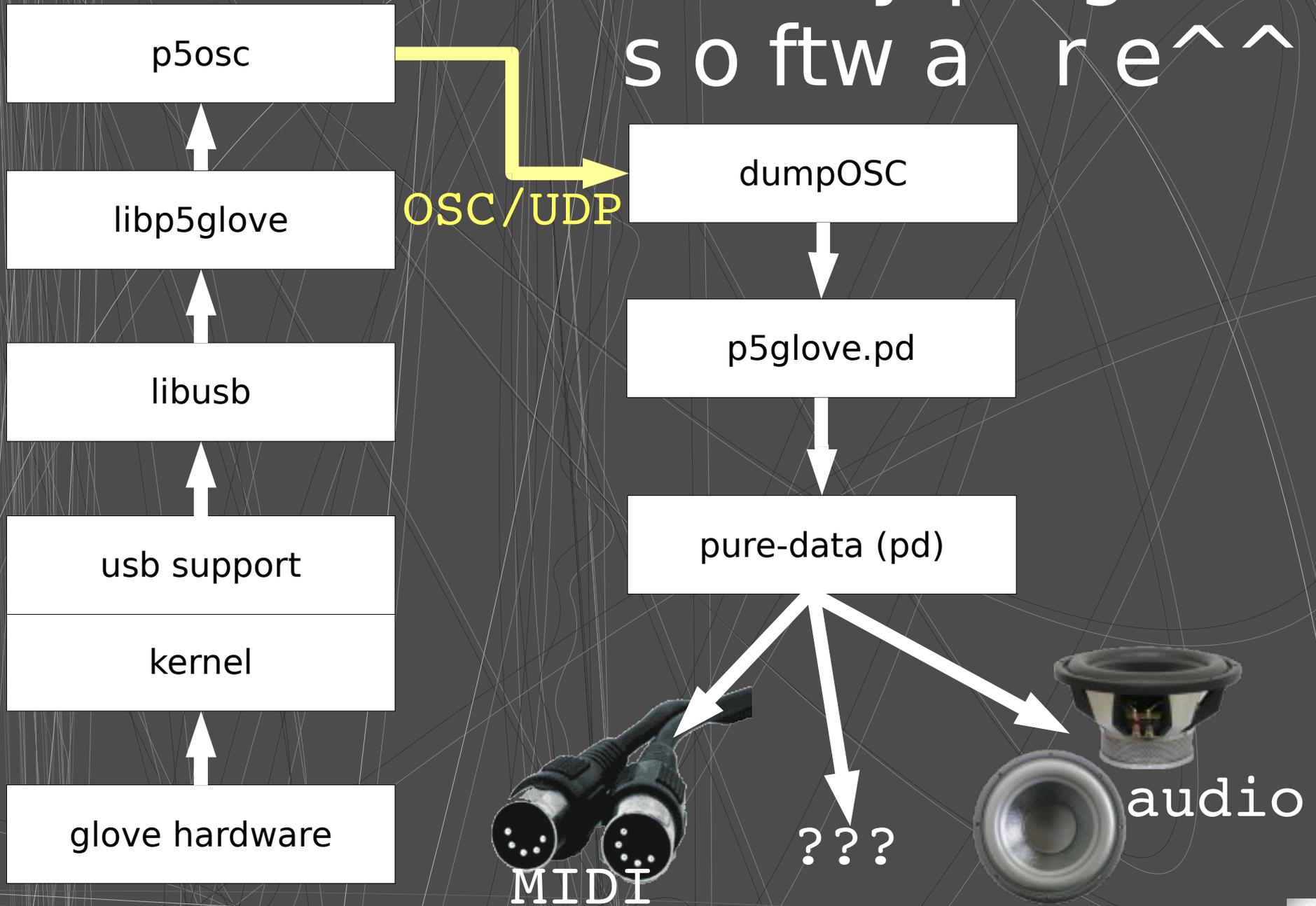
- pure-data (pd) ::::: for great victory



- feed::
- software synthesizers
- internal/external midi devices
- other pd patches
- ...but how to we get from the driver to [pd]?



# essential reality p5 glove software re^^



# essential reality p5 glove so f t w a re

- Q: ...well that's a lot of boxes...why not just write a **[pd]** **external**, silly?

- A: **libusb** doesn't support **nonblocking** bulk reads...yet

- A: **libOSC** provides nice network separation



# essential reality p5 glove demos

- basic synthesis in pd
- filter parameter control
  - sound fonts



# essential reality p5 glove IMPROVEMENTS?

- 8/16/24 byte alignment patch
  - line of sight recovery
    - startup issues
- inappropriate error messages
  - kernel conflicts with usbfs[?]
- calibration requires w\*ndows?
- option to use unix socket for OSC



fin

Q & A

p5 glove controller :: jason plumb :: <http://noisybox.net/>

