

# The Guitarist's Macintosh



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#### What's Possible?

- Audio processing
  - Virtual amplifiers
  - DSP: Virtual Stompboxes
- MIDI control
  - Access to synthesizer sounds
  - Input to sequencers for production
  - Input to music notation software

#### What do we need?

- Macintosh Computer
- Audio Interface
- Guitar controller
- Guitar synthesizer or Guitar-to-MIDI converter
- Software

## Macintosh Computer

- Any current model is good!
- Powerbook G4 is great for live use
- iMac for home recording
- G5 for powerhouse production!









#### Audio Interface



- Stereo is all that is needed, but multichannel gives room for growth (and surround sound)
- Get an interface with wide input gain control and mic preamps, to optimize level matching with the guitar
- FireWire or USB?
  - USB is less expensive, but useful mostly for stereo
  - FireWire is more robust, but costs a bit more

# Suggestions:























#### Guitar Controller

- Specifically designed guitar for synthesizer control
- Hex pickup mounted on any electric guitar

## Specialized Guitars

Godin Synth Access guitars (currently 9 different models: acoustic, electric, nylon/steel string)



Brian Moore Guitars (7 models, all electric style)



# Adding a hex pickup

- Roland GK-2 Standard
- Shadow pickup system
- Yamaha G1-D
- Blue Chip AIX 101



## Guitar Synthesizer

- Synthesizers with direct GK2-style input:
  - Roland GR-33
  - Roland GR-20
  - Yamaha G50
  - Axon AX-100SB





### Guitar-to-MIDI Converter

- Roland GI-20 Guitar-to-USB/MIDI
- Axon AX-100
- Shadow SH 075





#### Software

- Sequencer
- Notation Software
- Plug-ins
  - Synthesizers or DSP
- Stand-alones
  - Synthesizers or DSP

## Stand-alone Applications

- Garageband & Logic
- Amplitube
- Native Instruments Guitar Rig
- Native Instruments synthesizers
- Arturia synthesizers
- Korg Legacy Collection synthesizers

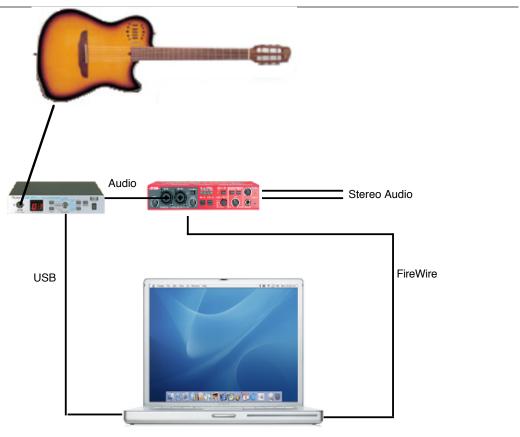
## Plug-ins

- All the stand-alones mentioned are available as plug-ins as well
- Logic Pro
- Slayer
- Virtual Guitarist Electric Guitar Edition

## Setting Up:

- Connections
- Guitar setup
- MIDI setup
- Audio Setup

#### Connections: Basic



## Guitar Setup

- Good strings
- Intonation
- Action
- Tuning

## MIDI setup

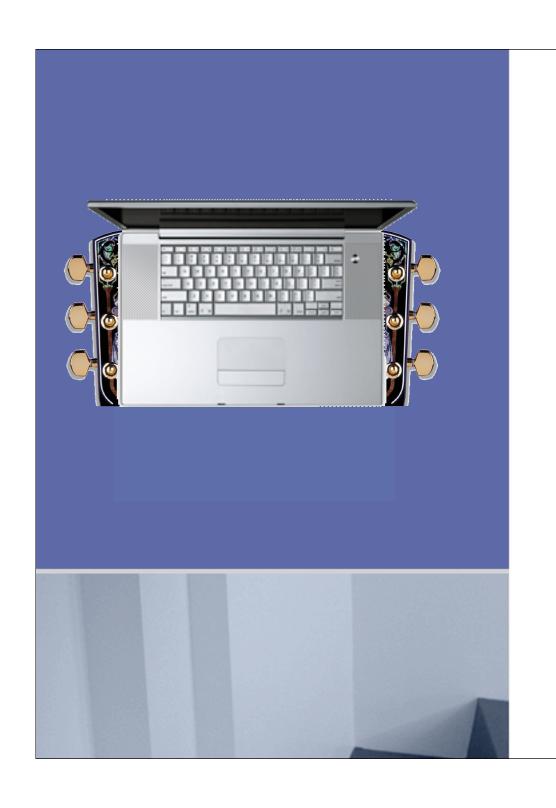
- String sensitivity
- Bend Type/Range
- Single- or Multi-channel settings
- Splits/layers

## Audio Setup

- Levels
- Latency
  - I/O Buffer holds data in transfer between audio hardware and CPU
  - Disk buffer holds data in transfer between disk and CPU
  - Process buffer Holds data in transfer between host application and CDII (for DSP processes)

## Putting it all Together

- Process your guitar sound
- Control synthesizers
- Automate performance actions
- Set up real-time controls
- Have fun playing



## Thank You!



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