

DIY Recording: Mobile Recording for the Masses



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Why Record With A Laptop?



- ✓ Portability
 - ✓ It travels with you
 - ✓ Your whole recording system fits in your backpack
- ✓ Flexibility
 - ✓ Allows you to work in places a desktop can't touch
 - ✓ Can double as your live-performance rig
- ✓ Affordability
 - ✓ Prices are similar to desktop systems
 - ✓ Accessories are relatively cheap.

What do I record with my laptop?



- ✓ Symphony Orchestras
- ✓ Chamber Music
- ✓ Rock Bands
- ✓ Pipe Organ
- ✓ Choirs
- ✓ Native American Flute
- ✓ Jazz Combos

Mac vs. PC?



- ✓ Not an issue anymore
- ✓ Both platforms offer very powerful computers
- ✓ Both platforms are reasonably priced
- ✓ Your decision should be dictated by what Hardware/Software you will be using

Laptop-Based Recording System



✓ Hardware

- ✓ Laptop
- ✓ Audio Interface
- ✓ Outboard Mic Preamp(s)
- ✓ Outboard Hard Drive(s)
- ✓ Outboard Compressor(s)
- ✓ Microphones

✓ Software

- ✓ Multi-Track Recording (DAW)
- ✓ Two-Track Editing
- ✓ CD/DVD Burning
- ✓ Plug-In Effects

Hardware: Audio Interface



- ✓ USB/Firewire/PCMCIA
- ✓ Resolution
 - ✓ 16-bit/44.1 kHz
 - ✓ 24-bit/192 kHz
- ✓ Bus-Powered vs. A/C-Powered
- ✓ Rackmount/Standalone/Control Surface

Hardware: Audio Interface



✓ Inputs/Outputs

- ✓ Mic: How many? XLR/TS? Phantom power?
- ✓ Line: 1/4" and/or RCA
- ✓ MIDI: How many?
- ✓ Digital: S/PDIF, AES/EBU, ADAT
- ✓ Headphones: How many? Independent?

Hardware: Outboard Mic Preamps



- ✓ Extends the abilities of your interface
- ✓ Generally, provides higher quality preamps than your audio interface
- ✓ May offer features like selectable phantom power, digital outputs, phase switch, full metering, etc...
- ✓ Allows the ability to shape tones based on the type of preamp (tube, solid state)

Hardware: Outboard Hard Drive(s)



- ✓ Most laptop hard drives run at 5400rpm.
- ✓ Multi-track recording requires HD speeds of at least 7200rpm, with 10,000rpm being ideal
- ✓ Should be USB for small track counts (1-4) and Firewire for larger track counts (4+)
- ✓ Available in small table-top or larger rack-mount versions
- ✓ May be bus-powered but most often are A/C powered

Hardware: Outboard Compressors



- ✓ Useful for getting consistent, hot levels while avoiding digital distortion
- ✓ Used on highly dynamic instruments like drums, bass and vocals
- ✓ Usually available in single, dual or eight-channel models

Hardware: Microphones



- ✓ Anything from cheap live sound mics to mega-expensive studio mics
- ✓ Consider stereo mics
- ✓ Consider space issues
- ✓ Heavy mics require heavy stands
- ✓ Isolation needs may dictate your choices of polar patterns

Software: Multi-Track Recording



- ✓ Pro Tools: cross-platform
- ✓ Logic Audio: Mac-only
- ✓ Digital Performer: Mac-only
- ✓ Cubase: cross-platform
- ✓ Sonar: PC-only
- ✓ Live: cross-platform

Software: 2-Track Editor



- ✓ Peak: Mac-only
- ✓ Wavelab: PC-only
- ✓ Audacity: cross-platform

Other Software



✓ CD/DVD Burning

- ✓ Mac: Toast, Jam

- ✓ PC: Wavelab, EZ-CD Creator

✓ Plug-Ins

- ✓ Waves: cross-platform

- ✓ McDSP: cross-platform

- ✓ Antares: cross-platform

Resources for Laptop Recording



- ✓ Trade Magazines
 - ✓ EQ
 - ✓ Electronic Musician
 - ✓ Tape Op
- ✓ Manufacture's Websites
 - ✓ M-Audio
 - ✓ Tascam
 - ✓ Digidesign
- ✓ Retailers
 - ✓ Sweetwater Sound
 - ✓ Full Compass