

# Index

## A

- AAC (Advanced Audio Coding) file format
  - creating with iTunes, 533–536, 572–573
  - overview of, 516
- Ableton Live, 69–106
  - Arrange View in, 71
  - audio clips in, 89
  - audio recording tutorial in, 93–97
  - Bottom Line of, 105, 545–548
  - creating session in, 100–101
  - effects included in, 87–89
  - expanding, 88–89
  - exporting Apple Loops from, 564
  - exporting CD-ready files from, 571
  - exporting WAV files from, 525
  - GarageBand and, 239–240
  - as laptop software, 497
  - Lite Digidesign Edition of, 140–141
  - mastering demo files, 70
  - OS X and, 102–104
  - plug-in effects in, 300–302, 559
  - Pro Tools and, 140–141, 152–156
  - ReWire session with Logic and, 207–208, 552
  - ReWire session with Reason and, 97–100, 547–548
  - Session View mode in, 70–71
  - template setup in, 70
  - using Audio Unit virtual instruments in, 344–345
  - using VST virtual instruments in, 345
  - versions of, 69
  - video composing with, 103–104
  - virtual amplification in, 399
  - virtual instruments in, 344–345
- Ableton Live and MIDI
  - key mapping, 476, 491–492
  - MIDI clips, 90
  - MIDI clips, creating, 546
  - MIDI effects, 87
  - MIDI files, exporting, 466–467
  - MIDI files, opening, 566
  - MIDI loops, creating, 433–435
  - MIDI loops, editing in Clip View, 547
  - MIDI mapping, 474–478, 491, 567
  - MIDI mixers in, 463
  - MIDI performances, creating, 545–546
  - MIDI tracks, 75
  - MIDI velocity and clips, 478–479
  - quantizing, 479, 568
- Ableton Live instruments, 79–86
  - Impulse, 80–83
  - MIDI tracks for virtual, 76–77
  - overview of, 79–80
  - Sampler, 84–86
  - Simpler, 83–84
- Ableton Live interface, 71–79
  - Info view, 73
  - Live Browser, 72–73
  - Show/Hide buttons, 73
  - toolbars, 78–79
  - Track window, 74–78
- Ableton Live, working with loops in
  - audio loops, 90–93, 546–547
  - formats, 413
  - as major feature, 69–70, 411
  - using and creating, 430–435
- Absynth, 367–370
- Acid loops
  - format, 413
  - history of, 411
  - in Pro Tools, 438
  - software programs using, 413
- acoustic guitar
  - compression and, 314
  - EQ for, 325
  - in laptop recordings, 506–507
- Action Menu, BIAS Peak, 271
- Active Screen Corners, setting up in Exposé, 3
- Activity Monitor, 10–11
- adapters, laptop, 502
- Add Tempo Change button, Pro Tools, 122
- ADSR envelopes, 84, 362
- Advanced Audio Coding format. *see* AAC (Advanced Audio Coding) file format
- AIFF (Audio Interchange File Format) files
  - batch converting into Apple Loops, 563
  - best format for delivering, 539
  - as common sampler format, 349
  - converting into Apple Loops, 417, 562
  - converting loops in Redrum to, 421–422
  - exporting clips in Audacity as, 263
  - exporting Live clips as, 432
  - importing into Logic, 448
  - overview of, 516
- AKAI Hardware Library
  - format, 349
- AKG D112 microphones, 503
- Align button, Track Editor, 489–490
- Altec Lansing portable speakers, 502
- amplifiers, virtual, 397–407
  - AmpliTube 2, 404–406
  - common problems with, 399
  - creating own, 402–403
  - in GarageBand, 400
  - Guitar Combos software, 400–401
  - in laptop recording, 506
  - Line 6, 406
  - in Live, 399
  - in Logic, 400
  - other, 407
  - overview of, 397–398
  - in Pro Tools, 399
  - setting up, 398
  - using Guitar Rig 2, 401–402
- AmpliTube 2, 404–406
- Amplitude LE plug-in, 144–145
- Analog Signature Pack, 335
- Animate Opening Applications
  - function, Dock, 3
- Another Side of Bob Dylan* (Dylan), 157
- Anwida Soft Chorus plug-in, 319–320
- Apple Loops, 411–456
  - batch converting WAV of AIFF files into, 419, 563
  - Bottom Line, 455–456, 562–565

- converting WAV of AIFF files into, 562
  - creating loop library, 454–455
  - defining, 411–412
  - exporting from any program, 564–565
  - in GarageBand. *see* GarageBand, working with loops in
  - in Live. *see* Ableton Live, working with loops in
  - in Logic. *see* Logic, working with loops in
  - other loop formats, 412–413
  - overview of, 411
  - in Pro Tools. *see* Pro Tools, working with loops in
  - purchasing loop libraries, 413–414
  - in Reason. *see* Reason, working with loops in
  - types of, 412
- Apple Loops Utility, 414–420
  - batch converting WAV of AIFF files into Apple Loops, 419, 563
  - changing tempos, 420
  - converting AIFF file to Apple Loops, 417–418
  - converting Rex files to Apple Loops, 420
  - converting WAV files to Apple Loops, 419
  - inside view of Apple Loop, 416–417
  - maintaining consistent volume level, 428–430
  - overview of, 414–416
  - preferences, 418
- Apple World Travel Adapter kit, 503
- AppleCare, for laptop, 497
- Arm Session Recording button, 94
- arpeggiator, 87, 146
- Arrange Mode, in Reason, 55–57
- Arrange view, in Live
  - audio recording in, 95
  - overview of, 71
  - real world scenario using, 66–67
  - video composing in, 103–104
- Arrange window, Logic, 169, 179–183, 551
- Arrow tool, Logic, 179, 183
- Arturia Analog Factory synths, 375–376
- AU (Audio Units) plug-ins
  - format, 297–298
  - in GarageBand, 304–305, 347–348
  - in Live, 153, 155, 300–302, 344–345
  - in Logic, 302, 347
  - at MDA, 340
- Audacity, 260–264
- AUDelay (Audio Unit Delay) plug-in, 279–280, 307
- Audio channel strips, Logic, 170–171
- audio clips, Live, 89, 91
- Audio Ease AltiVerb plug-in, 321–322
- Audio Editor, 293
- Audio Hijack, 256–260
  - Audio Hijack Pro, 257–260
  - creating loop or sample from DVD, 256–257, 557
  - overview of, 256
- audio input, in Logic, 165
- Audio Input Path selector, in Pro Tools, 113
- Audio Interchange File Format. *see* AIFF (Audio Interchange File Format) files
- audio loops
  - creating in Pro Tools, 441
  - creating with Live, 433–435
  - editing in Live's Clip View, 546–547
  - exporting in Pro Tools, 442–443
  - working with, 90–93
- audio only session, Pro Tools, 119–122
  - creating click track, 120
  - overview of, 119
  - recording signal, 120–122
  - tempo changes, 122
- Audio Output Path selector, in Pro Tools, 113
- audio recording, in Live
  - not while creating templates, 148
  - overview of, 93–97
- audio tracks
  - adding Software Instrument or Real Instrument loops to, 178
  - creating out of virtual instrument performance, 346–347
  - MIDI tracks vs., 76
  - in Track window, 74–75
- Audio Unit Delay (AUDelay) plug-in, 279–280, 307
- Audio Unit Modules, GarageBand, 224, 227
- Audio Units plug-ins. *see* AU (Audio Units) plug-ins
- Audio Volume indicator/pop-up slider, Pro Tools, 113, 122
- AudioFinder, 247–255
  - adding effects, 253
  - bookmarks, 250
  - browsing, 250
  - converting files, 252–253
  - copying files to new location, 251–252
  - editing files, 253–255
  - overview of, 247
  - playing files, 251
  - Plug-in Manager, 255
  - scanning for audio files with, 248–250, 558
  - setting up, 247–248
- Audio/MIDI preferences, GarageBand, 213
- AudioSuite plug-in, Pro Tools defined, 130
  - processing audio with, 549
  - using delays, 131–132
- AudioUnit effects, 253, 554
- AUGraphicEQ equalizer, 323–324
- AUMatrixReverb, 301
- authorization
  - dongles, 299–300
  - Nomad Factory plug-in bundles, 333
- Autoload session, creating, 167–169, 550–551
- Automat synthesizer, 378
- automation
  - in Logic, 180, 200–201
  - panning, 128
- automation, in Pro Tools
  - backup, 110
  - plug-ins, 135–137
  - volume, 127–128
- automation, in Reason
  - clearing, 59
  - creating, 58–59

Matrix Pattern Sequencer, 57–58  
 MIDI mapping, 470–472  
 of mixer or effect, 59, 545  
 Autoplay, Reason Browser window, 29  
 aux input tracks, Pro Tools, 113–114, 120  
 AVerb effect, Logic, 199  
 AVI format, 104

**B**

B4 II virtual organ, 381–382  
 B4 Xpress virtual organ, 382–383  
 backup  
   of hard drive, 10, 12  
   of laptop, 502  
   onto external hard drives, 12  
   Pro Tools options for, 110, 122  
 Band-pass filter, 327  
 bass  
   and compression, 314  
   EQ for, 325  
   for laptop recording, 507  
 batch conversion  
   of audio files with Sample Manager, 291–292, 556–557  
   of WAV or AIFF files into Apple Loops, 419, 563  
 Battery drum sampler, 389–392  
 beats per minute (BPM), 421  
 beds, podcast, 235  
 BF76 Peak Limiter, 313  
 BFD virtual drummer, 394–397  
 BIAS Peak, 269–273  
   basics, 270–271  
   editing with, 271–272  
   overview of, 269  
   recording into, 272–273  
 Big Rocker Impulse drum kit, 80–83  
 bit depths, and sample rates, 523  
 Bit Range, Sample Manager, 291  
 Black Water Reverb, 321  
 bleed, in laptop recording, 504–505  
 Blockfish compressor plug-in, 312  
 Blue synthesizer, 365–367  
 Blue Tubes Bundle, 335  
 BlueVerb DRV-2080, 322  
 Bomb Factory plug-ins, in Pro Tools, 135, 312  
 bookmarks, with AudioFinder, 250

Bottom Line (ending each chapter), 541–574  
   Ableton Live, 105, 545–548  
   Apple Loops, 455–456, 562–565  
   GarageBand, 243, 552–555  
   laptop studio, 513, 569–570  
   Logic, 209, 550–552  
   MIDI, 492–493, 566–569  
   more useful recording software, 296, 555–558  
   optimizing system, 20, 541–542  
   plug-in effects, 341, 558–560  
   post production, 540, 570–573  
   Pro Tools, 160–162, 548–550  
   Reason, 68, 543–545  
   virtual instruments, 408–409, 560–562  
 Bounce to Disk function, Pro Tools, 443  
 BPM (beats per minute), 421  
 breakpoints, 93, 127  
 Brick Wall setting, for limiters, 520  
 Browse button, Reason, 28  
 Browser window, AudioFinder, 248, 250  
 buffer settings, Pro Tools and OS X, 156–157  
 bus tracks, adding effects, 201–202  
 Buzzer 2 synthesizer, 378

**C**

C3 Multi Band compressor, 313–314  
 cables, laptop, 501–502  
 CamelCrusher plug-in, 317–318  
 CD authoring, 528–533  
   with automatic dithering, 522–523  
   exporting files from your DAW, 571–572  
   ISRC numbers and, 529  
   other software for, 533  
   overview of, 528  
   Red Book standard for, 528–529  
   with Toast with Jam, 532–533  
   with XO Wave, 529–532  
 CD Baby, 538  
 centered microphones, 398  
 Channel EQ, Logic, 197  
 channel strips  
   Arrange window, Logic, 166  
   Melodyne Mixer, 276–277  
   Mixer console, Reason, 31

channels, MIDI, 459  
 Chip32 synth, 363–364  
 Chord effect, in Live, 87  
 chorus plug-in effect, 319–320  
 click tracks  
   overview of, 507  
   setting up in Pro Tools, 120  
   silencing, 122  
 Clip Box, 89  
 clip slots, 74–76  
 Clip View  
   editing Live audio clips, 89, 546–547  
   editing MIDI clips, 90, 547  
 Collect All and Save command, 92, 103  
 Combinator, 22, 49–50  
 Command+C, 126  
 Command+V, 126  
 commercial loops, 415  
 commercial plug-ins  
   compressor effects, 315  
   delay effects, 310  
   distortion effects, 317  
   EQ effects, 326  
   filter effects, 329  
   modulation effects, 320  
   reverb effects, 323  
 commercial synthesizers, 378–379  
 composition, in Live, 71  
 compression, 311–315  
   basic parameters, 311–312  
   commercial plug-ins, 315  
   free plug-ins, 315  
   going easy with, 539  
   limiting vs., 312, 520  
   multiband, 313  
   overview of, 311  
   right, 313–315  
   working with, 312–313  
 Compressor plug-in, Logic, 196–197  
 condenser microphones  
   ECM-DS70P, 509  
   overview of, 503  
   recording acoustic guitars with, 506–507  
   virtual amplifiers using, 398  
 control bar, GarageBand, 215  
 Control Chooser, Envelope Editor, 93  
 control points, GarageBand, 214  
 control surfaces  
   laptop studio, 500  
   in Reason, 469–470

Controller lane, Reason, 55, 472–474  
 controllers, MIDI, 459  
   defined, 458–459  
   keyboards, 461–462  
   mixers, 463–464  
   pads, 462  
 conversion  
   in AudioFinder, 252–253  
   in Sample Manager, 290–291  
 conversion, batch  
   of audio files with Sample Manager, 291–292, 556–557  
   of WAV or AIFF files into Apple Loops, 419, 563  
 copy functions  
   in AudioFinder, 251–252  
   in Pro Tools, 438  
 copyrights, public domain vs., 258  
 Counter window, Pro Tools, 117  
 CPU meter  
   in GarageBand, 242  
   in Live, 102–103  
   in Pro Tools, 157  
   in Reason, 64–65  
   saving power using, 3  
 Creative Commons licenses, 415  
 cross-fades  
   creating, 292–293  
   with Crossfade tool in Logic, 180  
   with Sample Editor, 448–449  
 Crystal synthesizer, 245  
   breeding presets, 371  
   creating patches, 372–373  
   expanding instruments, 372  
   expanding sounds and presets, 371  
   installing and using, 370–371  
   loading as Rax instrument, 278–279  
   overview of, 370  
 cycle regions  
   in GarageBand, 216  
   in Logic, 178  
 Cycling '74, 337–340  
   defined, 337  
   Hipno, 339–340  
   other products, 340  
   Pluggo, 337–338  
   Pluggo Junior, 339

## D

Da Hornet synthesizer, 378  
 Dashboard utility  
   optimizing system by disabling, 7, 10, 541  
   setting preferences, 3–4  
 DC offset, 266  
 DDL-1 Digital Delay line, 47  
 deeper synths, Logic, 187–194  
   EXS24 mkII sampler, 192–194  
   Sculpture synth, 188–189  
   Ultrabeat drum synth, 189–192  
 Default Scan, AudioFinder, 248–250  
 delay effects, 306–311  
   choosing, 309  
   commercial plug-ins for, 310  
   common parameters for, 306–307  
   DigiRack plug-ins for, 130–131  
   DigiRack plug-ins using AudioSuite for, 131–132  
   FabFilter Timeless for, 309  
   free plug-ins for, 310  
   GarageBandAUdelay for, 307  
   King Dubby for, 310  
   in Logic, 194–195  
   Ohmforce OhmBoyz for, 307–309  
   overview of, 306  
   Reason's DDL-1 Digital Delay for, 47  
   recommendations for plug-ins, 330  
   turning MIDI performance into loop with, 428  
 Descriptors section, Apple Loop, 416  
 Desktop & Screen Saver preferences, 4  
 Details view, GarageBand, 220, 223  
 Device Chooser, Envelope Editor, 93  
 Diamond bundle, Waves, 335  
 Digi 002, 108  
 Digi 002 Rack, 108  
 DigiDesign Users Conference (DUC) forum, 108  
 DigiRack plug-ins, Pro Tools AudioSuite delays, 131–132  
   delays, 130–131  
   tempo sync, 131  
 Digital Audio Disc Committee, 528–529  
 digital distribution, 537–538  
 Disable Dashboard utility, 10

Disk Space meter, Pro Tools, 157  
 Disk Utility, 14–15, 18  
 distortion effects  
   free and commercial plug-ins for, 317  
   Logic, 195–196  
   overview of, 315  
   parameters, 316  
   Reason's Scream 4 for, 46–47  
 dithering, 522–523  
 DJ EQ, in Logic, 197  
 DLS Music Device, 460  
 Dock, 3, 5  
 donationware, 306  
 dongles, 299–300  
 doubling, recording technique, 506  
 down-sampling, 522  
 Dr. Rex Loop Player  
   altering loops in, 33  
   defined, 21  
   editing options in, 34, 543  
   overview of, 31–32  
   playing loops in, 32–33, 421  
 drag and drop  
   files in AudioFinder, 251  
   Rex loops to Pro Tools session, 437–438  
 Draw Mode switch, 79, 81  
 D-reverb plug-in, Pro Tools, 134  
 drivers, updating, 20  
 Drum lane, Reason, 55, 66–67  
 Drum Mixer section, Ultrabeat, 189  
 drums  
   composing for video with Live, 104  
   creating. *see* Impulse  
   creating loops with Redrum, 425–430  
   laptop recording of, 505  
 drums, virtual, 384–397  
   with Battery, 389–392  
   with iDrum, 385–389, 392–393, 561–562  
   MIDI controller pads for human-sounding, 462  
   other programs for, 397  
   overview of, 384–385  
   programming, 384  
   programming in Logic's Hyper Edit window, 486–487  
   using, 385  
   virtual drummers, 393–397  
 DSP Menu, BIAS Peak, 271  
 Dub Delay plug-in, 340–341

dub techniques, 329–330  
 DUC (DigiDesign Users Conference) forum, 108  
 Ducking feature, GarageBand, 235  
 Duplicate command, Pro Tools, 126  
 duplicate files, removing, 10  
 dust problems, 19–20  
 DUY, 341  
 DVDs, loop or sample from, 256–260, 557  
 dynamic microphones, 398, 503  
 dynamics, 196–197, 232  
 Dynamics III plug-ins, 132–133

## E

ECF-42 Envelope Controlled Filter, Reason, 47–48  
 echo effect, 47  
 ECM-DS70P condenser microphone, 509  
 Edit Menu, BIAS Peak, 271  
 Edit window, Pro Tools, 110, 118–119  
 editing  
   in Audacity, 262  
   audio loops in Live's Clip View, 546–547  
   in AudioFinder, 253–255  
   in BIAS Peak, 271–272  
   in Impulse, 82  
   laptop recordings, 508  
   in Live, 95, 431–432  
   in Logic, 179–183, 551  
   in Matrix Editor, 182–183  
   in Melodyne Cre8, 274–275  
   nondestructive, 124–125  
   in Pro Tools, 124–126  
   Real Instrument loops in GarageBand, 451–452  
   in Sampler, 85–86  
   in Simplr, 84  
   software loops in  
     GarageBand, 449  
     in Wave Editor, 265–266  
     XO Wave features for, 531  
 effects  
   in Audacity, 263–264  
   in AudioFinder, 253  
   in GarageBand, 226–229, 235, 554  
   in GarageBand, printing completed tracks, 242–243  
   Kontakt, 356  
   in Live, 87–89  
   in Logic. *see* Logic effects  
   for master track, 78  
   in Pro Tools, 123. *see also* Pro Tools plug-ins  
   in Rax, 279–280  
   in Reason, 22, 44–48  
   with return tracks, 77  
   in SampleTank, 352–353  
   in virtual synthesizers, 363  
   in VSTi Host, 283  
   in Wave Editor, 267  
 eKeys, 461  
 electric guitar  
   and compression, 314  
   EQ for, 325  
   laptop recording of, 506  
 electric pianos, virtual, 383–384  
 e-mail attachments, 18  
 EMU Hardware Library format, 349  
 Energy Saver preferences, 6  
 Ensemble (ES) synth, 186  
 Envelope Editor, 92–93  
 Envelopes Box  
   for audio clips, 89  
   for MIDI clips, 90, 94  
 EQ (equalization)  
   free and commercial plug-ins, 326  
   going easy with, 539  
   Graphic, 323–324  
   Logic, 197  
   overview of, 323  
   Parametric, 324  
   Pro Tools, 134  
   T-Rack5 mastering software, 519  
   using, 325–326  
 Eraser tool, Logic, 179  
 ES E (Ensemble) synth, 186  
 ES M (ES Mono) synth, 186  
 ES P (E Poly) synth, 186–187  
 Essential Studio Suite Bundle, 335  
 EVbB3 Tonewheel Organ, Logic, 184  
 EVD6 Electric Clav, Logic, 184–185  
 Event List, Logic, 485  
 Evolution 37-key eKeys, 461  
 EVP88 Electric Piano, 185–186  
 Expert Tools, Melodyne, 274  
 Export settings, GarageBand, 214  
 Export to Disc option, GarageBand, 213  
 exporting  
   Apple Loops from any program, 564–565  
   in Audacity, 263  
   audio loops in Pro Tools, 442–443  
   CD-ready files from your DAW, 571–572  
   GarageBand song to iTunes, 555  
   to iTunes, GarageBand, 234, 237  
   loops from Reason, 426–427, 430  
   loops in Live as AIFF or WAV files, 432  
   loops in Logic, 447  
   MIDI files in GarageBand, 466  
   MIDI loops in Pro Tools, 443  
   song in Reason, 60–61  
   exporting WAV files from DAW programs, 523–528  
     in GarageBand, 526–528  
     in Live, 525  
     in Logic, 526–528  
     no peaking, 524  
     overview of, 523  
     in Pro Tools, 526  
     in Reason, 524  
     sample rates and bit depths, 523  
 Exposé preferences, 3–4  
 EXS24 mkII sampler, 192–194  
 EXSP24 Sample Player, 192  
 external hard drives  
   backing up files on, 12  
   running OS X on, 16  
 External Sync Switch toolbar, 79

## F

FabFilter Timeless delay, 309  
 FabFilter Volcano, 327–328  
 fades  
   adding to samples, 295  
   creating, 292–293  
   in mastering process, 539–540  
   in Pro Tools, 442  
 Fast Track USB, 498  
 Fat Drum Loop, Blockfish, 312  
 Favorites list, Reason Browser, 29  
 File Browser, Live  
   accessing audio files, 103  
   defined, 72  
   finding loops with, 73  
 File Creator option, Sample Manager, 291  
 file formats. *see* formats  
 File Info, Apple Loop, 416  
 files, removing duplicate, 10  
 FileVault, deactivating, 5

filters  
 free and commercial plug-ins  
 for, 329  
 overview of, 326  
 parameters for, 326–328  
 quick filtering, 328  
 for virtual synthesizers, 362

FireWire drives, 12, 13

Flange-o-tron Pluggo, 337

folders, new Impulse, 82

Font Book, 9

fonts, removing unneeded, 9

formats

GarageBand, 213

hard drive, 13

loop, 411–413

plug-in, 297–299

post production, 515–516

Pro Tools, 107–108, 129–130

sampler, 349

virtual instrument plug-in,  
 343–344

The Freak Accident CD (Alternative  
 Tentacles), 511–512

Free Hand Pencil tool, 483

free loops, 414–415

free plug-ins

compressor effects, 315

delay effects, 310

distortion effects, 317

EQ effects, 326

filter effects, 329

modulation effects, 320

plug-in effects, 305

reverb effects, 323

free synthesizers, 378

FreeG plug-in, 317

freezing tracks, 102, 208–209

Frequency/cut-off, 327

FXpansion, 298, 304–305

## G

gain plug-ins, 315, 316

GarageBand, 211–243

Bottom Line, 243, 552–555

drum tracks, creating with  
 Software Instruments, 554

effects, adding to track,

226–229, 554

exporting Apple Loops

from, 565

exporting CD-ready files

from, 572

exporting song to iTunes,  
 234, 555

exporting WAV files from,  
 526–528

first session, 212

Guitar Cable, 501

installing, 212

installing on external hard  
 disk, 241

instruments, virtual,

347–348, 561

instruments included with,  
 219–226

interface, 214–217

as laptop software, 498

to Logic, 241

Microphone Cable, 501

Musical Typing and, 231–232,  
 552–553

OS X and, 241–243

overview of, 211

pitch shifting with, 233–234

plug-in effects, adding to tracks,  
 304–305, 559

podcasting, 234–237

preferences, 212–214

real world scenario using,  
 237–238

ReWire and, 238–241

Track Editor and, 229–231

using Live Arrange View  
 with, 71

virtual amplification in, 400

GarageBand, working with loops in,  
 449–454

adding to podcast, 235

converting Software Instrument  
 loops, 453

creating, 563–564

creating new Apple Loop, 452,  
 563–564

creating Real Instrument  
 loops, 453

editing Real Instrument loops,  
 451–452

editing software loops, 449

exporting loops to iTunes, 453

finding loops with File  
 Browser, 73

Loop Browser, 450–451,  
 553–554

overview of, 217–219

pitch shifting, 450

purchasing loops, 413

GarageBand and MIDI

editing functions, 488–489

mixer, 464

opening files, 566

playing MIDI file, 465–466

quantization in, 569

velocity, 489

GarageBand Anywhere, 241

GarageBandAUDelay, 307

GarageRemote, 464

gating, recording vocals using, 505

General MIDI (GM) Sound Set,  
 459–460

General Preferences, GarageBand,  
 212–213

Generator menu, GarageBand, 224

Global Groove Amount toolbar, 79

Glue tool, Logic, 179

GM (General MIDI) Sound Set,  
 459–460

Gold bundle, Waves, 336

gold sounding plug-in, T-RackS, 518

Grabber tool, 126, 127

Gracenote database, 535–536

Grand Piano track, GarageBand, 214

Graphic EQ, 323–324

Grid Value selector, Pro Tools,  
 117–118

Grid/Groove Quantize, 482

Griffin iMic, 498, 509

groove functions, 460

Groove Librarian, BFD virtual

drummer, 394–396

Guitar Amp Pro, 196

Guitar Combos software, 400–401

Guitar Rig 2, 401–403

guitars, and distortion, 315

## H

HALion, 360

hard drives, 12–16

cleaning up, 9–10

formatting, 13

installing GarageBand on  
 external, 241

laptop, 496

making backups of, 10, 12

optimizing, 12

reformatting/partitioning to  
 optimize, 13–15, 542

researching, 12–13

running OS X on external, 16

USB vs. FireWire, 13

viewing free space on, 9

Hardware Library format, 349  
 hardware maintenance, 19–20  
 headphone mixes, in laptop recordings, 508  
 headphones, for laptops, 500, 501  
 High Pass filter, 326  
 High Shelving EQ, in Logic, 197  
 Hipno, 339–340, 408  
 Hot-Swap Browser button, Live, 72  
 Hot-Swap Preset button, Live, 434–435  
 "Houses of the Holy" (Zeppelin), 184  
 HTDM (Host TDM) plug-ins, 130  
 Hyper Edit window, Logic, 485–487  
 Hyperbolic's TidyUp!, 10

## I

iDrum  
 creating complete demo track with, 392–393  
 creating drum loops with, 561–562  
 creating new kit, 387  
 making loops with, 387–388  
 MIDI drag in, 389  
 MIDI mapping in, 388–389  
 overview of, 385–386  
 programming basics, 386–387  
 IK multimedia AmpliTube LE, 144–145  
 IK Multimedia SampleTank 2 SE, 142–144  
 iLife suite, 211  
 iMovie, adding soundtracks to, 237–238  
 importing  
 file formats in NN-XT, 37–38  
 importing WAV and AIFF files in Logic, 448  
 loops in Pro Tools, 439  
 patches in Kontakt, 359  
 samples in Kontakt, 356–357  
 Impulse  
 creating and saving new kits, 82  
 creating drum arrangements in, 83  
 creating drum performance with, 80–81  
 defined, 79  
 saving clips, 82–83  
 Independent Online Distribution Alliance (IODA), 538  
 Info view, Live, 73

Input Quantization, Pro Tools MIDI performance, 481–482  
 Input section  
 of audio tracks, 75  
 of audio tracks vs. MIDI tracks, 76  
 inserts  
 adding effects in Reason as, 544  
 adding in Pro Tools, 123–129  
 TDM plug-ins added to tracks as, 129  
 Instrument Track, Logic, 171, 178  
 instrument tracks, Pro Tools, 114, 479–481  
 instruments  
 in Ableton Live. *see* Ableton Live instruments  
 in GarageBand, 219–226  
 in Logic. *see* Logic instruments  
 in Reason. *see* Reason instruments  
 interfaces  
 Ableton Live. *see* Ableton Live interface  
 audio and MIDI laptop, 498–500  
 BIAS Peak, 270  
 GarageBand, 214–217  
 MIDI, 464  
 Reason, 28–29  
 International Standard Recording Code (ISRC), 529, 532  
 I/O (input/output), Pro Tools, 112–113  
 IODA (Independent Online Distribution Alliance), 538  
 iPod style earbuds, for laptops, 500  
 isolation  
 for laptop recordings, 504  
 recording vocals using, 505  
 ISRC (International Standard Recording Code), 529, 532  
 iTunes  
 AAC format for, 516  
 CD authoring in. *see* CD authoring  
 creating MP3 and AAC files with, 252–253, 533–536, 572–573  
 creating samples from, 294–295  
 excluding MP3 files from AudioFinder scan, 248–249  
 exporting Apple Loops to, 565  
 exporting GarageBand song to, 453, 555

exporting podcast to, 237  
 exporting song to, 234  
 getting your song on, 537  
 Izotope's Ozone plug-in, 523

## J

Join function, GarageBand, 450

## K

Key lane, Reason, 52–54  
 keyboard shortcuts  
 disabling Spotlight, 6  
 Logic, 172–173  
 Pro Tools plug-ins, 133  
 setting preferences, 3–4  
 Wave Editor, 268–269  
 keyboards  
 GarageBand's Musical Typing, 231–232  
 Logic, 184–186  
 MIDI. *see* MIDI keyboards  
 playing Software Instruments with, 219  
 setting preferences, 6–7  
 setting up in Reason, 472  
 keyboards, virtual, 379–384  
 electric pianos, 383–384  
 organs, 381–383  
 overview of, 379  
 pianos, 379–381  
 keys, plug-in effects, 299–300  
 Keystation Pro, 461  
 kick drum, 314, 325  
 King Dubby delay, 310  
 knee, in compression, 311  
 Komplete, 407–408  
 Kontakt, 354–359  
 creating multisample instrument, 357–359  
 creating single sample instrument, 357  
 effects, 356  
 importing patches, 359  
 importing samples, 356–357  
 loading instruments, 355–356  
 overview of, 354  
 setting up, 354–355  
 taking it further, 359  
 Korg Legacy Collection synths, 376



- laptop studio composition
    - with, 510
  - in Live. *see* Ableton Live,
    - working with loops in
  - in Logic. *see* Logic, working
    - with loops in
  - making with iDrum, 387–388
  - online resources for free,
    - 414–415
  - in Pro Tools. *see* Pro Tools,
    - working with loops in
  - purchasing, 413–414
  - in Reason. *see* Reason, working
    - with loops in
  - Lounge Lizard, 383–384
  - Low Frequency Oscillators. *see* LFOs
    - (Low Frequency Oscillators)
  - Low Pass filter, 326
  - Low Shelving EQ, Logic, 197
  - Luxonix LFX-1310, 332
- M**
- MachFive, 360
  - Magnify tool, Logic, 179
  - Main Counter, Pro Tools, 117
  - maintenance scripts, 542
  - Malström Graintable Synthesizer
    - altering graintable, 40–41
    - creating and saving patches
      - with, 41, 544–545
    - creating instrument loops with,
      - 427–428
    - defined, 22
    - overview of, 39–40
    - real world scenario using, 65–66
    - setting up new patch with, 40
    - using rhythmic patches, 41–42
  - Marquee tool, Logic, 180
  - MAS (Motu Audio System)
    - plug-in, 299
  - Master Boot Record, Disk Utility, 15
  - master fader track, 123–124
  - master track
    - adding universal effects to
      - Rax's, 280
    - pitch shifting in GarageBand
      - on, 233–234
    - viewing in Live, 77–78
  - Master Volume slider,
    - GarageBand, 216
  - mastering, 516–523
    - defined, 516
    - dithering, 522–523
    - plug-ins, 522
    - real world scenario, 538–540
    - by studios, 516–517
    - T-RackS software for, 518–521
    - using limiters, 570–571
    - by yourself, 517–518
  - Matrix Editor
    - creating MIDI performance in,
      - 176–177
    - editing Software Instrument
      - loop with, 183
    - editing with, 182–183
    - quantizing MIDI performance
      - in, 484
    - using Event List vs., 485
  - Matrix Pattern Sequencer
    - creating ECF-42 Envelope
      - Controlled Filter effect in,
        - 47–48
    - creating instrument loops in,
      - 427–428
    - overview of, 50–52
    - working with SubTractor in, 39
  - M-Audio FireWire 1814, 498
  - M-Audio Transit, 498–499
  - Mbox 2 Pro, 107
  - Mbox 2 Pro hardware interface, 498
  - MDA, 340
  - Media Browser, GarageBand,
    - 235–326
  - Melodyne Cre8
    - Mixer 8, 276–277
    - overview of, 273
    - setting up, 273–274
    - working with audio files,
      - 274–276
  - memory, optimizing system, 1–2
  - menus, Logic, 168
  - Meta Editor, AudioFinder, 253–255
  - metadata, adding to files with
    - iTunes, 535
  - Metric Halo's Channel Strip plug-in,
    - 331–332
  - Metronome toolbar, 79
  - microphones
    - experimenting with, 570
    - in *The Freak Accident* CD, 511
    - types of laptop, 503–504
  - MIDI, 457–493
    - audio tracks vs., 76
    - Bottom Line, 492–493, 566–569
    - channels, 459
    - choosing default editor, 182
    - Clip View window, 81
    - controllers, 458–459, 499
    - creating and saving clips, 92
    - creating laptop studio for, 510
    - creating performance, 174–177,
      - 180, 490–492
    - drag, in iDrum, 389
    - editing loops in Live's Clip
      - View, 547
    - Envelope Box, for clips, 90, 94
    - in GarageBand. *see* GarageBand
      - and MIDI
    - General MIDI (GM), 459–460
    - getting started, 457–458
    - history of, 457
    - interfaces, 464, 499
    - for laptops, 499
    - and Live. *see* Ableton Live
      - and MIDI
    - in Logic. *see* Logic and MIDI
    - mapping, in iDrum, 388–389
    - mixers, 463–464
    - Note Editor, 81, 83
    - opening files in any DAW, 566
    - out, in and thru, 459
    - pads, 462
    - playing and creating files,
      - 465–469
    - in Pro Tools. *see* Pro Tools
      - and MIDI
    - quantization, 460
    - in Reason. *see* Reason and MIDI
    - reasons to use, 465
    - recording, 96–97
    - recording, using Live with Pro
      - Tools, 153
    - sequencers, 458
    - sound module, 458
  - MIDI keyboards
    - channels on, 459
    - choosing, 461–462
    - creating performances with/
      - without, 175–176
    - as most common controller,
      - 458–459
    - Out, In and Thru ports on, 459
    - switch for, 79
  - MIDI Learn automation, FabFilter
    - Volcano, 328
  - MIDI Thru/Region info box, Logic
    - Arrange window, 166
  - midiO, 466
  - Minimonsta:Melohman synth,
    - 373–375

Mix window, Pro Tools, 110, 128–129

Mixer 14:2, Reason, 30–31, 45

mixers

- Audacity, 261–262
- audio track, 75
- BFD virtual drummer, 395
- drum loop, 426
- GarageBand, 214–215
- for laptops, 504
- master track, 78
- MIDI, 463–464

Mode buttons, Pro Tools, 115

modulation effects

- creating with Malström synth, 41
- free and commercial plug-ins for, 320
- in Logic, 198–199
- overview of, 317
- parameters for, 318
- working with, 318–320

modulation wheels, in Reason, 28

modules, in GarageBand, 224

mono audio track, in Pro Tools, 111–113

Moog, Robert, 373

Motu Audio System (MAS) plug-in, 299

mouse

- playing Software Instruments with, 219
- setting preferences, 6–7

MOV (QuickTime) format, 104, 246

MP3 file format

- creating with iTunes, 252–253, 533–536, 572–573
- excluding from AudioFinder scan, 248–249
- exporting in Audacity, 263
- overview of, 516

MP3.com, 537

MS-20 synthesizer, 376–377

multiband, compression, 313

Multiband Limiter, T-RackS, 520–521

multi-effect plug-ins, 331–333

multiple outputs, Live with Pro Tools, 154–155

multisamples, 84–86, 357–359

multitracks, recording in Audacity, 261

Musical Instrument Digital Interface. *see* MIDI

Musical Typing, GarageBand, 231–232, 552–553

Musicians bundle, Waves, 336

Musicians II bundle, Waves, 336

Mute tool, Logic, 179

MXL-990 condenser microphone, 503

My Space, 537

## N

naming, Reason instruments, 33

naming conventions, Pro Tools, 115

Native Instruments

- B4 II virtual organ, 381–382
- B4 Xpress virtual organ, 382–383
- Battery drum sampler, 389–392
- Guitar Combos software, 400
- Guitar Rig 2, 401
- virtual synthesizers, 370

NN19 advanced Sampler, Reason defined, 22, 34

- features of, 350
- overview of, 35
- playing REX slices in, 35
- real world scenario using, 65

NN-XT advanced sampler, 36–38

NN-XT Remote Editor

- loading and playing multiple loops, 423–424
- loading and playing single loop, 422–423
- saving self-contained patch, 424–425
- turning MIDI performance into loop, 428

Nomad Factory plug-in bundles

- Analog Signature Pack, 335
- authorization, 333
- Blue Tubes Bundle, 335
- defined, 333
- Essential Studio Suite Bundle, 335
- Liquid Bundle II, 333–335

Nomad-Phaser plug-in, 318

nondestructive editing, 124–125

normalizing, 289–290, 448

Note Editor, 95, 97

Note Length effect, Live, 87

## O

Object Parameters box, Arrange window, 166

off-axis microphones, 398

Ohmforce OhmBoyz delay, 307–309

OMS (Open Music System), Opcode, 457

online resources

- Ableton Live, 69, 152
- Altec Lansing portable speakers, 502
- Altiverb plug-in, 321
- Apple Loops, 415
- Audacity, 260, 264
- Audio Hijack, 256
- audio interfaces, 498–499
- AudioFinder, 247
- Battery, 389–392
- BFD virtual drummer, 394–397
- BIAS Peak, 269
- Blockfish compressor plug-in, 312
- Blue synthesizer, 365–367
- cables for laptops, 501–502
- CD authoring software, 529, 532–533
- Crystal synthesizer, 245, 370
- Crystal synthesizer patches, 371
- Cycling '74, 337
- digital distribution, 537–538
- Disable Dashboard utility, 10
- dithering, 523
- FabFilter Timeless delay, 309
- FXpansion, 298
- GarageBand, 243
- GarageBand Anywhere, 241
- GarageBand Audio Units, 227
- Guitar Combos software, 400–401
- hard drives, 13
- headphone splitters, 501
- how your DAW handles MIDI files, 465
- iDrum, 385
- iLife suite, 211
- ISRC (International Standard Recording Code), 529
- laptop storage and backup, 502
- Logic Express, 241
- loops, 413, 414
- maintenance scripts, 17–18
- mastering plug-ins, 518
- microphones, 503
- MIDI interfaces, 464

- MIDI keyboards, 461–462
  - Minimonsta:Melohman
    - synth, 373
  - mixers, 504
  - Nomad Factory plug-in
    - bundles, 333
  - Ohmforce OhmBoyz delay, 307
  - Pace iLok key, 299–300
  - plug-ins, 305, 559–560
  - podcasts, 237
  - Pro Tools, 108
  - public domain, 258
  - Rax, 277
  - Reaktor, 407
  - Reason, 22–23
  - Remedy synthesizer, 361–362
  - Sample Manager, 289
  - SampleTank 2 sampler, 351
  - Steinberg Studio Case II, 408
  - Steinberg/Syncrosoft Key, 300
  - T-RackS mastering
    - software, 518
  - virtual pianos, 380–381
  - virtual samplers, 360
  - VST enabler, 264
  - VSTi Host, 281
  - Wave Editor, 264
  - Waves plug-in bundles, 335
  - Xpand!, 145–146
  - OnyX, 18
  - Open Music System (OMS),
    - Opcode, 457
  - Operator, 79
  - optimizing system, 1–20
    - Bottom Line, 20, 541–542
    - disabling Dashboard utility, 10, 541
    - hard drives, 9–10, 12–16
    - hardware maintenance, 19–20
    - memory, 1–2
    - OS X maintenance, 16–19
    - partitioning hard drive, 542
    - reformatting hard drive, 542
    - running OS X maintenance
      - scripts, 542
    - setting preferences, 541
    - Universal
      - Binary-compatibility, 11
      - viewing active programs in
        - Activity Monitor, 10–11
  - optimizing system, setting System
    - Preferences, 2–9
    - Dashboard & Exposé, 3–4
    - Desktop & Screen Saver, 4
  - Dock, 5
  - Energy Saver, 6
  - Keyboard & Mouse, 6–7
  - overview of, 2–3
  - security, 5
  - Software Update, 8–9
  - Sound, 8
  - Spotlight, 6
  - Orca synthesizer, 378
  - Organizer, 251–252
  - organs, virtual, 381–383
  - OS X
    - custom installation of, 17
    - Font Book, 9
    - GarageBand and, 241–243
    - hardware maintenance, 19–20
    - Live and, 102–104
    - Logic and, 208–209
    - maintenance, 16–19
    - Pro Tools and, 156–157
    - repairing permissions, 18
    - Web protection, 18
  - oscillators, 361–362, 367
  - Output section
    - of audio tracks, 75
    - of audio tracks vs. MIDI
      - tracks, 76
  - overdubs, in laptop recording, 507–508
  - overhead cymbals, 314
- P**
- Pace iLok key, 299–300
  - panning
    - automation, 128
    - in master track, 77–78
  - Parametric EQ, 324
  - partitions, hard drive, 13–15
  - paste functions, in Pro Tools, 438
  - patches
    - creating Crystal synthesizer, 371–373
    - creating own Combinator, 50
    - creating with Malström synth, 40–41, 544–545
    - creating with virtual
      - synthesizers, 365–367, 561
    - creating with Xpand!, 146
    - Kontakt importing from other
      - formats, 359
    - for Reason instruments, 28
    - rhythmic, 41–42
  - Pattern lane, Reason, 55
  - PCM (Pulse Code Modulation), 516
  - Pencil tool
    - in Logic, 179, 183
    - MIDI editing in Pro tools with, 483–484
    - MIDI loops in Pro Tools
      - with, 443
  - permissions, repairing, 18
  - PH-90 Phaser, in Reason, 48
  - phantom power, 503
  - Phazer looping program, 411
  - pianos
    - and compression, 315
    - EQ for, 325
    - virtual, 379–381
  - Pianoteq, 380–381
  - Ping Pong Delay, 478
  - pitch bend, for Reason
    - instruments, 28
  - Pitch effect, Live, 87
  - Pitch Shifting, in GarageBand, 233–234, 450
  - Platinum bundle, in Waves, 336
  - Platinum Verb effect, in Logic, 199
  - Pluggo Junior plug-in
    - defined, 245
    - overview of, 339
    - for plug-in tutorials, 300
  - Pluggo plug-ins
    - defined, 245
    - overview of, 337–338
    - virtual instruments in, 408
  - Pluggo Runtime, 338
  - Plug-in Device Browser button, Live
    - Browser, 72
  - plug-in effects, 297–341
    - in Ableton Live, 300–302, 559
    - accessing presets, 303
    - adding to Pro Tools tracks, 549
    - Bottom Line, 341, 558–560
    - compression, 311–315
    - delays, 306–311
    - distortion/gain, 315–317
    - donationware, 306
    - dongles and keys, 299–300
    - EQs, 323–326
    - filters, 326–329
    - finding free, 305
    - formats, 297–299
    - in GarageBand, 304–305, 559
    - installing VST, 558
    - locating for free on Web, 559–560
    - in Logic, 194, 302–303, 559

- mastering, 518, 522
- modulation, 317–320
- multi-effects, 331–333
- overview of, 297
- Pluggo and Pluggo Junior, 245
- in Pro Tools, 303, 559
- quick installation, 299
- Real Time AudioSuite, 559
- real world scenario using, 330–331
- reverbs, 320–323
- Super Destroy FX, 329
- plug-in effects, bundled, 333–341
  - Cycling '74, 337–340
  - DUY, 341
  - MDA, 340–341
  - Nomad Factory, 333–335
  - Pro Bundle, 341
  - Project Studio Bundle, 341
  - Wave Arts, 341
  - Waves, 335–336
- Plug-in Manager, AudioFinder, 255
- Plugsound Pro, 360
- Pod guitar interface, 406
- podcasting, with GarageBand, 234–237
- Polysix synthesizer, 377–378
- post production, 515–540
  - Bottom Line, 540, 570–573
  - CD authoring, 528–533
  - creating MP3 and AAC files with iTunes, 533–536
  - digital distribution, 537–538
  - exporting sessions from your DAW, 523–528
  - file formats, 515–516
  - mastering. *see* mastering
  - overview of, 515
  - real world scenario, 538–540
  - sample rates and bit depths, 523
- power adapters, for laptops, 502–503
- pre-fader recording, Logic, 194
- preferences
  - Apple Loop, 418
  - GarageBand, 212–214
  - GarageBand loop, 213
  - iTunes, 252–253
  - optimizing system, 541. *see also* System Preferences
  - Rax, 278
- premastering, 517
- presets
  - breeding in Crystal, 371
  - for GarageBand, 223–224, 228–229
  - for Logic plug-ins, 303
  - Minimonsta:Melohman synth, 374–375
  - for Pro Tools plug-ins, 133
  - virtual synthesizers
    - creating, 561
- Preview/Cue volume knob, Live, 78
- Pro Bundle, 341
- Pro Tools, 107–162
  - 4-band EQ 3 plug-in, 324
  - Ableton Live Lite Digidesign Edition in, 140–141
  - adding plug-in effects for, 549
  - adding virtual instruments to, 346
  - audio only sessions in, 119–122
  - AudioSuite plug-ins for, 549
  - Bottom Line, 160–162, 548–550
  - compressor plug-ins for, 312
  - copy and paste functions in, 438
  - Counter window in, 117
  - creating and saving new session in, 119, 548–549
  - disk usage in, 157
  - Edit window in, 110, 118
  - editing, 124–126
  - exporting Apple Loops from, 564–565
  - exporting CD-ready files from, 572
  - exporting WAV files from, 526
  - first session, 109–110
  - formats, 107–108
  - HD software, 107
  - IK multimedia AmpliTube LE in, 144–145
  - IK Multimedia SampleTank 2 SE in, 142–144
  - inserts, 123–129
  - LE software, 107
  - master fader track and, 123–124
  - Mix window, 128–129
  - M-Powered software in, 108
  - OS X and, 156–157
  - panning automation in, 128
  - portability of sessions in, 160
  - purchasing loops for, 413
  - Reason and, 141–142, 148–152, 550
  - recording more tracks, 124
  - Round Robin allocation in, 159–160
  - setting up, 109
  - side-chaining and, 158–159
  - software included in, 139–140
  - tech support for, 108
  - templates, 146–148
  - tracks, 111–117
  - Transport bar, 117–118
  - user forum, 108
  - using Live, 152–156
  - virtual amplification in, 399
  - virtual instruments in, 345–347, 560
  - volume automation in, 127–128
  - volume automation on tracks in, 549
  - VSTi Host and, 284
  - Xpand! and, 145–146
- Pro Tools and MIDI
  - creating performance with/without MIDI keyboard, 479–481
  - editing, 483–484
  - MIDI loops, 443
  - MIDI mixer, 464
  - MIDI tracks, 114
  - opening files, 566
  - playing and creating MIDI files, 468–469
  - quantization in, 481–483, 568–569
- Pro Tools LE, 497
- Pro Tools M-Powered, 498
- Pro Tools plug-ins, 129–139
  - adding delay effects, 559
  - AudioSuite, 129–130
  - automation of, 135–137
  - Bomb Factory, 135
  - DigiRack, 130–132
  - Dynamics III, 132–133
  - EQ, 134
  - formats for, 303–304
  - RealTime AudioSuite, 129–130
  - reverb, 134
  - sends, 137–139
  - TDM, 129–130
  - tips for working with, 133
- Pro Tools session (PTF) files, 110
- Pro Tools, working with loops in, 435–444
  - Acid loops, 438
  - creating, 438, 440–444
  - setting up, 435
  - using drag and drop Rex loops, 437–438
  - using Import Audio, 439–440
  - using Time Compression/Expansion tool, 436
  - using Workspace, 440
- Process panel, Sample Manager, 289

Processor window, Wave  
 Editor, 266  
 Project Studio Bundle, 341  
 properties, Apple Loop, 416  
 PTF (Pro Tools session) files, 110  
 public domain, copyrights vs., 258  
 Pulse Code Modulation (PCM), 516  
 Pure Volume, 537

## Q

quantization  
 adjusting timing of MIDI  
 performance, 460  
 in GarageBand, 489–490, 569  
 in Live, 479, 568  
 in Logic, 569  
 in Matrix Editor, 484  
 in Pro Tools, 481–483, 568  
 in Reason, 474, 568  
 Quantize tool, Matrix Editor, 183  
 Quick Time Music Synthesizer  
 sound bank, 459–460  
 QuickTime (MOV) format, 104, 246

## R

Rack Instruments, in Live, 433–435  
 RAM  
 adding more, 2  
 in laptops, 496  
 monitoring for each program,  
 10–11  
 optimizing amount of, 1–2  
 troubleshooting, 2  
 Random effects, in Live, 87  
 Rax, 277–281  
 adding effects, 279–280  
 overview of, 277–278  
 playing, 278–279  
 recording performance with,  
 281, 556  
 setting up, 278  
 Reaktor, 407  
 Real Instrument loops  
 adding to Audio track, 178  
 adding to loop library, 454–455  
 creating in Logic, 446–447  
 defined, 412  
 Real Instrument loops, in  
 GarageBand  
 converting Software Instrument  
 loops to, 242  
 creating, 453  
 editing, 230–231, 451–452

overview of, 216–217  
 recording with, 225–226  
 Real Time AudioSuite. *see* RTAS  
 (Real Time AudioSuite) plug-ins  
 re-amping, 511–512  
 Reason, 21–68  
 Ableton Live and, 97–101  
 Arrange Mode, 55–57  
 Automation features, 545  
 Bottom Line, 68, 543–545  
 creating new instruments in,  
 49–50  
 creating new song in, 60, 543  
 effects, adding as inserts and  
 sends, 544  
 effects included in, 22, 44–48  
 exporting Apple Loops  
 from, 564  
 exporting songs, 60–61  
 exporting WAV files from, 524  
 GarageBand and, 238–239  
 installation and audio setup,  
 23–26  
 interface basics, 28–29  
 as laptop software, 497  
 mastering session files in, 23  
 OS X and, 64–65  
 overview of, 21  
 Pro Tools and, 141–142,  
 148–152, 550  
 real world scenario, 65–67  
 ReFills, 23  
 ReWire and, 63  
 ReWire session with Live and,  
 97–100, 547–548  
 ReWire session with Logic and,  
 202–206, 552  
 Sequencer, 52–54  
 tech support and resources,  
 22–23  
 template for instruments and  
 effects, 61–63  
 things not done by, 22  
 Transport and Sequencer, 26–27  
 Transport bar, 55  
 using Matrix Pattern Sequencer,  
 50–52, 57–61  
 Reason, working with loops in,  
 421–430  
 converting in Redrum,  
 421–422  
 drum loops in Redrum, 425–426  
 editing, 543  
 editing in Dr. Rex Loop  
 Player, 543

exported loops, 430  
 exporting, 426–427  
 instrument loops, 427–428  
 maintaining consistent volume  
 level, 428–430  
 MIDI performances, 428  
 playing in NN-XT, 422–424  
 Reason Adapted 3, 141–142  
 Reason and MIDI, 469–474  
 configuring, 23–26  
 manually working with,  
 472–474  
 MIDI mapping, 470–472  
 MIDI mixer, 463  
 playing and creating MIDI files,  
 467–468  
 quantization, 474, 568  
 setting up control surface or  
 keyboard, 469–470, 472  
 working with, 567  
 Reason Browser window, 29  
 Reason instruments, 30–44  
 adding effects to, 47  
 creating new session, 30  
 Dr. Rex Loop Player, 31–34  
 Malström Grainable  
 Synthesizer, 39–42  
 Mixer 14:2, 30–31  
 naming or renaming, 33  
 NN19 Digital Sampler,  
 35, 350  
 NN-XT Advanced sampler,  
 36–38  
 overview of, 21–22  
 Redrum, 42–44  
 SubTractor Analog Synthesizer,  
 38–39  
 using Combinator to create  
 new, 49–50  
 recording  
 in Audacity, 261  
 in BIAS Peak, 272–273  
 laptop. *see* laptop recording  
 in Logic, 173–177  
 output of aux or instrument  
 track, 152  
 in Pro Tools, 120–122  
 in Rax, 281  
 in VSTi Host, 284  
 in Wave Editor, 268  
 ReCycle  
 advanced editing techniques,  
 286–288  
 editing, 543  
 exporting, 288  
 working with, 285–286

Red Book standards  
 for CD authoring, 528–529  
 creating CD Master with, 532  
 ISRC numbers and, 529  
 non-Red Book-compliant  
   vs., 529  
 software compliant with, 533  
 with Toast with Jam, 532–533  
 with XO Wave, 529–532

Redo command, 125

Redrum drum machine  
 converting loops, 421–422  
 creating drum loops, 425–430  
 defined, 22  
 loading patches, 44  
 overview of, 42  
 programming beats, 42–43  
 real world scenario, 66  
 triggering sample, 44

ReFills, in Reason, 23, 64

Region Parameters box, Logic, 444

Remedy synthesizer, 361–362, 378

Remote Editor, NN-XT, 36

Remote Override, Reason, 471–472

Render to Disk, Live, 432–433

RePsycho! plug-in, 340

researching, hard drives, 12–13

Return tracks, 76–77

returns, adding effects in Reason  
 as, 45

reverb effects  
 adding to samples, 295  
 free and commercial plug-ins  
   for, 323  
 in Logic, 199–200, 202  
 overview of, 320  
 parameters, 320–321  
 in Pro Tools, 134  
 in Reason, 45–46  
 recommendations for, 330  
 using, 321–323

ReWire  
 with GarageBand, 238–241  
 with Live, 71, 97–101, 102  
 with Live, Pro Tools  
   and, 155  
 with Logic and Live,  
   207–208  
 with Logic and Reason,  
   202–203, 552  
 overview of, 63  
 with Pro Tools and Reason,  
   150–151, 550

Rex lane, Reason, 54–55

REX loops  
 adding to Pro Tools session,  
   437–438  
 converting to Apple Loops, 420  
 format, 412  
 playing in NN19, 35  
 software programs using, 413

Ringshifter Ring Modulator effect,  
 in Logic, 198–199

RMS/peak detection,  
 compressors, 312

Rode NT1A condenser  
 microphone, 503

Root key, 358

Rosetta software, 11

Round Robin allocation, in Pro  
 Tools, 12, 159–160

routing  
 audio, 121  
 in Logic, 202, 203–204  
 multiple outputs, 150–151

RTAS (Real Time AudioSuite)  
 plug-ins  
 defined, 130  
 overview of, 298–299  
 in Pro Tools, 303  
 where to place, 559

RV7000 Advanced Reverb, 45–46

## S

Sample Box, in Live, 89–91

Sample Delay, in Logic, 194

Sample Display, in Live, 431–432

Sample Editor, in Logic, 448

Sample Manager, 288–292  
 adding effects, 291  
 batch converting audio files  
   with, 291–292, 556–557  
 converting files, 290–291  
 creating fades with, 292–293  
 normalizing, 289–290  
 overview of, 288–289

sample rates  
 and bit depths, 523  
 and Sample Manager, 291

Sampler  
 defined, 79  
 trying out in demo mode, 80  
 working with, 84–86

samplers, virtual, 348–360  
 basic parameters, 350–351  
 choosing best, 349  
 formats and file formats, 349

Kontakt, 354–359  
 limitations, 348–349  
 overview of, 348  
 SampleTank 2, 351–354

samples  
 adding reverbs and fades to, 295  
 with Audio Hijack, 256–257  
 with Audio Hijack Pro, 257–260  
 creating from iTunes song,  
   294–295  
 creating multisamples, 84–86  
 creating with Audio Editor, 293  
 editing in Simplr, 84  
 spoken word, 257–260, 293

SampleTank 2 sampler, 351–354

SampleTank SE, 142–144

Save button, Reason, 28

Save options  
 Audacity, 263  
 audio clips, 91  
 Impulse kits, 82  
 Live clips, 82–83  
 MIDI clips, 92  
 Pro Tool, 110, 119  
 Sample Manager, 291  
 SampleTank 2 sampler, 353–354

Scale effect, in Live, 87

scanning, in AudioFinder, 248–250

scenes, in master track, 77–78

Scissors tool, Logic, 179, 447

Scream 4 distortion, in Reason,  
 46–47

Screen Saver preferences, 4

Sculpture synthesizer, 187–189

Search tags, Apple Loop, 416

searches  
 AudioFinder, 250  
 Live File Browser, 73

Security preferences, 5

Selector tool, 125–126

Send Song to iTunes option,  
 GarageBand, 213

sends  
 adding effects in Reason as,  
   45, 544  
 Pro Tools plug-ins, 137–139

Sequencer section, Ultrabeat, 190

Sequencer window, Reason, 26–27,  
 52–55

sequencers, MIDI, 458

Session View, in Live, 70–71, 94–95

Setup Assistant, in Logic, 164–165

Show/Hide button, in Live, 72, 73

Shure Beta 52A microphones, 503

- Shure SM57 microphones, 503
- side-chaining, in Pro Tools, 158–159
- Signature Denominator toolbar, 79
- simple synthesis, 363–364
- Simpler
  - defined, 79
  - recording MIDI clips with, 96–97
  - trying out in demo mode, 80
  - working with, 83–84
- Smart tool, Pro Tools, 441–442
- SmartDisk, 502
- SmartShare headphone splitters, 501
- snare drums, 314, 325
- Soft Clipper, T-RackS, 521
- software
  - included with Pro Tools, 139–140
  - laptop studio choices, 497–498
  - removing unneeded, 10
- software, useful recording, 245–296
  - Audacity (audio editor), 260–264, 555
  - Audio Hijack / Audio Hijack Pro, 256–260, 557
  - Audio Units, 555–556
  - AudioFinder. *see* AudioFinder
  - BIAS Peak, 269–273
  - Bottom Line, 296, 555–558
  - creating samples, 293–294
  - getting ready, 245–247
  - Melodyne Cre8, 273–277
  - Rax, 277–281, 556
  - ReCycle, 285–288
  - Sample Manager, 288–293, 556–557
  - VST instruments, 555–556
  - VSTi Host, 281–284
  - Wave Editor, 264–269
- Software Instrument loops
  - adding to Instrument or Audio track, 178
  - adding to loop library, 454–455
  - creating in Logic, 445–446
  - defined, 412
  - editing with Matrix Editor, 183
- Software Instruments loops, in GarageBand
  - converting to Real Instrument loops, 242, 453
  - creating, 452
  - creating drum track, 219–220, 554
  - creating keyboard track, 221–222
  - editing performances, 229–230, 449
  - fixing it in the mix, 222
  - overview of, 217
  - synthesizers, 222–224
- Software Update preferences, 8–9
- Solo tool, Logic, 179
- Sonic Foundry, Acid program, 411
- Sony's Acid, 71
- sound modules, MIDI, 458
- Sound Preferences, 8
- SoundTech, Lightsnake cable, 502
- soundtracks, adding to iMovie, 237–238
- Sountrack program, Apple Loops for, 411
- Space Designer effect, Logic Pro, 199–200
- speakers, portable laptop, 502
- Special category, Logic effects, 200
- Spight, Ralph, 511–512
- split mono, vs. stereo, 539
- Split Track command, 563
- spoken word samples, 257–260, 293
- Spotlight, disabling keyboard shortcut to, 6
- Square Pencil tool, 483
- StealthPlug, IK Multimedia, 502
- Steinberg/Syncrosoft Key, 299–300
- stereo, split mono vs., 539
- stereo audio tracks, in Pro Tools, 113
- Stereo Delay, in Logic, 194
- stereo master fader, in Pro Tools, 114
- stereo tracks, for Live and Reason, 98
- storage, laptop, 502
- Sub Counter, in Pro Tools, 117
- submixes, 505
- SubTractor Analog Synthesizer
  - defined, 22
  - filter section of, 362
  - overview of, 38–39
  - real world scenario using, 65–66
- SupaPhaser, 283
- SupaPhaser plug-in, 318–319
- Super Destroy FX (AU, VST) plug-in, 329
- “Superstition” (Wonder), 184
- surround sound, 163
- sweeping effects, in Reason, 47–48
- Synthesizer section, Ultrabeat, 189
- synthesizers
  - Crystal synthesizer, 245
  - MIDI keyboards combined with, 462
- synthesizers, Logic, 186–194
  - deeper, overview of, 187
  - ES E (Ensemble synth), 186
  - ES M (ES Mono), 186
  - ES P (E Poly), 186–187
  - EXS24 mkII sampler, 192–194
  - overview of, 186
  - Sculpture, 188–189
  - Ultrabeat drum synth, 189–192
- synthesizers, virtual, 360–379
  - Absynth, 367–370
  - adding more elements, 364
  - adding more voices, 367
  - ADSR envelopes, 362
  - basics, 361
  - commercial, 378–379
  - creating basic patches and presets with, 561
  - creating patches, 365
  - Crystal, 370–373
  - effects, 363
  - filters, 362
  - free, 378
  - LFOs, 362
  - oscillators, 361–362
  - other Native Instruments, 370
  - overview of, 360
  - patch creation with Blue, 365–367
  - simple synthesis, 363–364
  - vintage, 373–378
- synthesizers, GarageBand
  - creating original, 224
  - modules, 224
  - overview of, 222–223
  - preset instruments, 223–224
- system optimization. *see* optimizing system
- System Preferences, 2–9
  - Dashboard & Exposé, 3–4
  - Desktop & Screen Saver, 4
  - Dock, 5
  - Energy Saver, 6
  - Keyboard & Mouse, 6–7
  - overview of, 2–3
  - security, 5
  - Software Update, 8–9
  - Sound, 8
  - Spotlight, 6

**T**

Tap Tempo toolbar, in Live, 79  
 Tape Delay, in Logic, 195  
 tape-based delay effects, 306  
 TCE (Time Compression and Expansion) mode, 124–125  
 TDM (Time Division Multiplexing) plug-ins, 129–130, 163  
 tech support  
   Pro Tools, 108  
   Reason, 22  
 templates  
   creating Autoload song in Logic, 167–169  
   creating in Reason, 61–63  
   creating Live, 70  
   creating Pro Tools, 146–148  
   types of GarageBand, 212  
 tempo  
   adjusting with Logic Transport bar, 172  
   creating audio-only session with changes in, 122  
   DigiRack plug-ins with synced, 131  
   setting with Apple Loop Utility, 420–421  
 Tempo toolbar, 79  
 Text tool, Logic, 179  
 third-party  
   plug-in presets, 303  
   supporting Live, 89  
 TidyUp!, 10  
 Time Adjuster preset, 139  
 Time Compression and Expansion (TCE) mode, 124–125  
 Time Compression/Expansion tool, 436–437  
 Time Division Multiplexing (TDM) plug-ins, 129–130, 163  
 Timeline, GarageBand, 215  
 Timeline, Logic's Arrange window, 165  
 Toast with Jam, 532–533  
 Tool buttons, Pro Tools, 116–117  
 Toolbars, BIAS Peak, 270  
 Toolbars, Live, 78–79  
 Tools box, Logic Arrange window, 166  
 Track Editor, in GarageBand  
   defined, 215  
   MIDI information, 489  
   Musical Typing in, 231–232  
   pitch shifting in, 233

  quantizing in, 489–490  
   Software Instrument performances, 229–230  
   tutorial, 229–231  
 track header, in Audacity, 262  
 track header, in GarageBand, 214  
 Track Info window, in GarageBand, 220  
 Track Record Enable button, 121  
 Track window  
   audio tracks, 74–75  
   Master track, 77–78  
   MIDI tracks, 75–76  
   Return tracks, 76–77  
 Tracker plug-in, 340  
 tracking, using master track, 78  
 Tracking Speed slider, Mouse tab, 7  
 tracks, creating in Pro Tools, 111–117  
   aux input tracks, 113–114  
   instrument tracks, 114  
   MIDI tracks, 114  
   Mode buttons, 115  
   mono audio track, 111–113  
   naming conventions, 115  
   overview of, 111  
   recording, 124  
   stereo audio tracks, 113  
   stereo master fader, 114  
   Tool buttons, 116–117  
   versions of Pro Tools and, 111  
   Zoom buttons, 116  
 T-RackS mastering software  
   equalizer, 519  
   as limiter plug-in, 570–571  
   Multiband Limiter, 520–521  
   online resource for, 518  
   Soft Clipper, 521  
   Tube Compressor, 519–520  
   versions of, 518–519  
 Transients, adjusting Apple Loop, 417–418  
 Transport bar  
   Audacity, 261  
   BIAS Peak, 270  
   GarageBand, 215–216  
   Logic, 172  
   Pro Tools, 117–118  
   Reason, 55  
 Transpose function, using loops in Logic, 444–445  
 Triangle Pencil tool, 483  
 Trim tool, in Pro Tools, 124–125

troubleshooting RAM, 2  
 Tube Compressor, T-RackS, 519–520

**U**

UDF format, 539  
 Ultrabeat drum synth, 189–192  
 Undo command, 125  
 Universal Binary, 11  
 updates  
   hardware driver, 20  
   Logic and OS X, 208  
   setting up Pro tools by checking, 109  
   Software Update preferences, 8–9  
 URS, 341  
 USB vs. FireWire, 13  
 user forum, for Pro Tools, 108

**V**

velocity  
   in GarageBand Software instrument track or loop, 489  
   in Hyper Edit window, 486–487  
   as Live effect, 87  
   in Live MIDI clips, 478–479  
   in Pro Tools MIDI clips, 482  
 Velocity lane, Reason, 55  
 Velocity tool, Matrix Editor, 183  
 Version Tracker, 17  
 vintage synthesizers, 373–378  
 virtual drummers  
   BFD, 394–397  
   defined, 384  
   other types of, 397  
   overview of, 393  
 virtual instruments, 343–410  
   amplifiers. *see* amplifiers, virtual  
   Bottom Line, 408–409, 560–562  
   bundles, 407–408  
   drums. *see* drums, virtual  
   in GarageBand, 347–348, 561  
   keyboards, 379–384  
   in Live, 344–345  
   in Logic, 347, 551–552, 560–561  
   overview of, 343  
   plug-in formats, 343–344  
   in Pro Tools, 345–347, 560  
   samplers. *see* samplers, virtual  
   synthesizers. *see* synthesizers, virtual

Virtual Studio Technology. *see* VST (Virtual Studio Technology)  
plug-ins  
virus protection programs, 18  
vocals  
    adding to virtual synthesizers, 367  
    and compression, 314–315  
    EQ for, 325–326  
    laptop recording, 505–506  
volume automation, in Pro Tools, 127–128, 549  
VST (Virtual Studio Technology)  
plug-ins  
    in Audacity, 260, 264  
    installing, 558  
    in Live, 300–302  
    in Live, disabled in ReWire mode, 152, 155  
    at MDA, 340  
    overview of, 298  
    using virtual instruments in GarageBand, 347–348  
    using virtual instruments in Live, 345  
    using virtual instruments in Logic, 347  
    wrappers, 298  
VSTi Host, 281–284

## W

warp modes, Live, 431  
WAV (waveform) file format  
    batch converting into Apple Loops, 563  
    best format for delivering, 539  
    as common sampler format, 349  
    converting into Apple Loops, 419–420, 562  
    converting loops in Redrum to, 421–422  
    exporting loops in Live as, 432  
    exporting sessions from your DAW, 523–528  
    importing into Logic, 448  
    overview of, 516  
Wave Arts, 341  
Wave Editor, 264–269  
    basics, 265  
    editing sound files, 265–266  
    effects, 267  
    keyboard shortcuts, 268–269  
    overview of, 264  
    Processor window, 266  
    recording, 268  
    working with layers, 267  
WaveArts FinalPlug 5, 523  
waveforms, oscillators, 361–362

Waves Mastering  
    bundle, 518  
Waves plug-in bundles, 303, 335–336  
Waves Renaissance Compressor  
    plug-in, 312–313  
Wavestation synthesizer, 376  
widgets, Dashboard, 10  
Workspace, Pro Tools  
    adding loops in, 440  
    using Live with, 155–156  
wrapper programs, 298

## X

XO Wave, 529–531  
Xpand!, 145–146, 443

## Y

Yellow Tools  
    Independence, 360

## Z

Zone Editor, Sampler, 85–86  
Zoom buttons, Pro Tools, 116