

Index

A

absolute colorimetric rendering
intent 19

actions (Photoshop) 90–93

Adobe (ACE) 59

Adobe Bridge showing embedded
profiles 55

Adobe Magazine 144

Adobe RGB 54–56, 63, 75, 89, 90

Adobe RGB (1998) 101, 109, 110, 118

Adobe RGB (1998): gamma 2.2,
6500K 54

Advertising and Illustrative Photog-
raphers Association (NZ) 143

Advertising Photographers of
America (APA) 143, 145

American Society of Media Photogra-
phers (ASMP) 143, 145

American Society of Picture
Professionals 143

Apple vii

Apple Cinema Display 122, 123

Apple RGB 54, 56

Apple RGB: gamma 1.8, 5000K 54

archiving 51, 138

Association of Photographers
(UK) 143

Australian Commercial and Media
Photographers 143

Auto Color 87

B

black point compensation 59

C

calibrate and profile devices 66–81

calibrating

- digital cameras 67
- dye sublimation (dye sub)
printers 71
- ink-jet printers 70
- monitors 67–70
- printers 70–73
- projectors 73
- scanners 67

creating device profiles 74–81

device profiles 12–14

editing profiles 81

higher-end color laser printer
calibration 71

profiling

- digital cameras 74
- monitors 76
- printers 76–81
- projectors 81
- scanners 75

calibration 6, 136

- device 11
- versus profiling 10

calibration software 139

Camera RAW (see RAW)

Camera RAW-processing
software 145

Canadian Association of Photogra-
phers and Illustrators in
Communication 143

CIE (Commission Internationale de
l’Eclairage) 3, 16

CIE XYZ 16

CMYK

- Custom CMYK window 61
- proofing 99
- versus RGB 42

color, consistent (see consistent
color)

color-managed workflow

- three stages 7

ColorChecker 108, 109

Colorimetric rendering intent 59

color labs 140

color management 2–5

- future of 133
- hardware and software 145
- history 2
- ICC 5
- in-depth 105–111
- technical aspects (see technical
aspects of color management)

Color Management Module (CMM)
14, 98

Color Management Policies options
(Photoshop) 57

ColorMatch RGB 54, 56

ColorMatch RGB: gamma 1.8, 5000K
54

color perception 3

color settings

- saving 62

Color Settings command
(Photoshop) 56

color space 15–17, 41, 54–65

- Adobe RGB (1998): gamma 2.2,
6500K 54
- Apple RGB: gamma 1.8, 5000K 54
- ColorMatch RGB: gamma 1.8,
5000K 54
- device-independent 16
- device-specific 16
- intermediate 17
- model 15
- ProPhoto RGB: gamma 2.2,
6500K 54
- recommendations 136
- setting in Photoshop 56
- sRGB: gamma 2.2, 6500K 54

Color Vision 77, 138

Commission Internationale de
l’Eclairage (CIE) 3

consistent color 1–7

consumer photo lab digital
printer 140

Conversion Options box
(Photoshop) 59

Convert to Profile command
(Photoshop) 84

Create Droplet command
(Photoshop) 93

CRT monitors 138

Custom CMYK window 61

custom profiles 60

D

DDC (direct digital communication)
139

delivery of images 137

Desaturate Monitor Color
(Photoshop) 60

device calibration (see calibration,
device)

- device profiles (see calibrate and profile devices)
 - Digital Camera Magazine 144
 - digital cameras 27–35, 140
 - additional considerations 34
 - calibrating 67
 - digital image sensors (CMOS versus CCD) 29
 - exposure 32
 - input and resolution 28
 - JPEG (see JPEG)
 - profiles 13
 - profiling 74
 - RAW (see RAW)
 - white balance 29
 - digital color labs 140
 - Digital Negative (DNG) viii
 - Digital Output Magazine 144
 - DIMA test image 102
 - disk labels 138
 - DNG (Digital Negative) viii
 - Dot Gain 20% for Gray and Spot 56
 - downsampling 48
 - dye sublimation (dye sub) printer calibration 71
- E**
- Editorial Photographers 143
 - embedded profiles 136
 - Adobe Bridge showing 55 (see also profiles)
 - Epson 4800 printer
 - calibrating and profiling 125–131
 - Epson Scan software 105
 - 16-bit Gray Scale 107
 - 48-bit Color 107
 - Adjustments 107
 - Auto Exposure 108
 - Color button 106
 - Color Control Configuration 108
 - Color Restoration 107
 - ColorSync 106
 - Dust Removal 107
 - File Save Setting button 105
 - Film Mode 107
 - Full Auto Mode 105
 - Grain Reduction 107
 - Histogram Adjustment 108, 109
 - Home Mode 106
 - No Color Correction option 106
 - Professional Mode 107
 - Reflective Mode 107
 - Unsharp Mask Filter 107
 - European Color Initiative 141
 - exposure 32
 - Eye-One 138
 - Eye-One Display 121
 - Eye-One Spectrophotometer 126
- F**
- file info 138
 - Fraser, Bruce 144
- G**
- gamma
 - white point and gamma settings 139
 - gamut 15
 - wide-gamut RGB color 136
 - GCR (Gray Component Replacement) 61
 - GRACoL (General Requirements for Applications in Commercial Offset Lithography) 141
 - GRACoL's DTR004 141
 - GretagMacbeth vii, 77, 138
 - ColorChecker (ColorChecker)
 - Eye-One Spectrophotometer (see Eye-One Spectrophotometer)
 - ProfileEditor (see ProfileEditor)
 - ProfileMaker (see ProfileMaker)
 - guide prints 142
- H**
- higher-end color laser printer calibration 71
 - histogram 109
- I**
- ICC (International Color Consortium) 5
 - ICC color management 5
 - ICC profiles vii
 - creating 117–119
 - custom 61
 - ink-jet and dye sub printers 142
 - ink-jet printer calibration 70
 - input profile 13
 - International Commission on Illumination 3
 - International Digital Enterprise Alliance 143
 - Internet output 48–50
 - batch processing 50
- J**
- JPEG 11, 28, 29, 33–37, 91, 137, 140
 - when to shoot 34
 - workflow and 37
- L**
- LCD display 138
 - Lucas, Rick 144
 - LUT profile 13
- M**
- Matrix profile 13
 - Maxwell, James 3
 - metadata, embedded 138
 - Missing Profiles in Photoshop 57
 - Monaco Optix XR from X-Rite 77, 121, 138
 - monitors 138
 - calibrating 67–70
 - profiling 12, 76, 121–124
 - Black Luminance 122
 - White Luminance 122
 - Museum Computer Network 143
- N**
- National Association of Photoshop Professionals (NAPP) 145
 - National Press Photographers Association 143
 - native white point 139
- O**
- offset printers 141
 - Open Image 101

output
 preparing file for 40
 color space 41
 resolution 40
 sharpening an image 41
 output objective lists 89
 output profile 12

P

Pantone, printing accurately 120
 papers 126
 perceptual rendering intent 19, 59
 Perfection 3200 scanner 105
 Photo Marketing Association (PMA)
 145
 Photoshop
 actions 90–93
 assigning a profile 58
 Color Management Policies
 options 57
 Color Settings 127
 advanced options 59
 Convert to Profile command 84
 Create Droplet command 93
 Desaturate Monitor Color 60
 Print with Preview option 85
 Profile Mismatches and Missing
 Profiles 57
 proof view in 64
 setting color space 56
 Use Black Point Compensation
 options 59
 Photo Techniques 144
 Picture Archive Council of
 America 143
 Picture Licensing Universal
 System 143
 printers
 calibrating 70–73
 consumer photo lab digital
 printer 140
 driver options 128
 higher-end color laser printer
 calibration 71
 ink-jet and dye sub printers 142
 profiling 76–81, 125–131
 papers 126
 print guides 138
 print or proof-viewing area 140
 Print with Preview option
 (Photoshop) 85
 Pro4000 Photo Qlty IJP 101
 professional digital color labs 140
 Professional Photographer 145
 Professional Photographers of
 America (PPA) 143, 145
 profile connection space (PCS) 14
 profile editing 100–104
 applications 100
 ProfileEditor 101
 Global Correction tool 102
 Range Preview box 103
 Selective Color tool 102
 ProfileMaker 80, 126
 calibrating with 130
 Correct for Optical Brightener 131
 Viewing Light Source
 Profile Mismatches in Photoshop 57
 profiles 96
 applying for output 84
 assigning in Photoshop 58
 assigning versus converting 63
 Auto Color 87
 calibrating (see calibrate and
 profile devices)
 Convert to Profile command 84
 custom 60
 device (see device profiles)
 editing 81
 embedded profiles 136
 monitor 12
 output 12
 output objective lists 89
 placing color profiles 82
 profiling versus calibration 10
 system 82
 using printer driver to convert
 profile 86
 (see also embedded profiles)
 Profile Verification Kit 140
 projectors
 calibration 73
 profiling 81
 proof view in Photoshop 64
 ProPhoto RGB: gamma 2.2, 6500K 54

R

RAW 28, 33, 136, 140
 workflow and 37
 ReadMe files 138
 relative colorimetric rendering
 intent 19
 rendering intents 18, 59
 absolute colorimetric 19
 perceptual 19
 relative colorimetric 19
 saturation 19
 resolution 22, 40, 42
 resources 135–145
 books 144
 manufacturers 145
 podcasts 145
 trade associations 145
 trade journals 144
 UPDIG Guidelines (see UPDIG
 Guidelines)
 websites 144
 RGB
 versus CMYK 42
 RGB color space choices 56
 RGB master files 142
 RIPs (Raster Image Processors)
 112–120
 advantages 112
 features and benefits 113
 ink limiting 116
 ink restriction 114
 nesting 119
 printer calibration and 114–117
 print Pantone and spot color
 accurately 120
 productivity controls 119
 selecting 113
 tone distribution 116
 RIP software 143
 Rodney, Andrew 144

S

saturation rendering intent 19
 scanners
 avoiding dust and noise 26
 calibrating 67
 choosing resolution 23

- halftones 26
- inputting with 22–27
- leveraging software 24
- profiles 13
- profiling 75
- starting with high bit depth 25
- scanning
 - in-depth 105–111
- scanning software 140
- sharpening an image 41, 46
- sharpening images 137
- Shutterbug 145
- spot color, printing accurately 120
- Spyder2 138
- sRGB 54–56, 60, 73, 75, 89–91
- sRGB: gamma 2.2, 6500K 54
- sRGB IEC61966-2.1 56
- Stevenson, Don vii
- Stock Artists Alliance 143
- SWOP TR00 141
- system profiles 82, 101

T

- technical aspects of color
 - management 95–133
 - color management in-depth (see color management, in-depth) 105
 - monitors, profiling (see monitors, profiling)
 - printers, profiling (see printers, profiling)
 - profile editing (see profile editing)
 - Raster Image Processors (see RIPs)
 - scanning (see scanning, in-depth) 105
 - under the hood 96–99
- test image 102
- TIFF 28, 33, 90, 91, 109, 142
- workflow and 37

U

- U.S. Web Coated SWOP v2 for CMYK 56
- UCR (Under Color Removal) 61
- UPDIG Guidelines 136–143
 - archiving 138
 - calibration 136
 - cameras 140
 - color management 136
 - color space recommendations 136
 - Consumer photo lab digital printer 140
 - CRT monitors 138
 - DDC (direct digital communication) 139
 - delivery of images 137
 - digital cameras 140
 - disk labels 138
 - embedded metadata 138
 - embedded profiles 136
 - formats and names 137
 - guide prints 142
 - ink-jet and dye sub printers 142
 - LCD display 138
 - monitors 138
 - native white point 139
 - offset printers 141
 - primary goals 136
 - print guides 138
 - print or proof-viewing area 140
 - professional digital color labs 140
 - RAW file format 140
 - RAW files 136
 - ReadMe files 138
 - resolution 137
 - RGB master files 142
 - scanning software 140
 - sharpening images 137
 - white point and gamma settings 139

- wide-gamut RGB color 136
- workflow 142
- working environment 140
- Use Black Point Compensation options (Photoshop) 59

W

- white balance 29
 - auto 30
 - custom 31
 - presets 30
- white point and gamma settings 139
- wide-gamut RGB color 136
- workflow 21–51, 142
 - input stage 22–35
 - digital cameras (see digital cameras)
 - scanners (see scanners)
 - supplied files 35
 - output stage 40–50
 - files and printer resolution 42
 - paper choice 44
 - preparing file for Internet 48
 - preparing file for output 40
 - printer resolution variation 43
 - print speed 44
 - RGB or CMYK 42
 - screening 44
 - sharpening 46
 - viewing distance 45
 - process stage 36–39
 - file format type 37
 - processing equipment 38
 - process refinement 37
 - working environment 140
 - working spaces 17
 - Working Spaces CMYK pull-down menu 60

Y

- Young, Thomas 2