# s is mosist your setup Guide to Flash Photography

DUSTIN DIAZ

This is Smosist Jubo YOUR YOUR SETUP GUIDE TO FLASH PHOTOGRAPHY

## DUSTIN DIAZ



#### THIS IS STROBIST<sup>®</sup> INFO: YOUR SETUP GUIDE TO FLASH PHOTOGRAPHY

#### **Dustin Diaz**

Published by Peachpit Press. For information on Peachpit Press books, contact:

#### PEACHPIT PRESS

1249 Eighth Street Berkeley, CA 94710 (510) 524-2178 Fax: (510) 524-2221

Find us on the Web at www.peachpit.com To report errors, please send a note to errata@peachpit.com Peachpit Press is a division of Pearson Education

Copyright @ 2012 by Dustin Diaz All photography @ Dustin Diaz except where noted

Editor: Ted Waitt Production Editor: Lisa Brazieal Interior Design: Mimi Heft Compositor: WolfsonDesign Indexer: James Minkin Cover Design: Mimi Heft Cover Images: Dustin Diaz

#### NOTICE OF RIGHTS

All rights reserved. No part of this book may be reproduced or transmitted in any form by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher. For information on getting permission reprints and excerpts, contact permissions@peachpit.com.

#### NOTICE OF LIABILITY

The information in this book is distributed on an "As Is" basis without warranty. While every precaution has been taken in the preparation of the book, neither the author nor Peachpit shall have any liability to any person or entity with respect to any loss or damage caused or alleged to be caused directly or indirectly by the instructions contained in this book or by the computer software and hardware products described in it.

#### TRADEMARKS

Strobist<sup>®</sup> is a registered trademark of Strobist.com. Used with permission. *This Is Strobist<sup>®</sup> Info* is not affiliated with or endorsed by David Hobby or Strobist.com.

All Canon products are trademarks or registered trademarks of Canon Inc. All Nikon products are trademarks or registered trademarks of Nikon and/or Nikon Corporation.

Many of the designations used by manufacturers and sellers to distinguish their products are claimed as trademarks. Where those designations appear in this book, and Peachpit was aware of a trademark claim, the designations appear as requested by the owner of the trademark. All other product names and services identified throughout this book are used in editorial fashion only and for the benefit of such companies with no intention of infringement of the trademark. No such use, or the use of any trade name, is intended to convey endorsement or other affiliation with this book.

ISBN-13 978-0-321-80354-2 ISBN-10 0-321-80354-X

987654321

Printed and bound in the United States of America

To Erin

She's pretty cool.

This page intentionally left blank

## CONTENTS

Introductionv
Backstoryv
On Strobist® Infov
This Book vi

l

## one: Lights, Camera, Action

On Acquiring Lights	2
Speedlights	2
Radio Triggers	3
Light Stands	5
Umbrella Adapters	7
Light Modifiers	3
Grid Spots1	1
Buying Advice	2

## two: Understanding Light Travel 13

Shutter Speed, Aperture, and ISO Sensitivity 14
Shutter Speed 14
Aperture
ISO Speed
Okay, Now What about This Flash Thing?
Okay, Now What about This Flash Thing? 15   What Is a Guide Number? 15

## three: This Is Strobist® Info 19

Index	. 121
-------	-------

## INTRODUCTION

I swore on my mother's grave that I would never write a book again. With that said, Mom, I am terribly sorry for even insinuating that you weren't alive. I'll send you a copy once this is over, and I'll await that embarrassing phone call where you're all like, "Mijo, what was that all about?" And I'll be like, "Oh, yeah. Sorry about that. I didn't have a clever opener so I just went with it."

Nevertheless, this wasn't yet another painful experience to complete. Luckily, I had an amazing wife (Erin), a patient editor (Ted Waitt), and a plethora of friends (an excuse to mention JR and Ashley) who helped push me along (or took me away) to complete this book. Pro tip for first-time authors: Don't write a book immediately after having a first child and switching jobs. Just don't.

To the point—you see, this was all a big misunderstanding with one thing leading to another. And it all happened like this.

### BACKSTORY

In 2006, I bought my first SLR camera, a Nikon D40. I took a lot of terrible photos. Like...just badly terrible. In 2007, I added more to that terrible collection. In 2008, I decided I liked taking terrible photos so I bought more lenses, figuring that would improve my ability to be a terrible photographer. Unfortunately, near the end of the year I caught a bug that made me care about taking good pictures. Then finally came Christmas 2008, when I decided to do one of those cheesy 365 "photo a day" projects for 2009. Long story short, it became stupidly successful. I wrote some things about lighting and drew some diagrams. I learned a lot of things, many hardships were had, and I am now a better person. Years later, I wrote a book about it. The End.

### **ON STROBIST® INFO**

Just to be up front, Strobist<sup>®</sup> is part of the David Hobby Hair Club for Men brand. If you haven't been there, I highly recommend you take a visit back to the old town and know your flash roots. Visit strobist.com for more information.

But seriously, if it weren't for David pouring in countless hours of blood, sweat, and beers, I can honestly say I'd be doing something else other than pretending to act like I'm a writer. David Hobby is *the* Godfather of Flash Photography.

### THIS BOOK

Considering this book made it into your hands one way or another, it's highly unlikely you'll ever read this introduction thing. For example, chicken butt banana brains! Am I right? Given that this book is filled with full-page, high-resolution beautiful photos (just sayin') accompanied by detailed setup shots, there seems very little reason to bother reading about gear, light travel, and the inverse square law. And to your defense, I'm right there with you! Photos speak a thousand words! But for what it's worth, in the spirit of terseness and not wasting your time, you'll be a thousand times better off reading the accompanying text chapters before trying to decipher the photo diagrams. So if you're learning about flash photography for the first time via this book, first off, good choice, and secondly, don't skimp out on the words. Everything from aperture settings to softboxes to rock music is covered, helping you streamline your way to becoming a professional flash diagram decoder and allowing you to recreate any image shown in this book. So just read the text, for you and for me. Together. We can make a difference. Now queue the happy music and read on.

This page intentionally left blank

# three: This Is Strobist Info

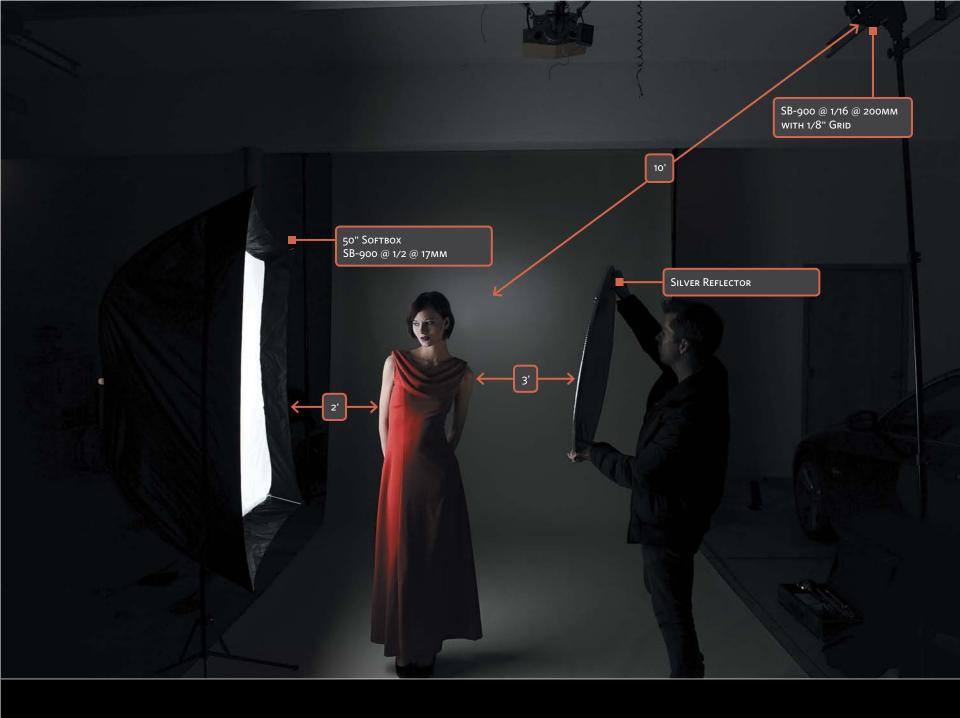
You've now arrived at the part of the book where you can skip to any page you want. With that in mind, use each photo as a guide to provide means to your own ends. So get out there, take some pictures, rock the lights and...oh my gosh I sound like every other photographer giving advice!

Oh well, I tried. Good luck, and may the schwartz be with you.

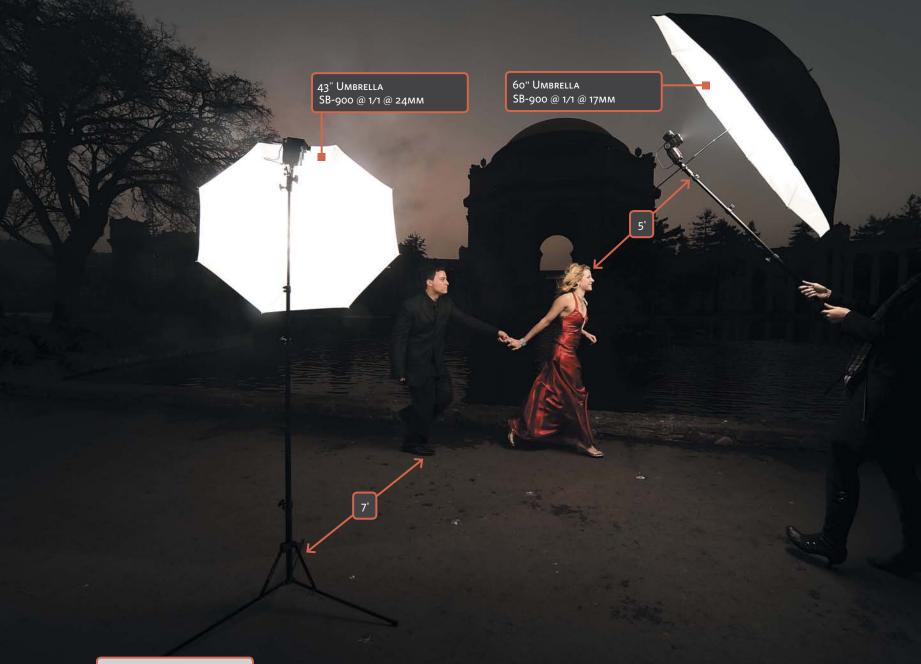






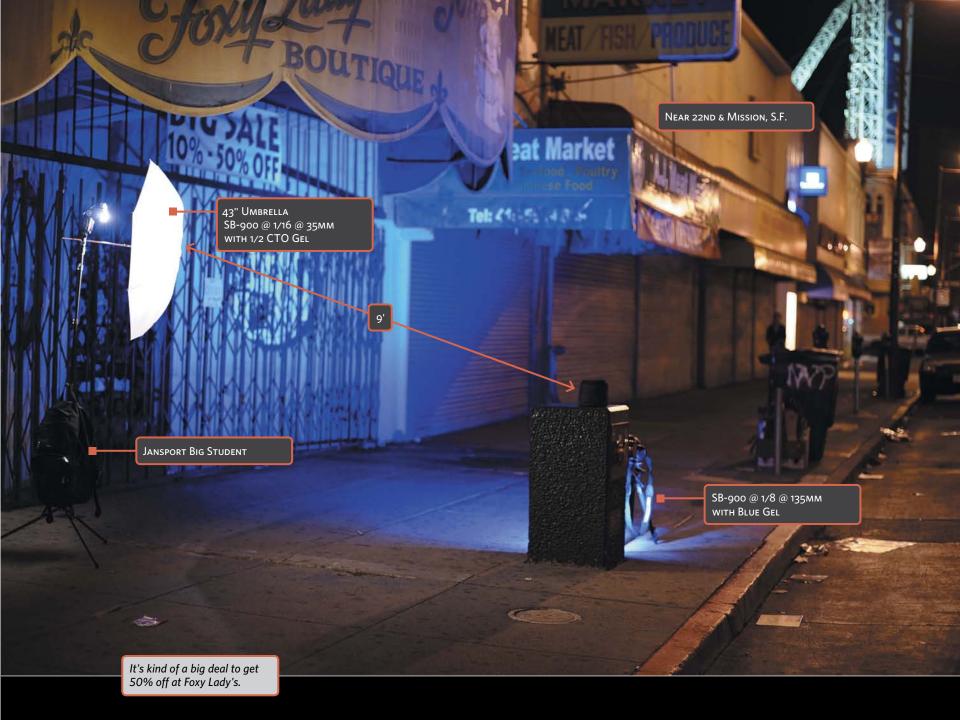




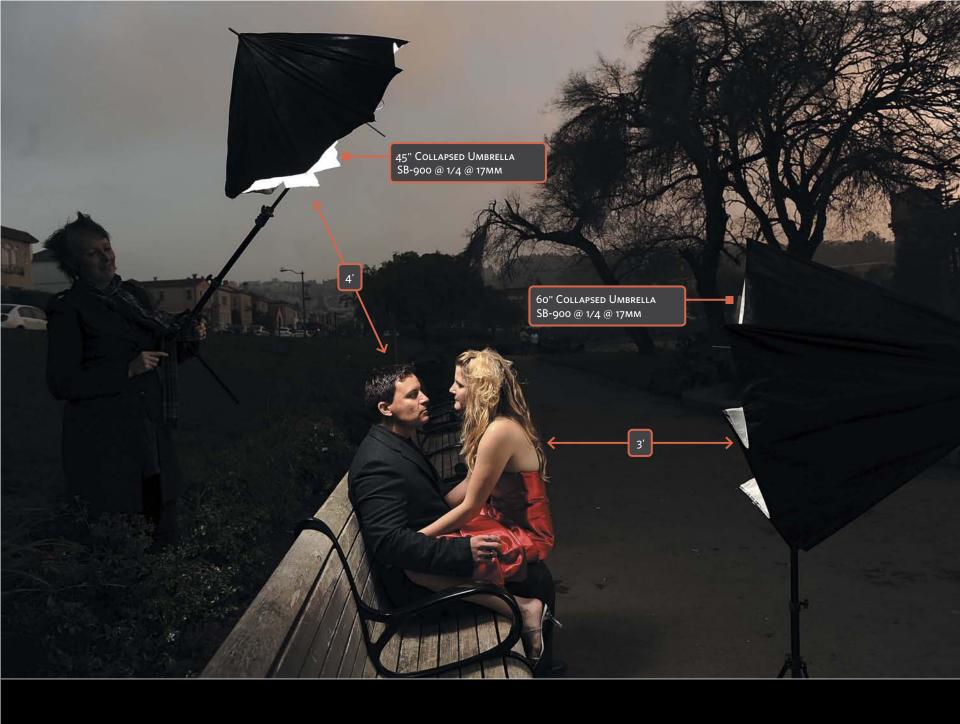


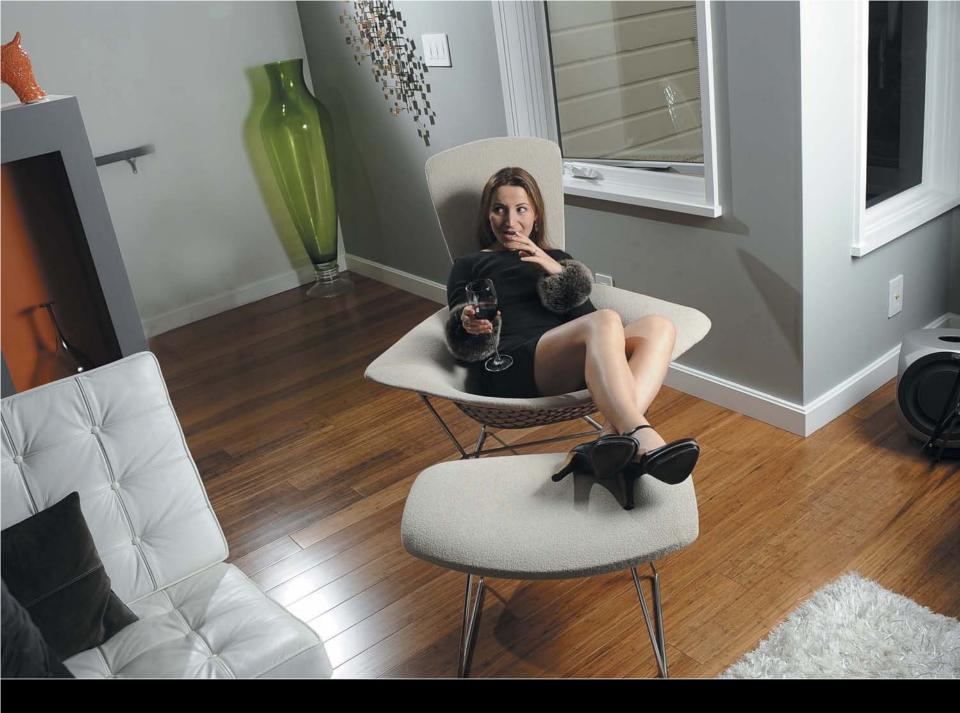
It took seven runs to get the final shot.

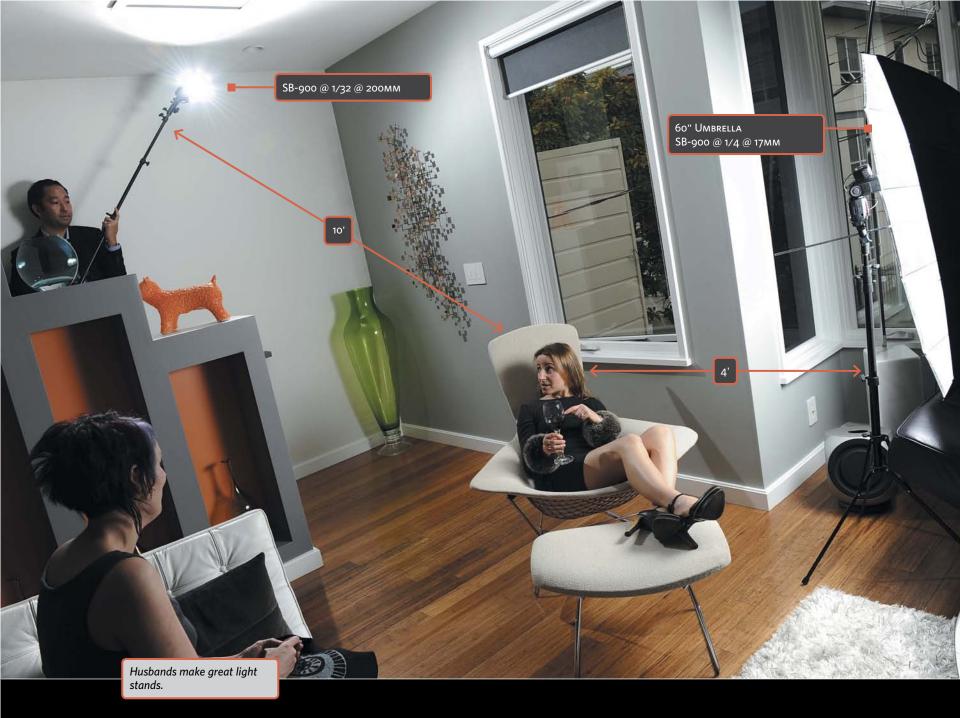




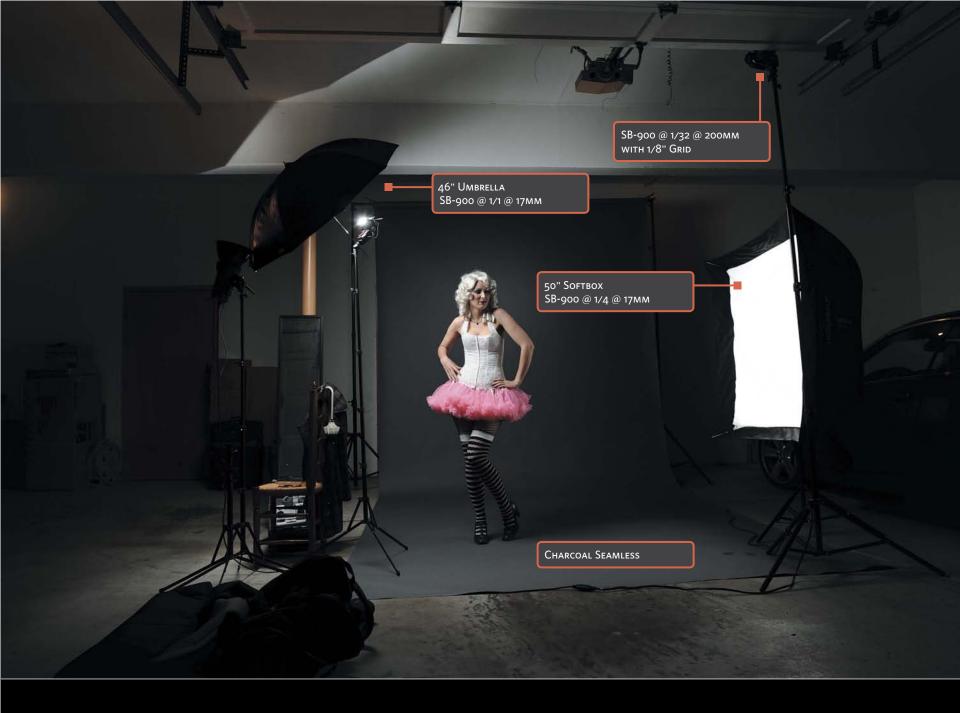




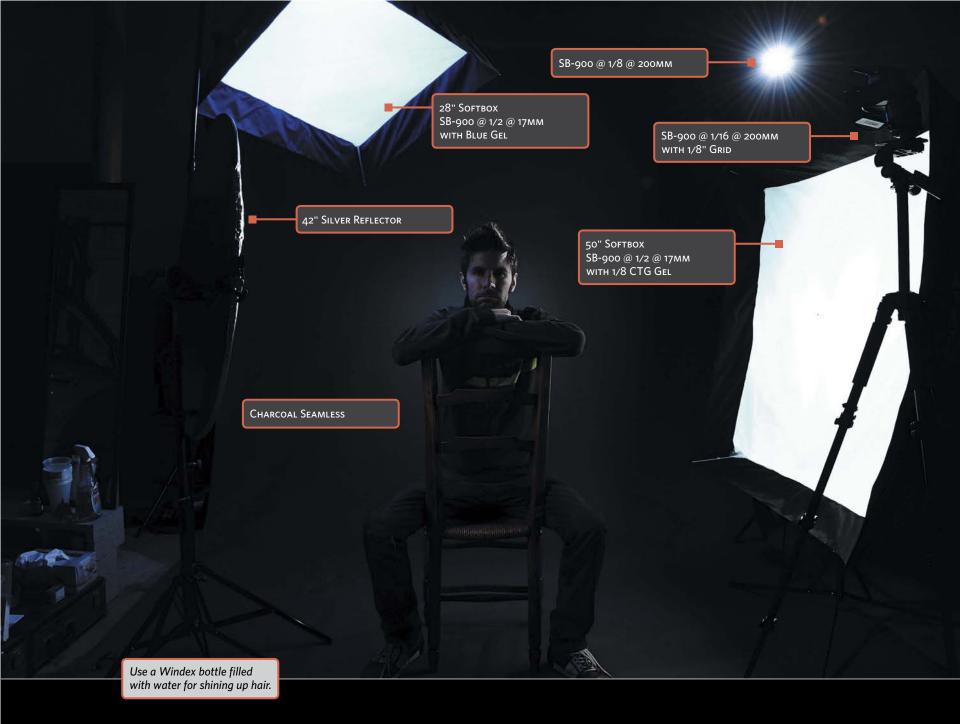
















Apparently, the theme of the night was "twins."







60" Umbrella SB-900 @ 1/1 @ 17mm

43" Umbrella SB-900 @ 1/2 @ 24мм

Two umbrellas are used to ensure even, full-body coverage. -

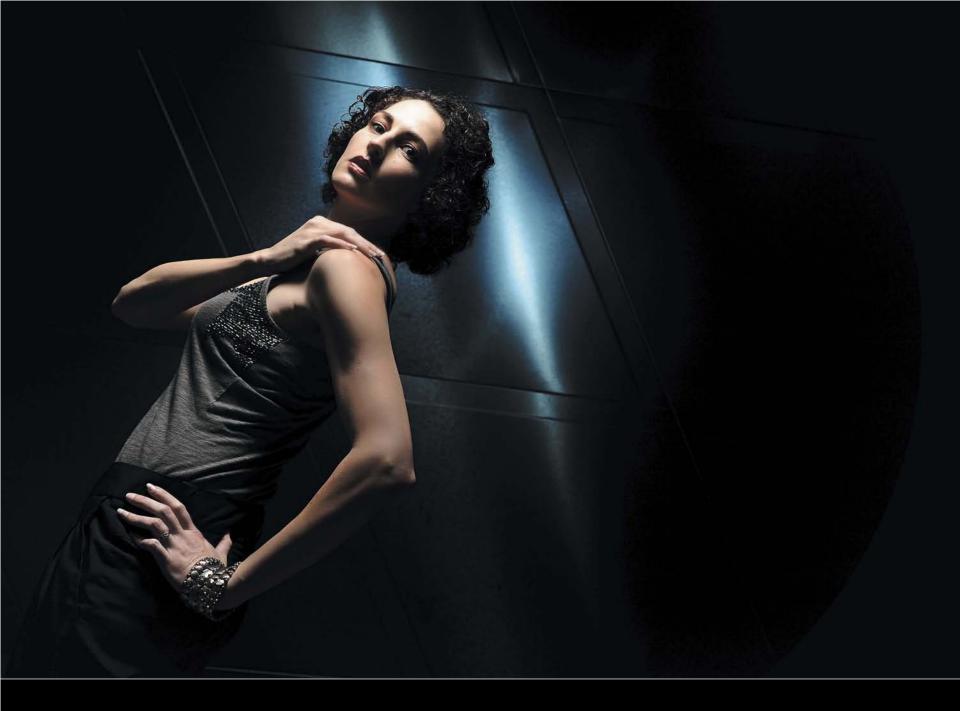
PALACE OF FINE ARTS

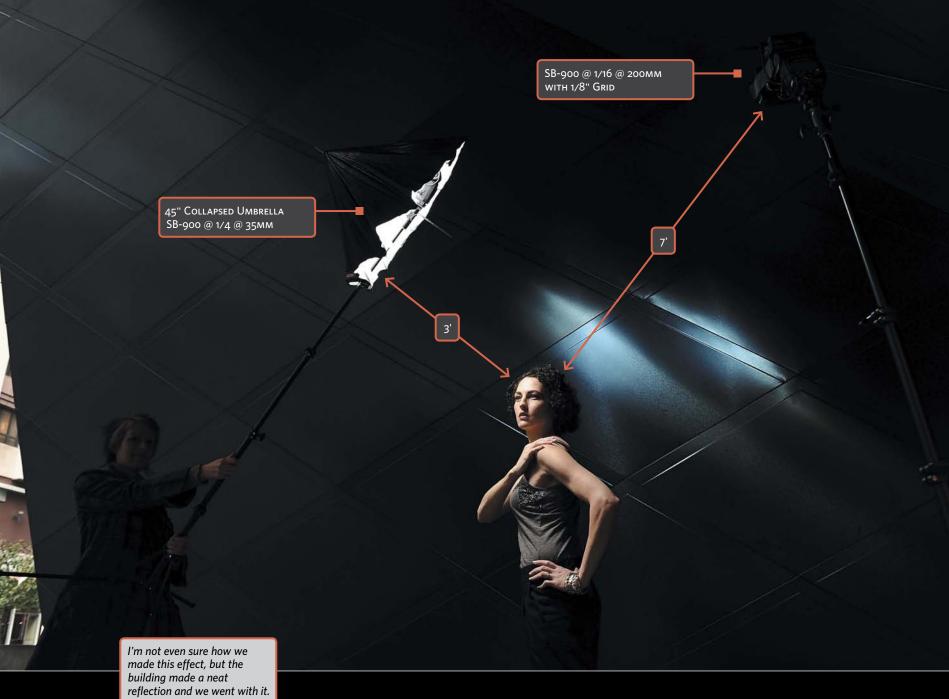
















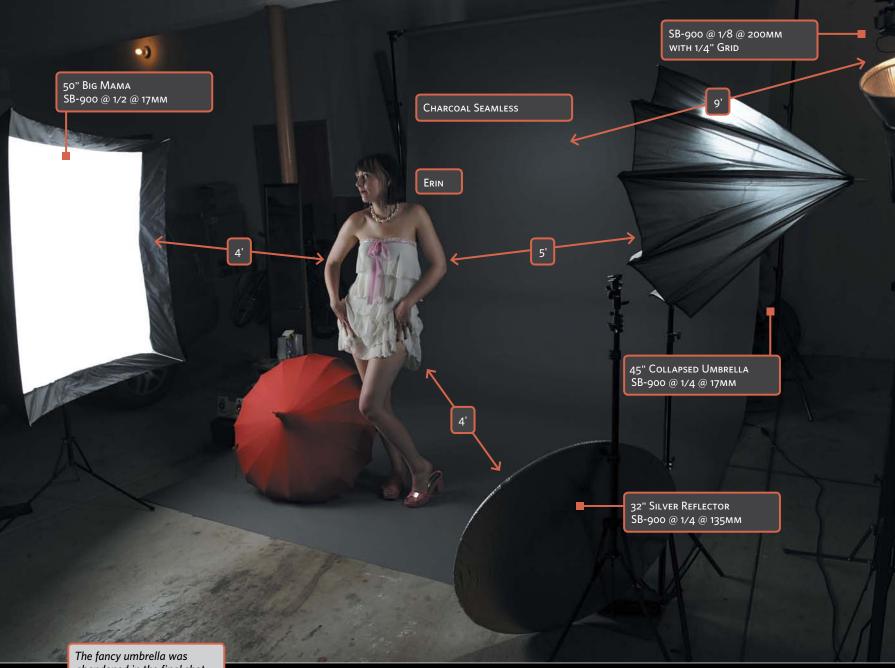










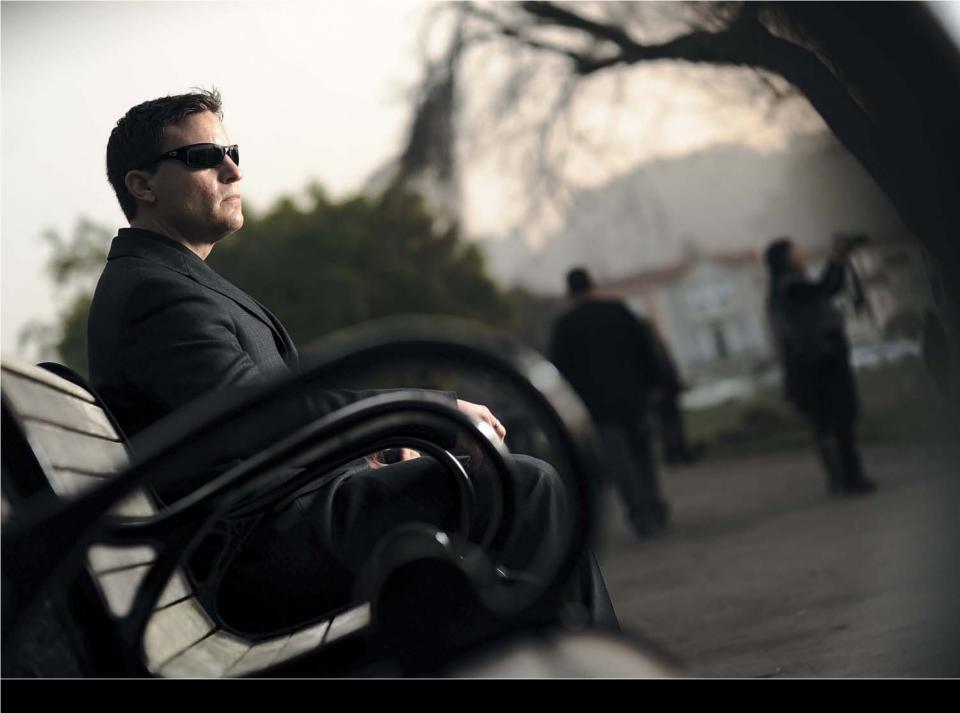


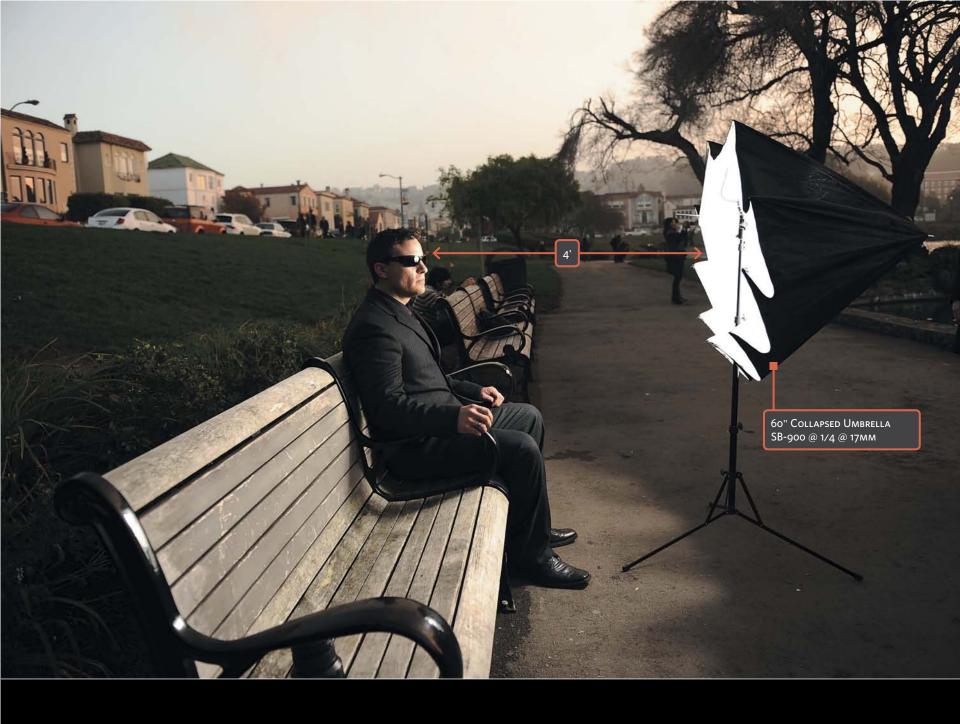
abandoned in the final shot.

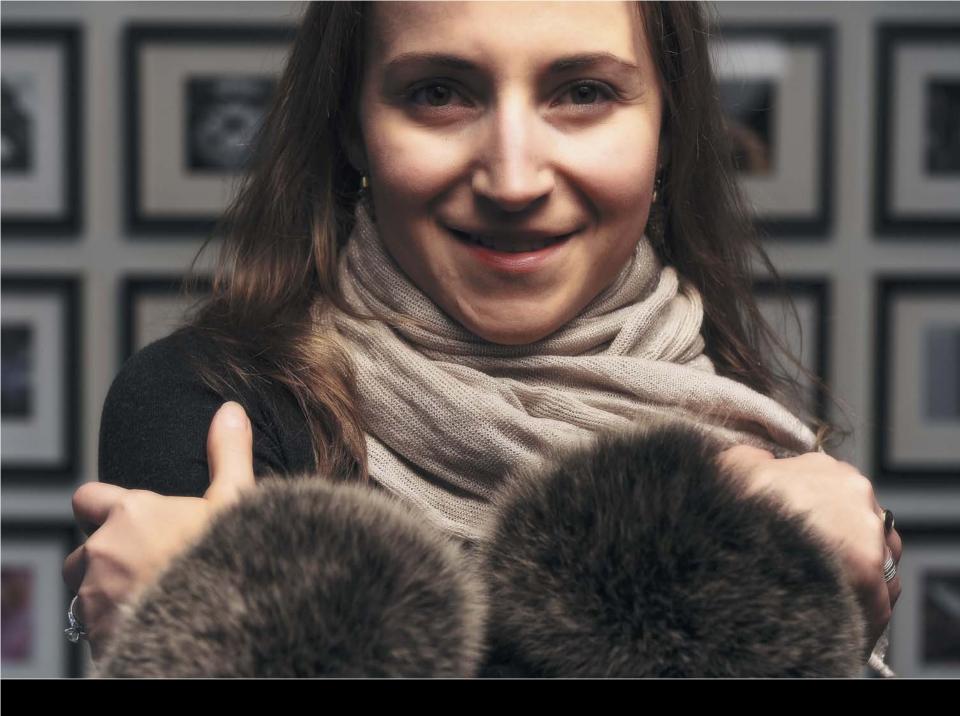




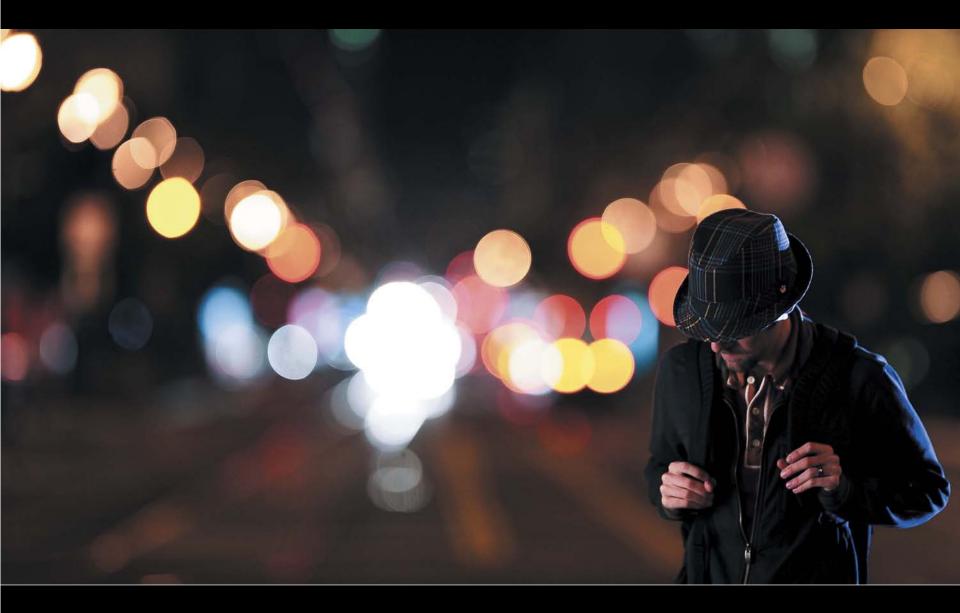
Beware of the Mary Poppins effect these softboxes have, and take extra precaution when shooting alone.















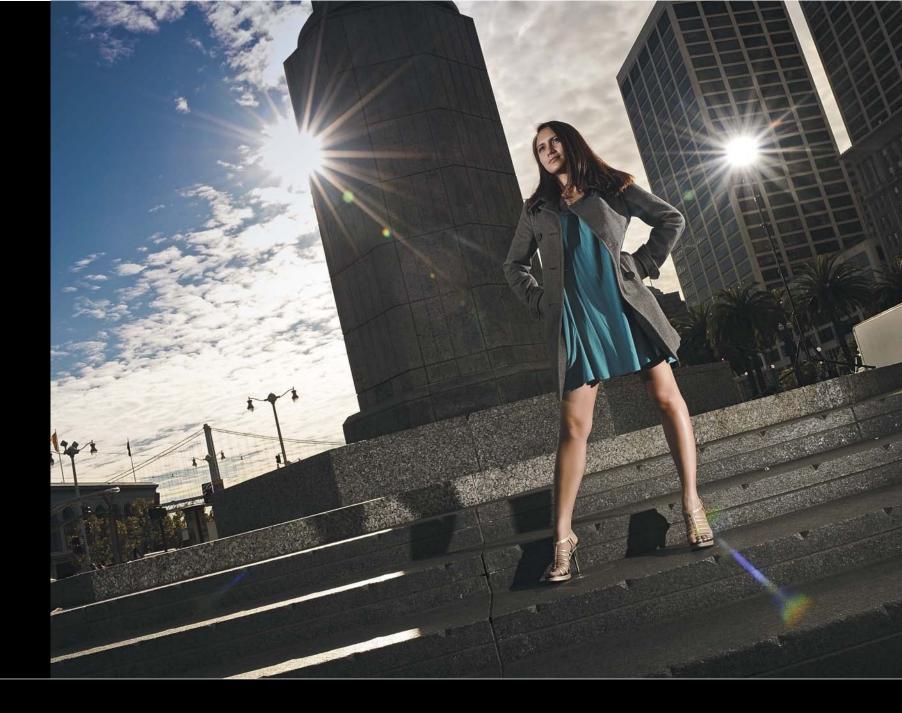


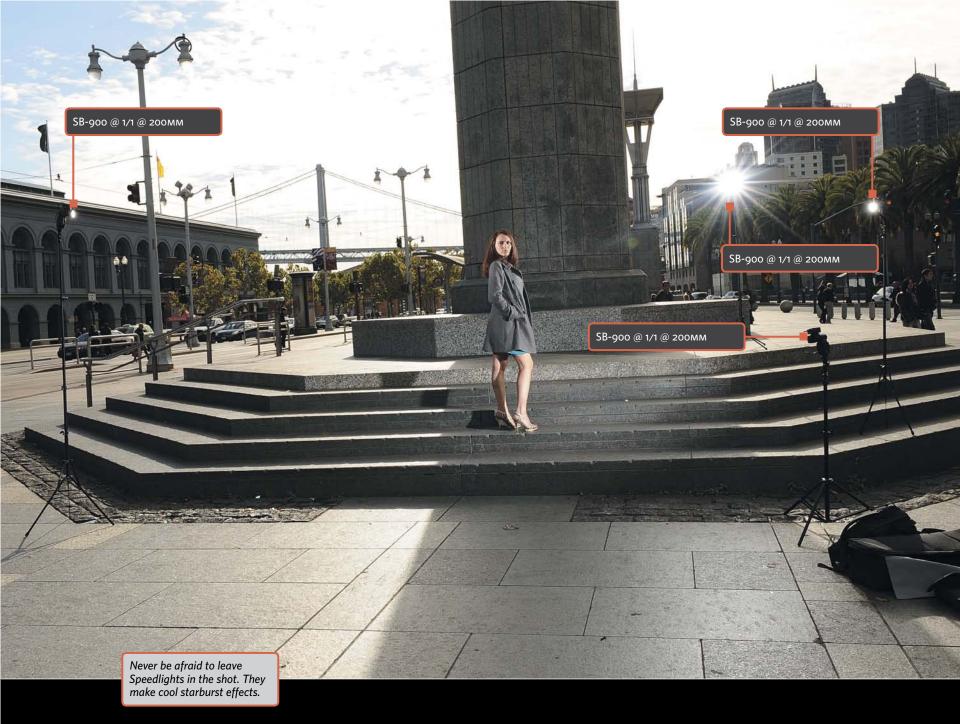
UONIN

1'

White Reflective Paper

There was an attempt to shoot some fruit, but that idea was abandoned in favor of the gnome.

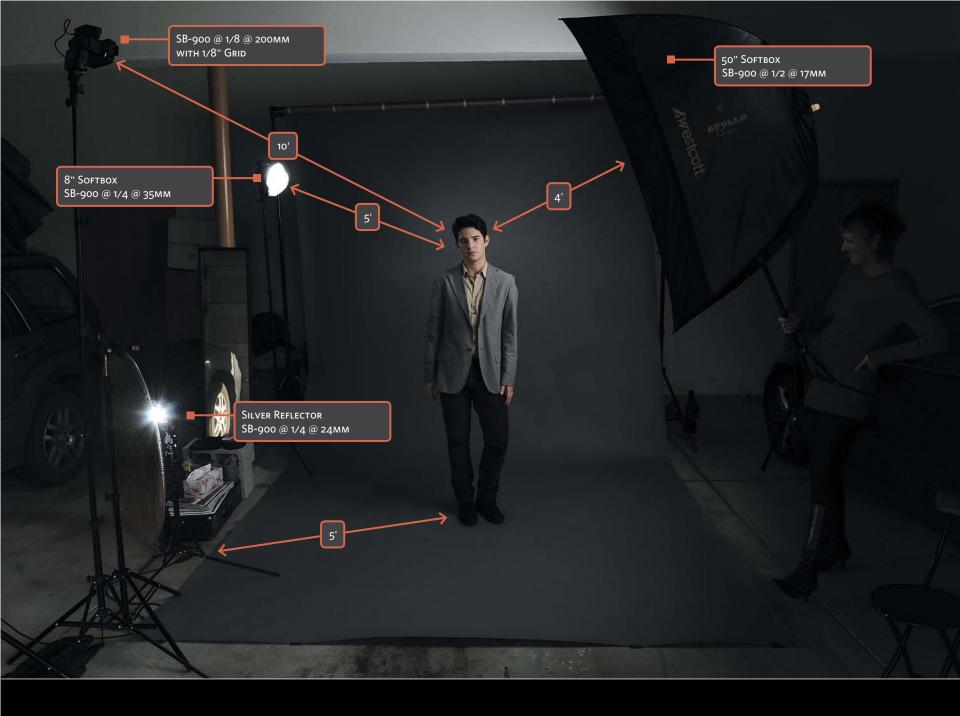










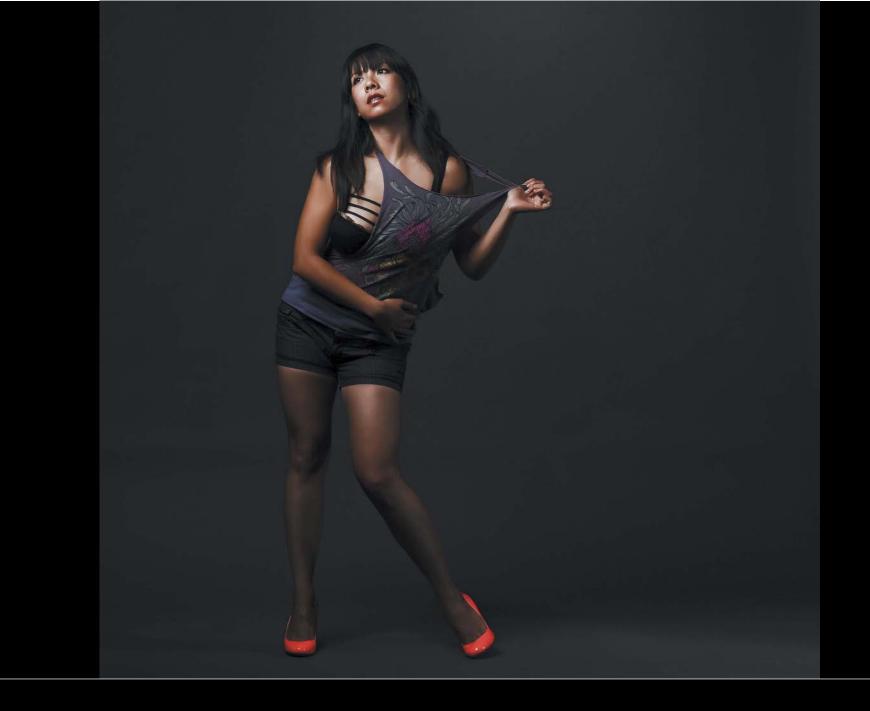






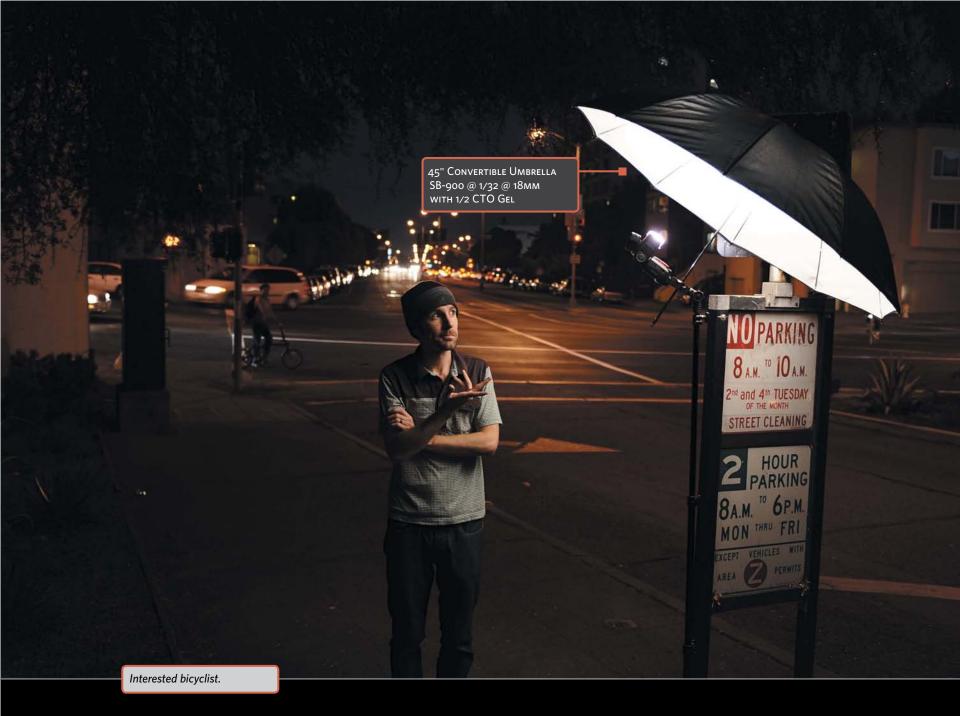




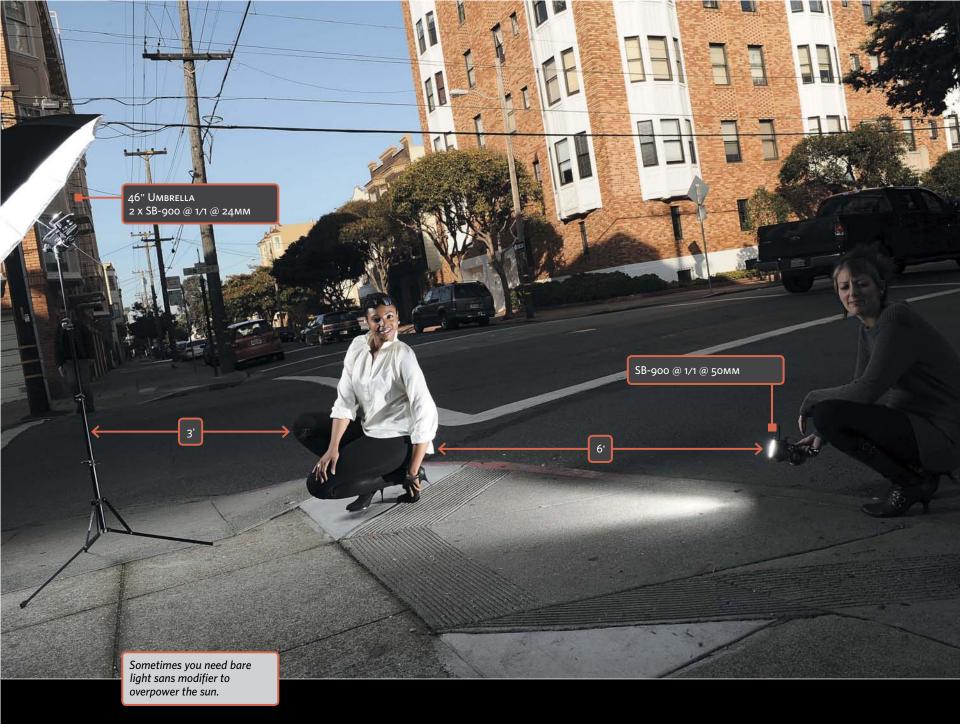














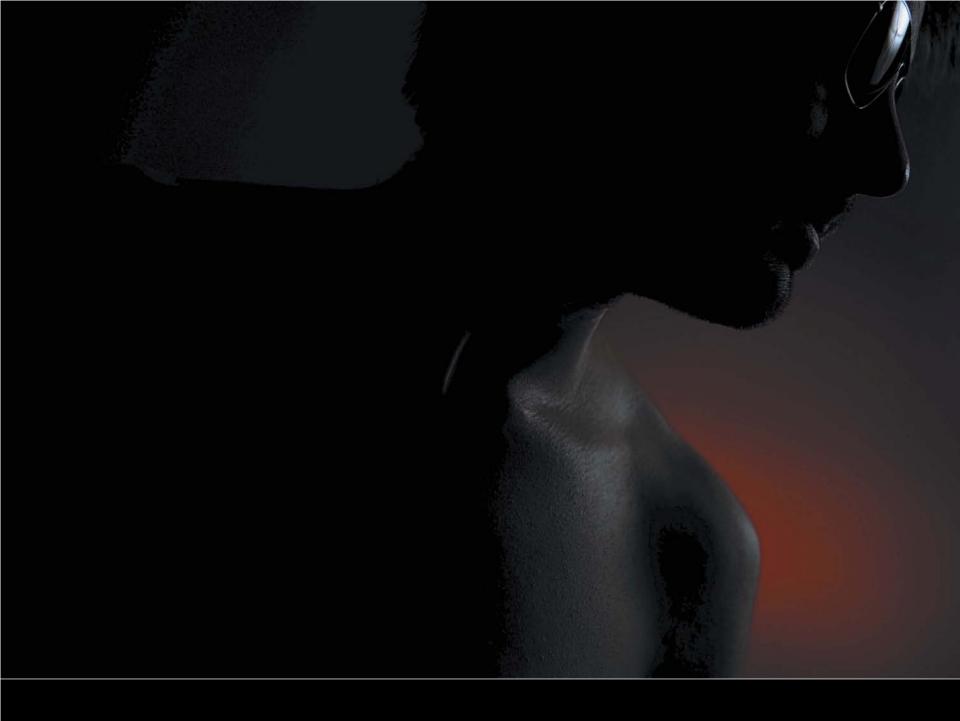


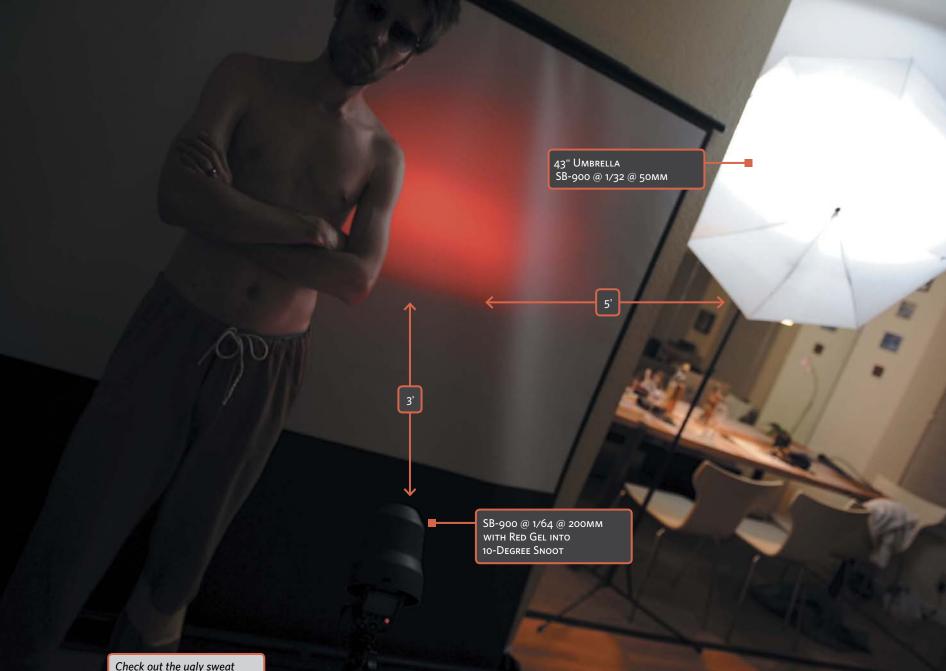


43" Reflective Umbrella SB-900 @ 1/1 @ 35mm

4'

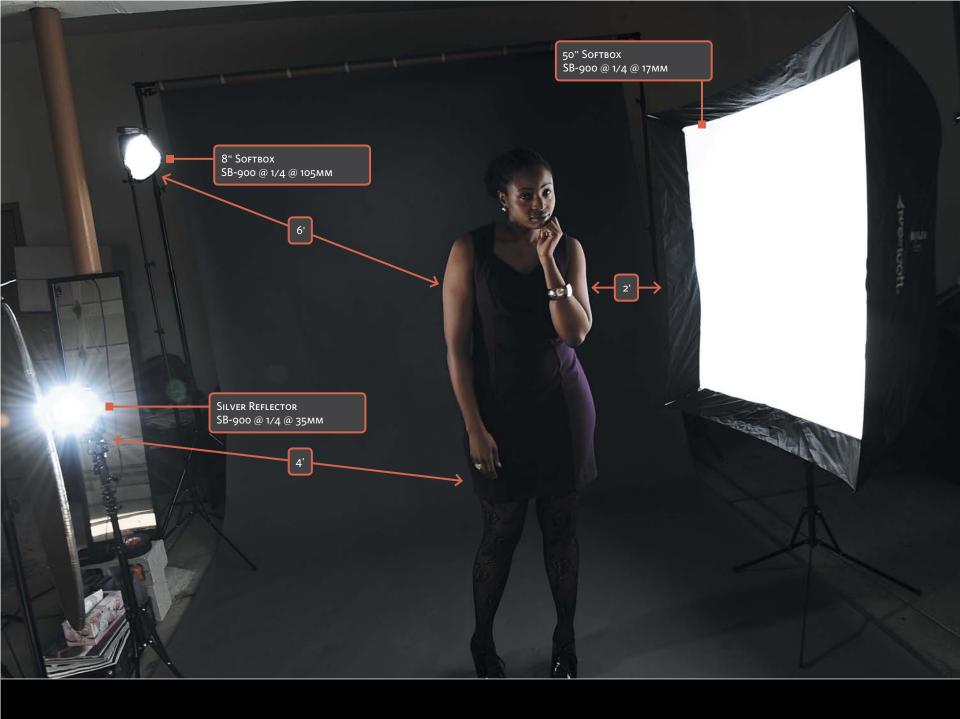
Not Shown 43" Shoot-Through Umbrella SB-900 @ 1/1 @ 35mm





Check out the ugly sweat pants from 1996.











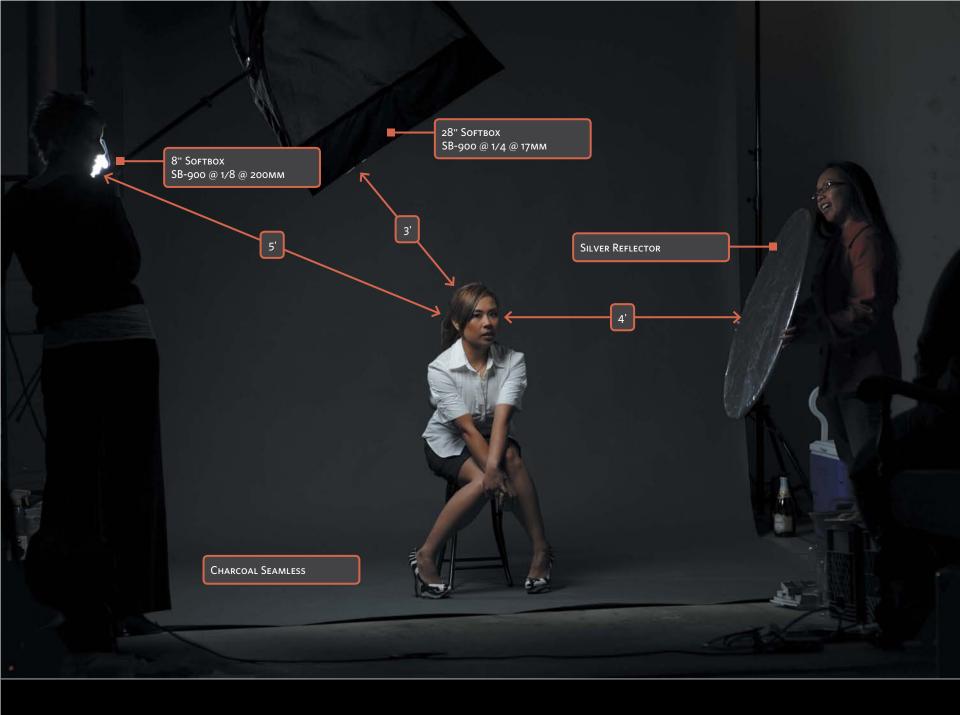
60" Umbrella (Not Shown) SB-900 @ 1/1 @ 17mm

SB-900 @ 1/1 @ 200MM

SB-900 @ 1/1 @ 200mm

If the light stands are masked well, why not leave the lights in the final shot?

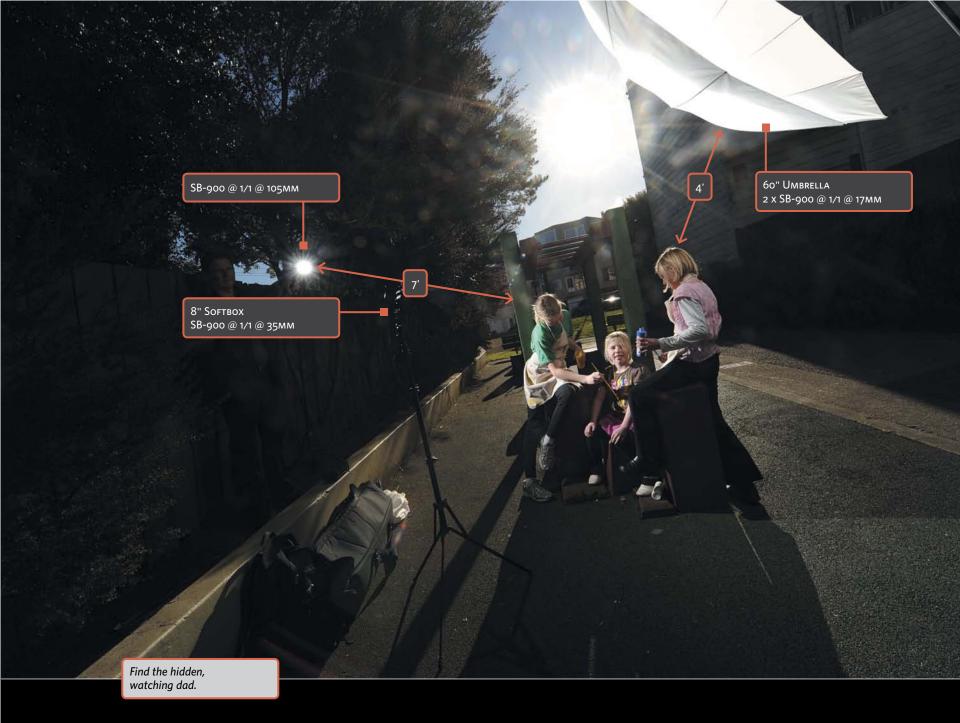




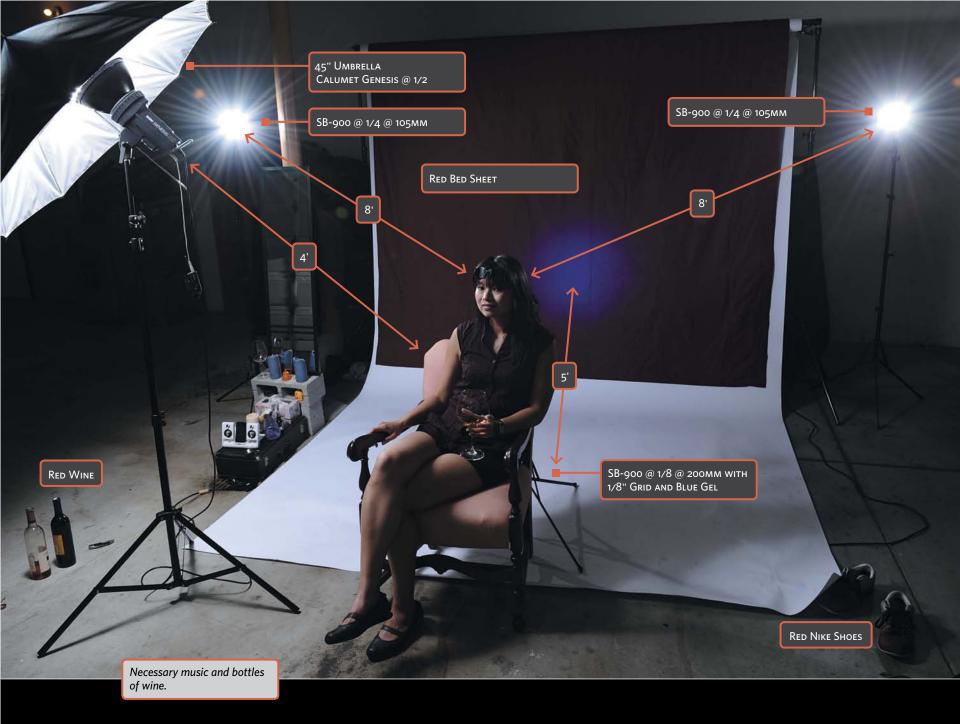




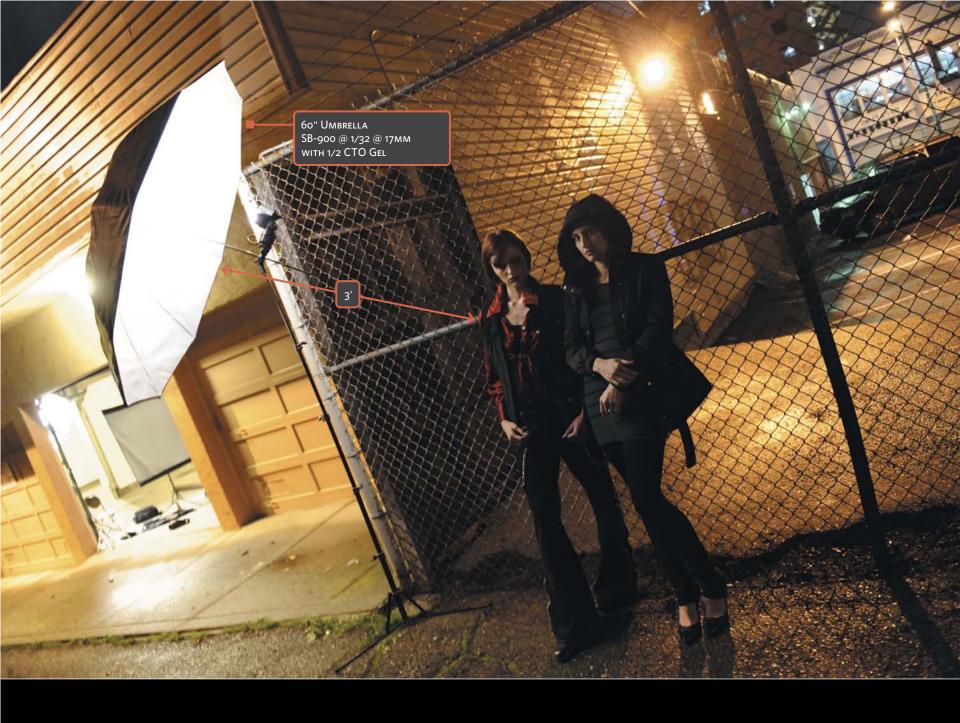




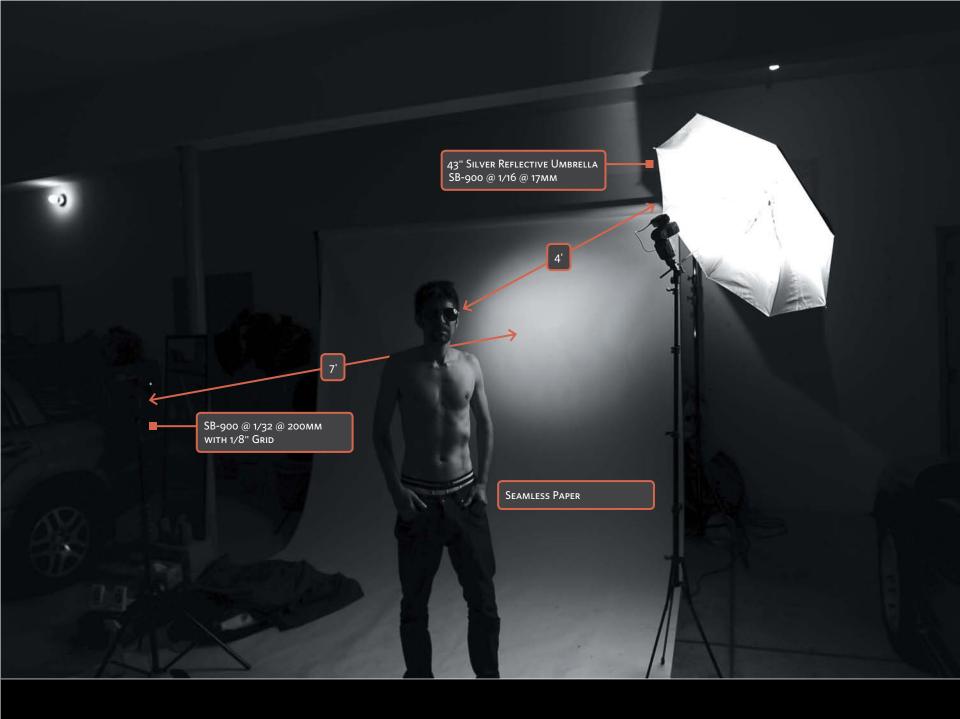




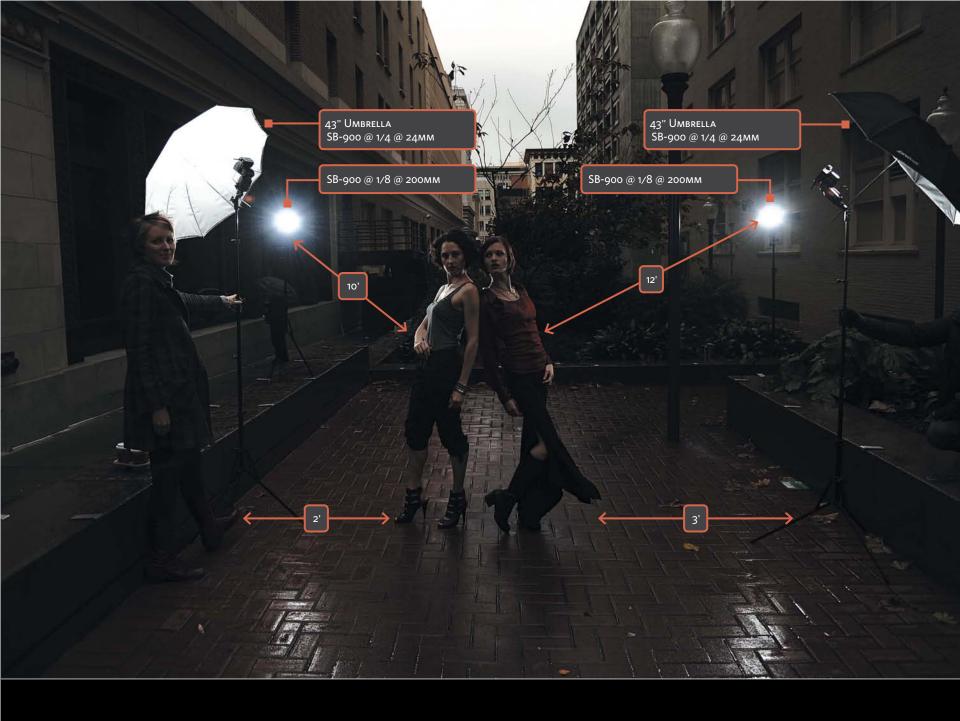






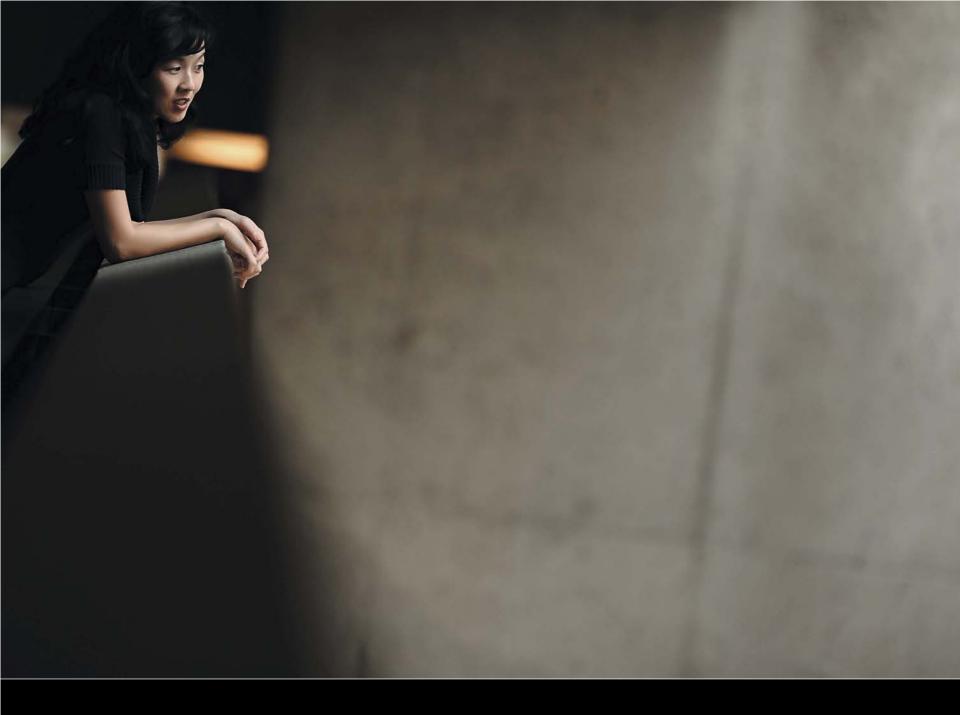






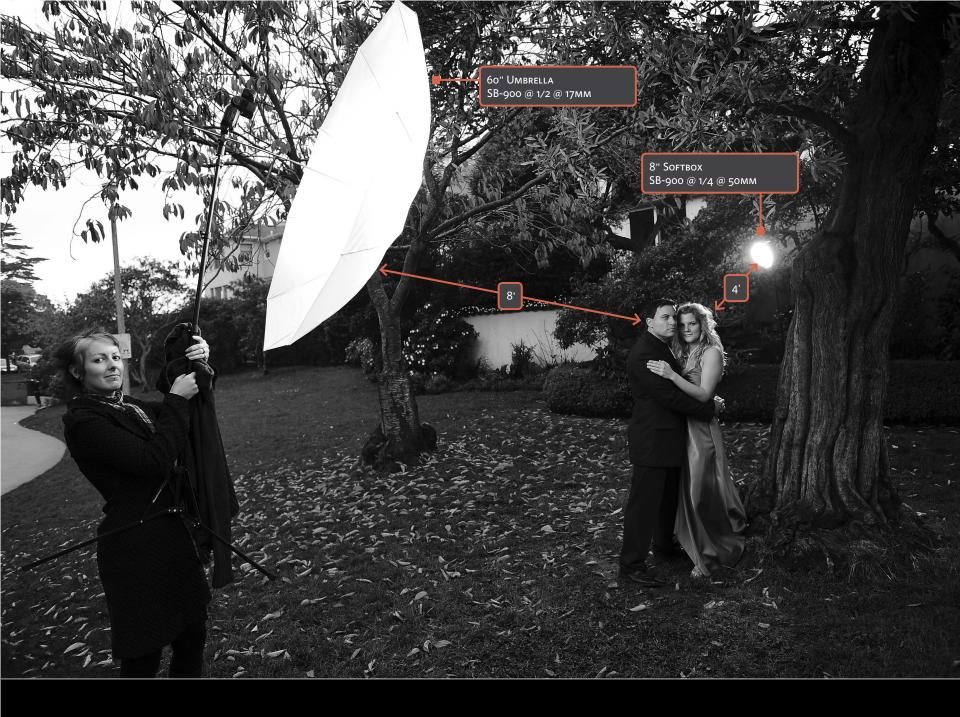
















10'

Robert (Human Light Stand)

Powell & Market, S.F.

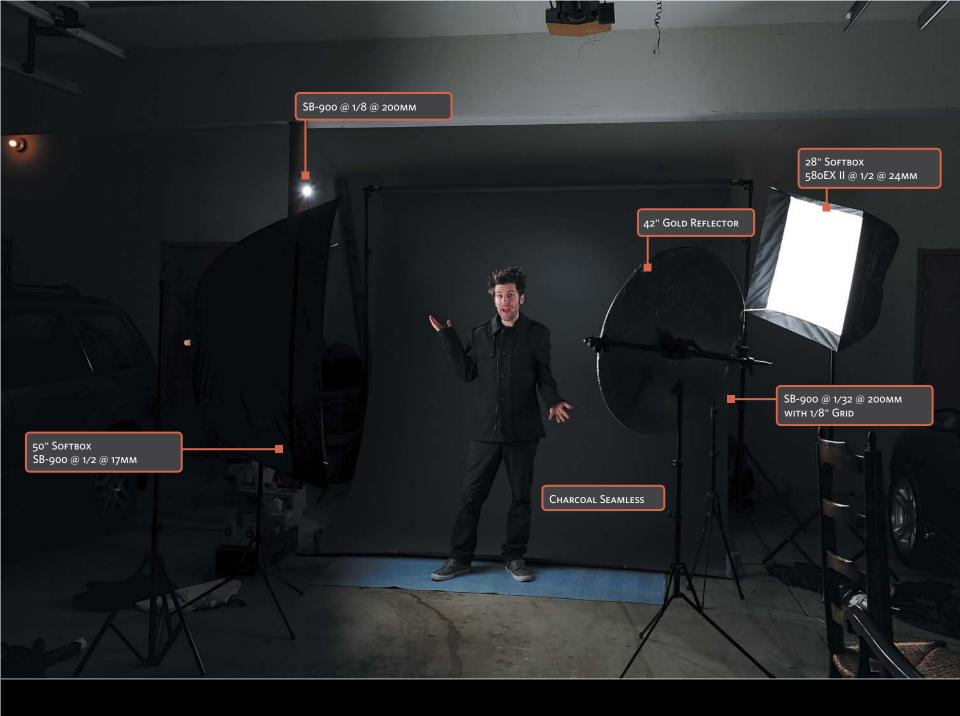
SSS MAR

b

Τινά

Camera 40'









This page intentionally left blank

# Index

1/8" grid, 11 8" softbox, 11 28" softbox, 10 42" reflector, 9 43" umbrella, 8 45" umbrella, 8 50" softbox, 10 60" umbrella, 9 430EX II flash, 2 580EX II flash, 2, 3

# А

adapters, umbrella, 7 aperture settings, 14-15

## В

backgrounds charcoal seamless, 33, 35, 51, 55, 77, 95, 117 seamless paper, 105 white seamless, 43 black backgrounds, 33, 35, 51, 55, 77, 95, 117 blue gel, 27, 35, 101 bracket, TriFlash, 7

# С

Cactus V4 transmitter/receiver, 3 Cactus V5 transceivers, 4 Calumet 7' stand, 5 Calumet 10' stand, 5, 6 Calumet umbrella adapter, 7 Canon 430EX II flash, 2 Canon 580EX II flash, 2, 3 charcoal seamless background, 33, 35, 51, 55, 77, 95, 117 clamps, Manfrotto Super Clamp, 6 compact umbrellas, 8 CTG gel, 35 CTO gel, 27, 45, 49, 53, 61, 63, 79, 83, 91, 103, 115, 119

# D

depth of field, 17 diffusers, 65 distance and light, 17 double-A batteries, 2

E equipment. See lighting equipment

### F

flash setups 1-flash shots, 53, 59, 61, 65, 69, 73, 79, 83, 91, 103, 111, 115, 119 2-flash shots, 23, 25, 27, 29, 31, 41, 43, 45, 47, 49, 57, 63, 85, 87, 95, 105, 109, 113 3-flash shots, 21, 33, 37, 39, 51, 75, 77, 81, 89, 93, 97, 101 4-flash shots, 35, 55, 67, 71, 99, 107, 117 See also softbox setups; umbrella setups flash units Guide Numbers, 15-16 power considerations, 15 speedlight recommendations, 2-3 See also lighting equipment four-flash shots, 35, 55, 67, 71, 99, 107, 117 f-stops, 14-15

# G

gels blue, 27, 35, 101 CTG, 35 red, 87 See also CTO gel gold reflectors, 39, 73, 117 grid spots, 11 1/4" grid, 55 1/8" grid, 11, 23, 35, 47, 49, 51, 71, 77, 101, 105, 117 Guide Number (GN), 15-16

### Н

hair, shining up, 35 Hobby, David, vi home-based photos, 61 Honl 1/8" Speed Grid, 11 Honl Traveller8 softbox, 11

inverse square law, 13-14, 17 ISO speed, 15

### J

Jansport Big Student pack, 27

#### L

Lastolite TriFlash adapter, 7 light aperture and, 14-15 flash power and, 15-16 inverse square law and, 17 ISO speed and, 15 shutter speed and, 14 light stands, 5-6 lighting equipment, 2-12 adapters, 7 buying advice, 12 grid spots, 11 light stands, 5-6 radio triggers, 3-4 reflectors, 9 softboxes, 10-11 speedlights, 2-3 umbrellas, 8-9 lighting setups. See flash setups; softbox setups; umbrella setups

# Μ

Manfrotto 6' Nano stand, 5, 6 Manfrotto Super Clamp, 6 Manfrotto swivels, 7 Mary Poppins effect, 11, 57

## Ν

Nikon SB-700 Speedlight, 2, 3 Nikon SB-900 Speedlight, 2, 3

# 0

one-flash shots, 53, 59, 61, 65, 69, 73, 79, 83, 91, 103, 111, 115, 119

### Ρ

paper seamless, 105 white reflective, 65 See also seamless backgrounds PocketWizard Flex, 4 PocketWizard Plus II, 4 power, flash, 15

### R

Radio Popper JrX, 4 radio triggers, 3-4 receivers, 3 red bed sheet, 101 red gel, 87 reflective paper, 65 reflectors, 9 gold, 39, 73, 117 silver, 23, 35, 43, 55, 71, 77, 89, 95

# S

SB-700 Speedlight, 2, 3 SB-900 Speedlight, 2, 3 seamless backgrounds charcoal, 33, 35, 51, 55, 77, 95, 117 white, 43 seamless paper, 105 shutter speed, 14 silver reflectors, 9, 23, 35, 43, 55, 71, 77, 87 snoot, 10-degree, 87 softbox equipment, 10-11 8" Honl softbox, 11 28" Westcott softbox, 10 50" Westcott softbox, 10 softbox setups 8" softbox, 99, 113 8" + 28" softboxes. 95 8" + 50" softboxes, 71, 89 28" softbox, 43, 45 28" + 8" softboxes, 95 28" + 50" softboxes, 35, 37, 117 50" softbox. 21, 23, 33, 39, 49, 51, 55. 57.63.77.97 50" + 8" softboxes, 71, 89 50" + 28" softboxes, 35, 37, 117 See also flash setups; umbrella setups speedlights recommended, 2-3 See also flash units

spots. See grid spots stands, light, 5-6 starburst effects, 67 strobist.com website, vi sunlight, overpowering, 81 Super Clamp, Manfrotto, 6 swivels, Manfrotto, 7

### Т

three-flash shots, 21, 33, 37, 39, 51, 75, 77, 81, 89, 93, 97, 101 transceivers, 4 transmitters, 3 TriFlash adapter, 7 triggers, radio, 3-4 two-flash shots, 23, 25, 27, 29, 31, 41, 43, 45, 47, 49, 57, 63, 85, 87, 95, 105, 109, 113

### U

umbrella adapters, 7 umbrella equipment, 8-9 43" umbrella, 8 45" umbrella, 8 60" umbrella, 9 umbrella setups 43" umbrella, 27, 39, 65, 83, 85, 87, 105, 107. 111. 115 43" + 60" umbrellas, 25, 41 45" umbrella, 47, 55, 61, 79, 91, 101 45" + 60" umbrellas, 29 46" umbrella, 33, 51, 69, 73, 81, 109, 119 60" umbrella, 31, 59, 75, 93, 99, 103, 113 60" + 43" umbrellas, 25, 41 60" + 45" umbrellas, 29 See also flash setups; softbox setups

# W

Waitt, Ted, vi Westcott softboxes, 10 white reflective paper, 65 white seamless background, 43 wireless radio triggers, 3-4