

Formation of a Digital Image

The Imaging Chain Simplified

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To my family and friends, who don't understand my obsession
with this thing called the imaging chain.

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Preface

Many of us working in technical fields hesitate when people ask us to explain what we do for a living. After I received my degree in optics, I sometimes found myself saying “yes” when older relatives asked if I worked on eyeglasses. Explaining that I work on the design of digital cameras by modeling the imaging chain is sure to produce blank stares or questions such as, “Can I buy an imaging chain in the store?” When I attempt to explain further, I usually fall into the trap of using the scientific language that I have grown accustomed to with my colleagues. This, of course, produces a long yawn from the listener, who then says, “Interesting,” and saunters into another room.

Formation of a Digital Image: The Imaging Chain Simplified discusses the process that creates digital images for people who don't want to be blinded with equations and bored with geek speak. This book is written for individuals who work with camera designers and want to know but are sometimes afraid to ask why they keep babbling about an MTF or some other mysterious acronym. If you ever wonder why pinstripe suits turn psychedelic on TV or why crosses appear on pictures of stars, I hope you will find this book helpful, and I apologize in advance for sometimes getting too close to geek speak. Habits are very hard to break. If nothing else, this book has photos of puppies that you will hopefully enjoy.

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