

Do It Yourself – Basic Photography

••• Have fun, experiment and enjoy the experience •••

Goals: Teach basic concepts and techniques to produce simple and good-looking product photos

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What Makes a Good Product Photo?

- A photo that highlights the item and shows its best features
- A clear and in-focus photo that displays enough resolution to look sharp — not pixelated
- Good composition. Being close enough to show the whole item, yet having enough background so as not to constrain it
- Choosing a natural non-distracting background. If not using a seamless background, place the product in its natural environment — where people would normally expect to see it
- In most cases, illuminate the product with soft light. This will eliminate deep shadows and harsh highlights. Natural window light is a GREAT option
- Keep product photos consistent. Choosing a dedicated studio area can really help achieve this
- If at all possible, use a decent-quality camera or smartphone with a zoom lens

White Background Photo Examples



Environmental Photo Examples



Smartphone or Digital Camera?

Digital camera benefits:

- Offering high-quality photographs
- The opportunity to use telephoto lenses — compressing the product with the background. Telephoto lenses eliminate product distortion
- Digital cameras offer much more exposure control, better color balance, larger file sizes and the opportunity to set the camera on “Manual” mode
- “Manual” mode helps control the outcome of the photo — blurring backgrounds, better exposure control
- Digital cameras produce professional-looking images and higher-quality image files

Digital camera disadvantages:

- More expensive
- Users need to know how to use them
- A much slower process for taking the picture and then posting or uploading
- Files are stored on digital cards, not accessible on portable devices or smart phones
- Images usually need to be manipulated in a photo-editing software and then saved

Smartphone advantages:

- Fast and immediate posting or uploading
- Instant image filters, less of a need to process the photo in a photo-editing software
- Easy and intuitive to use
- Connected to social media apps
- Portable with cloud-based backups

Smartphone disadvantages:

- Images sizes are usually smaller and files are saved as JPGs. JPGs are not ideal image files for photo editing since they lose quality every time they are saved
- Lacking quality in moderate or low light — this is getting better
- Many smartphones do not have optical zoom lenses — digital zoom erodes image quality
- File sizes may not be good for printed brochures, magazine articles or advertisements
- The wide-angle lenses are NOT ideal for product photography

Smartphone or Digital Camera?



Equipment Options



Basic studio:

- Tripod or smartphone tripod = \$50 - \$100 **** Important! *****
- 2 light stands = \$50
- Background crossbar = \$3 - \$50
- Digital camera or a good smartphone = \$100 - \$500
- A seamless Formica background or a vinyl background — not paper = \$50 - \$100
- Foam Core reflector = \$4
- 4 large A clamps = \$10
- A room next to a large window = free

Enhanced studio add-ons:

- 2 additional light stands = \$50
- Small tripod = \$30
- Mirror reflectors = \$25
- LED accent light \$40
- Square soft box for reflective products = \$50
- Artificial lights = \$25 - \$100+
- Different backgrounds = \$50 - \$100

Ultimate studio add-ons:

- High end digital camera = \$1,000+
- Quality light modifier, soft boxes and strobes = \$1,000 - \$3,000
- 6 - 8 light stands = \$200
- Light boom = \$100
- Fast computer with Photoshop or Light Room = \$600+

Equipment Options

- Natural light or windows, open shade, outside — morning or late-afternoon light is preferred
- Artificial light. LED, incandescent bulbs or fluorescent
- Studio Strobes, built-in camera flash

Modifiers:

- Light boxes
- Reflectors
- Mirrors
- Lighting tents
- White walls and ceilings
- Translucent fabric



Photo Setups and Techniques

Types of light:

- Soft, with wraparound, even light — nonexistent shadows
- Directional light. Depending on the source, lighting can be harsh, with bright highlights and deep shadows — like stage spot lighting
- Directional lighting (from the side) can be mixed with soft wraparound lighting for a natural, beautiful look. This is an excellent technique for lighting fabric or light-absorbing materials

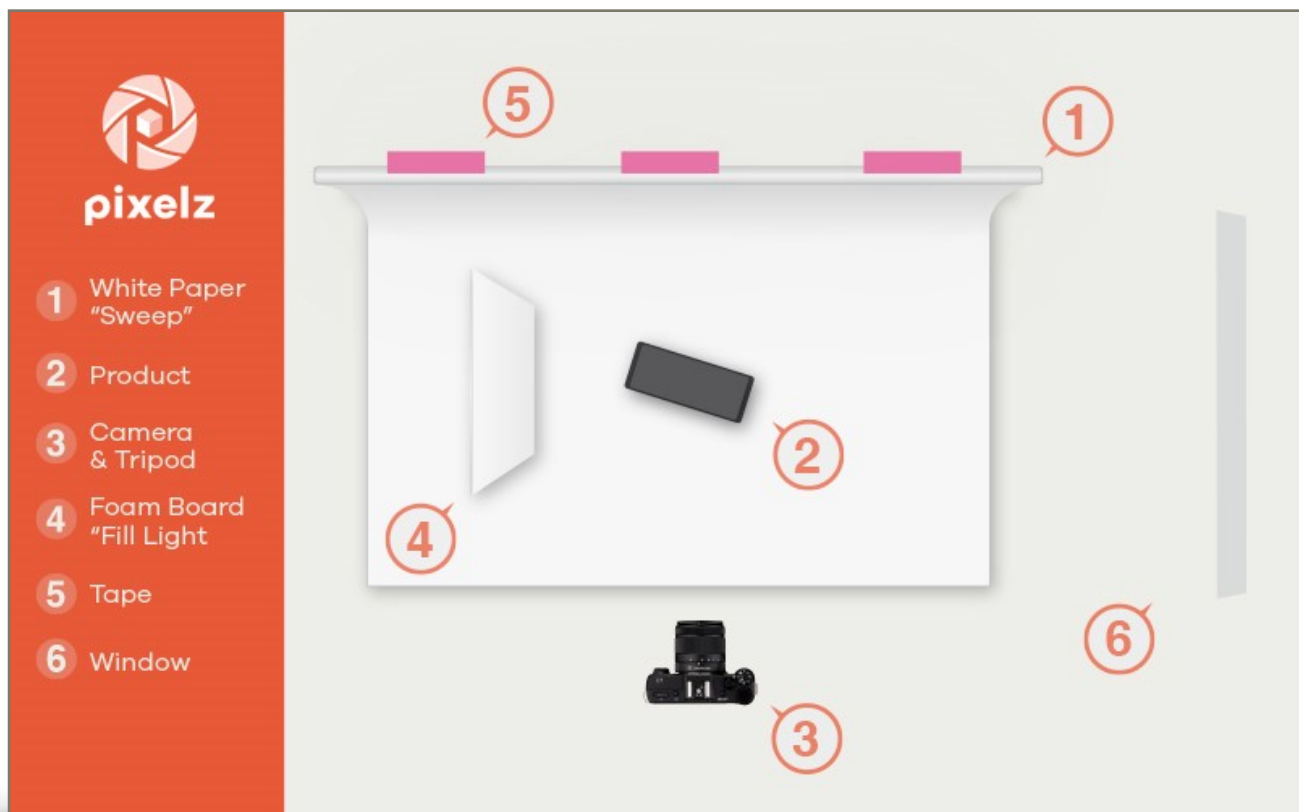
White balance and light color:

- Daylight = 5500 degrees Kelvin. This light is close in color to being outside
- Tungsten (incandescent bulbs) = 2700 degrees Kelvin. This light is more yellow, like a lightbulb in your home
- Warm fluorescent (pink-tinted tubes) = 4200 degrees Kelvin. Hard to balance and correct, they do not mix with other light colors



Photos Setup and Techniques

- Photos usually look best with bounced or nondirectional light — bounced off the ceiling, a white wall, or a large white card. This creates soft, even light without harsh reflections
- Accent lights or reflector cards can be added to bring out your products features
- If adding an accent light (LED or bulb), make sure its color matches your main light
- A light tent can be used if your product is reflective or you don't have large windows. Sometimes this can be GREAT for consistency, other times it can add complexity, because you are introducing foreign light sources
- If taking advantage of a window light, make sure sunlight is not streaming on to the photo set. In many cases, north-facing windows are best — just like an painter's studio
- If taking pictures outside, find open shade. Your product should be positioned in the shade, not the direct sunlight. The photo setup should face the sunny part of the yard, but no direct sunlight should hit your subject. Use reflectors or diffusers to highlight your items



Choosing a Studio Location

In the right room, you don't need many or any lights



Resources

Very good used digital cameras:

- Canon 6D with an 24mm - 105mm lens = \$1,000
- Canon 70D with an 18mm - 55mm lens = \$700
- Canon 60D with an 18mm - 55mm lens = \$350
- Canon Rebel T4i with an 18mm - 55mm lens = \$300
- Nikon D610 with an 24mm - 85mm lens = \$900
- Nikon D7100 with an 18mm - 105mm lens = \$525
- Nikon D3500 with an 18mm - 105mm lens = \$400
- Nikon D3300 with an 18mm - 105mm lens = \$300

Camera stores and photo suppliers:

- Amazon
- B&H Photo and Video
- Hunt Camera — location in Portland — they have used equipment with warranties

Backgrounds and general supplies:

- Lowe's
- Hammond Lumber
- Home Depot
- Furniture makers

YouTube videos to look up:

- “DIY Product Photos - Easy, Cheap and Good-looking”
- “How to do PRODUCT PHOTOGRAPHY at HOME”
- “How to use your camera in manual mode”
- “How to Build a DIY Photo Light Box with PVC”

Google search:

- DIY **Product** photography
- “Pixc's Ultimate Guide to DIY Product Photography” — Nice descriptions
- “How to use your camera in **manual mode**”
- “Shoot-manual-mode-cheat-sheet-beginners” — a wonderful chart on how to use manual mode on your camera

Questions?

Thank you!