

Tabletop Photography

Dave Montizambert looks at a nice 'little' earner

A few weeks back I was in touch with Mike McNamee about writing another article and asked what were the themes or topics. Of the topics Mike mentioned I chose miniatures. There was however some confusion on my part, I took miniatures to mean photographing small things not small prints. So here is my Canadian version of 'miniatures' in the form of a tabletop assignment I shot for an advertisement for a service bureau:

Doing tabletop photography of small products can be a lucrative addition to any photography business and it need not cost an arm and a leg to get into. Chances are you have everything you need already, however you may need to get a little creative. Most photographers own lighting equipment that is meant for lighting larger things such as people. But what if you needed to shoot a miniature subject like this nursery rhyme character Humpty Dumpty? Humpty is an egg-man, therefore he is relatively small, he is no bigger than an egg. To light small things you need small things to light them with. For dramatic selective lighting as in my Humpty Dumpty shot, you'll soon find your regular size soft-box or umbrella is not going to cut it – it is too broad a wash of light. Using reflector cards as main light sources is a really simple way to highlight key areas of your subject and set. My favourite setup for this type of lighting is, place the light origin (a strobe head with 7 – 12 inch reflector and a white diffusion gel over it) behind and to one side of the subjects. Point this light up so that only the edge of its beam backlights the subjects. The light spilling over top is then reflected back on to the fronts of the subjects with small reflectors. In this setup the strobe head is considered the separation or hair light and the reflector card(s) are considered to be the main-light(s). Not only is this reflector card method an elegant solution it also happens to be a really cheap way of doing professional quality lighting on small things. How often does that work out in photography? Where's the usual tradeoff?

My favourite material for miniature reflectors is small cutout pieces of foil-board. Foil-board is a highly reflective almost mirror-like silver foil material that is stamped onto semi-rigid card stock. It is sold as 11x14 inch (approximate) sheets at graphic supply stores and is really inexpensive. Now if the thought of having to spend a few miserable quid has you quaking because you tend to be somewhat thrifty, then go no further than the kitchen cupboard, where you will find aluminum food wrap. This reflective foil makes a reasonable reflector, however it does not create as nice a puddle of light as does foil-board. Foil-board has a reticulated surface that slightly breaks up the beam of light which bounces off it, resulting in a very becoming, soft-edged, puddle



Humpty Setup

Camera: Sinar P3 with Sinar 54H digital back.

Exposure: f13 (f11 & 1/3rd) at 1/60th, one exposure.

Lighting breakdown:

To light Humpty Dumpty an X2400 Whitelighting monoblock strobe has been placed behind and to the camera right side of the set. A piece of frosted diffusion material has been taped over the front of the 7" reflector to even out the light. The light from this strobe backlights Humpty. See [02_image](#) and [02_setup](#) to see effect of first light source.

To tone down the back-light, several black foil-wrap gobo's and a couple of 2 stop neutral density gels have been suspended between Humpty and the back-light on Grip-it magic arms. See [03_image](#).

Some of the strobe light spills past Humpty Dumpty and is rerouted onto the front of him and the surrounding props by 5 strategically placed foil board silver card reflectors. See [04_image](#) and [03_setup](#).

To reduce shadow contrast on the set an X1600 Whitelighting mono-block strobe fitted with a 2x3 foot Chimera soft-box is placed over top of the set. See [05_image](#) and [04_setup](#).

To illuminate the background (my wife's dark blue velvet scarf – I asked first), another X1600 mono-block strobe head fitted with a honeycomb grid and a blue gel, has been placed on a low stand to the camera left side of the background. Another reflector could have been used to light the background if it had not been such a light-eating fabric. See [06_image](#) and [05_setup](#).

To stop the camera right side of Humpty Dumpty from burning out, another piece of black foil is carefully placed so that it feathers some of the backlight off this area. See [01_image](#) and [06_setup](#).

MONTIZAMBERT

SMALL PRODUCT BIG PROFIT



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of light on the subject. Foil-board can be easily bent into a concave shape to focus/increase light intensity on subject or convex to spread/reduce intensity. Obviously you can cut it into any shape and size you want too. Supporting it is easy, my favourite is the "Grip-it" gooseneck like supports, which I bought some years ago from CPM Inc. in Dallas, Texas (at the time of this writing I could not find them on the web but I did find a similar product online in the www.adorama.com catalogue). However if the pricing here has you quaking you can use the fussier, less elegant solution of sticking the foil where you need it with Blu-Tack, or better still make your own miniature "Grip-it Magic-Arms" with 10-gauge electrical wire and some clamps. Start by soldering one end of the wire to a roach-clip (did I say that? I meant alligator clip! [In the UK we call them crocodile clips Ed.]), then slip the foil-board into its jaws. Disclaimer: the second largest industry after logging in the province of British Columbia (where I live) is the illegal cultivation of "BC Bud" a particularly potent strain of Marijuana. And so roach clips, etc, are on my mind as I am a landlord and have to deal with the whole marijuana "grow-op" issue that plagues and destroys rental properties. And now back to the article. There is always lots of the stuff left by electricians in construction site dumpsters waiting to be pilfered by you on your evening stroll - ah, 10-gauge wire not BC-Bud. Since this wire is semi-rigid yet pliable it is easy to bend to get the reflector card into the perfect reflecting position. The card sits in the jaws of the alligator clip and the whole assembly is clamped to the set or a light stand with a utility clamp that is soldered onto the opposite end of the 10-gauge wire.

On the topic of doing things inexpensively, a strobe head is optimum but is not totally necessary. A small tabletop set can be lit with a 60watt tungsten bulb and a long exposure in a relatively dark room. Or better still use a 500 -1000 watt work light. With digital you can custom white balance for the really warm colour shift caused by tungsten sources. Most professional and semi-professional digital cameras have pretty long shutter-speeds that produce little to no noise. In terms of digital noise, when working with weak lights it is best to use a lower ISO setting and a longer shutter-speed than it is to use a higher ISO and a short shutter-speed. The question is, is there a quality difference between using a daylight balanced strobe and some sort of tungsten light? Yes there is, strobe gives us full spectrum light, tungsten light does not since it lacks the cool end of the spectrum. However the results from tungsten are good enough. A really "cool" inexpensive full spectrum solution is the SoLux (www.solux.net) 4700K and 5000K low voltage (12 volt) 2-pin socket MR-16 bulbs - not a ton of juice, but really clean light. So if you are just getting started in photography and are tight on budget, go the tungsten or Solux route, then once you are making a little money, buy a strobe. Strobe allows you to photograph things that move, does away with ambient light problems and shaky floor issues, plus you can fade the power of the unit up or down with little impact on colour balance.

If you only own one light you can lighten the shadows on your tabletop set with a white reflector. Try placing this reflector above or to one side of the set and then angle it so that it catches the stray light passing over the subjects from the light origin and bounces it back into the shadows. For the fill reflector anything white will do - a white sheet of foam-board, or a white scrim, or a white towel, or white whatever.

For greater control and since I own one, my usual fill source is a soft-box. Using a second light (the soft-box) for fill gives me a little more control than a reflector fill since I can turn the power up or down to affect shadow contrast rather than having to rely on changing distance of the reflector to affect change.

The great thing about small tabletop sets is that they require very little space - with a little imagination and with permission from your spouse or roommate you can easily turn a kitchen table into a profit centre between meals!

Fill Reflectors

Fill Reflectors - White versus silver: You may ask, "Why would you ever use white when silver is a more efficient surface for reflecting light?" When considering which to use, efficiency is not the only consideration. The other part of that equation is light quality - a hard light quality or a soft light quality. Hard light means shadow edges that are relatively hard edged. Soft light means shadow edges that are relatively soft edged. Any reflections (called specular highlights) of the fill light source on the subject are generally smaller and brighter from a silver reflector than a white reflector. So you have to ask yourself, do you want any shadows created by the light from this reflector to be hard edged or soft edged and do you want any specular highlights to be brighter or less bright?

Let us go a little deeper: If you had two reflectors of the same dimensions, one white and one silver, the white reflector is more likely to create softer light than would the silver reflector. It all comes down to the area that the bouncing light inhabits on the surface of the reflector before it bounces off - the more area it inhabits the larger the effective size of the fill source will become. If you position your head at the correct angle so that you can see the reflection of the light source (the strobe head on the back right side of the Humpty Dumpty set) on the surface of the fill reflector, you would see a brighter smaller puddle of light in the middle of the silver reflector and you would see a general wash of light over all or most of the surface of the white reflector. So, the silver fill reflector keeps the reflection of the origin light source more focused on its surface, whereas the white fill reflector tends to spread it out much more. In affect the silver surface creates a smaller light source than does the white reflector. Smaller light sources do not see around into the shadows as much as larger sources do, therefore they do not eat into the shadow edges as much as a larger source would - if you allow the light to eat deeper into the shadow by enlarging the light source, it causes softer edged shadows. As for the affect on brightness of glare or sheen (specular highlights) on the subject's surface, a smaller light source creates a smaller brighter specular highlight than does a larger source.

And one final variable, if the light source feeding a silver reflector is relatively large like a soft-box and if the fill reflector is relatively close to that light, then it is possible that the reflection of that light on the surface of the reflector could inhabit the whole area of the reflector creating a light quality that would be just as soft as a white reflector of the same size.

DAVE MONTIZAMBERT ON CD & PAPER

This feature was extracted from Dave Montizambert's book - *Professional Digital Photography: Techniques for lighting, Shooting and Image Editing* - published by Amherst Media Buffalo NY.

For more Photoshop tutorials by Dave check out <http://www.software-cinema.com>

Dave lectures internationally on lighting, metering/zoning, and digital photography. He also writes magazine articles on these topics in North America and in Europe and has co-directed, co-produced, three humorous educational photography videos on metering, zoning, and lighting as well as written a how to book on lighting for photography also published by Amherst Media. Dave's knowledge was gained primarily from training with Dean Collins at Finelight in California and from training at SINAR in Switzerland.

Dave Montizambert owns and operates Montizambert Photography Inc. located in downtown Vancouver. For the past twenty-three years Montizambert Photography Inc. has created photographic images to aid various organizations and companies with their communication needs. They have created images for clients such as: McDonalds Foods, Motorola, Atlanta Scientific/Nexus Engineering, Toyo Tires, Tri-Star Pictures, Warner Brothers, Constantine Films of Germany, Chevron Canada, Cuervo Tequila, the C.B.C., J&B Scotch, Hong Kong Bank, Chimera Softboxes, Tsing Tao Brewery of China, No Fear Sports Gear, Kodak, and Canada Post.

