

LITESTAGE™ USER'S GUIDE

Note: This is a general user's guide for all of the Litestage™ models. Equipment shown is not included on all models. For more information on additional equipment and accessories, visit www.litestage.com.



QUICK START

- Assemble the Litestage™ according to the "Assembly Instructions". Then plug it in and try the various switches. You're probably eager to give it a try so take a few shots with your camera and see how easy the unit is to use.

- Then go through this guide. However, keep one important thought in mind. You will need to experiment to see what works best for you. We have tips on how to experiment and some guidelines on what usually works, but understand that there are many variables: From the type of camera and settings you're using, to the room lighting; and for digital customers, the type of computer, software program, printer and paper used. With so many variables, the most important thing you'll do is experiment and record your results.

USES AND USERS

- The Litestage™ system has advanced features and at the same time, is easy to use in it's "plug in and shoot" mode. This versatility makes it ideal for professional photographers as well as for businesses that could benefit from cost-effective, professional-quality photographs.

- The Litestage™ system produces photos with consistent results for: web sites; advertising; catalogs; price lists; new product bulletins; press releases; archiving of products, projects or samples; and more!

- Professional photographers, using the additional features of the Litestage™, will increase productivity and save both time and money in the process.

- Following the examples in this guide, even inexperienced photographers can produce professional-quality photographs for use in their business, school, laboratory or home.

- Technology Note: Camera capabilities and technology change so rapidly that we recommend you take from this manual what applies to your camera, your experience and your needs.

DIGITAL CAMERA USERS

- The advantage of a digital camera is that you can immediately review and eliminate photos.
- Digital cameras come in a variety of price ranges and have a wide range of features.
- Generally speaking, a suitable digital camera should have the following features (with manual settings) at a minimum:

- F-stop adjustments
- Shutter speed adjustments
- White Balance Control (see "SET UP" section)
- External flash connection (see "SET UP" section)
- Ability to accept other screw-on lenses/filters (such as zoom lens or neutral density filter)

(Note: Manual settings allow for greater flexibility, but for the novice, it can be a bit more confusing. Therefore, experimenting is important.)

FILM CAMERA USERS

- For all-around use, a 35mm camera is recommended.
- Generally speaking, a suitable film camera should have the following features (with manual settings) at a minimum:

- Variable shutter speed
- Variable apertures
- External flash connection (see the following section—"SET UP")

- Zoom and other lens options

- A film should be chosen which matches the type of photographic work to be done. In a stationary setup, using a tripod, film speed and shutter speed are not as critical as in challenging, moving subject photography (indoors or out.)

- Both of the following recommended films will produce sharp images, which can then be enlarged to any standard sized picture.

- We recommend Tungsten ISO 64 speed film for use with the tungsten lamps supplied with your Litestage™.

- For photo sessions using the supplied strobe lights, we suggest using ISO 100 Daylight film.

- All our exposure recommendations are based on the use of these films. Other films, with different speeds, will require a recalculation of exposures by using a light meter.

- In both cases, film types must be adhered to—Tungsten for tungsten lamp photography and Daylight film for strobe lighting.

SET UP

Refer to the "LITESTAGE™ SET UP GUIDE" to determine which type of set up to use for different photo situations. Note: Create the "Tent Setup" by using either a Tenting Cover (included with some models, or as an added accessory) or a roll of white background paper.

For Digital camera users:

• **Setting the White Balance (WB)**

The White Balance (WB) setting adjusts your camera to the light that you are using so that you get accurate color reproduction in your photos. Do not rely on the "Auto" White Balance control. If your camera only has "Auto" White Balance you will probably not get accurate color reproduction and it is recommended that you upgrade to a camera that has more manual adjustment capabilities. Note: If you are using a white background and your photos have a brownish or blueish tint, then your White Balance is not set properly.

• Using WB Presets

When using the Tungsten lamps, set the WB to: Tungsten, incandescent or the "screw-in light bulb" icon.

When using the Strobe lamps, set the WB to: Daylight or the "sun" icon.

• Using Manual Custom WB Calibration

Carefully read your camera manual to perform this manual calibration. It usually involves pointing your camera at a piece of white paper while using either the Tungsten or Strobe lamps, and then doing the WB calibration. This is often called "One Touch" WB.

• Using WB Compensation

If your camera has this feature, it is a way to fine tune the WB beyond the Presets and the Manual Calibration by adjusting the amount of red and blue in your images. It may not be necessary to use this feature, but it is worth trying if your colors are a bit off.

For digital or film camera users:

• Using the Litestage™ Strobe (Flash) Lamps

The reason for using Strobe Lighting is that it keeps things in focus when not using a tripod because it allows for shorter exposure times. It is also useful when hanging something in the Litestage™ to shoot (like an ornament). Even though an object appears motionless, it may still be moving and can cause the photo to be blurry. Strobe lighting will solve this problem.

Strobe lighting and tungsten lighting can provide different results (especially with digital cameras.) Even the model of your camera as well as the colors of the objects being photographed can look different depending on the type of lighting. For the most accurate color reproduction, it's ideal to experiment with the lighting options.

• Cameras With External Flash Capability

In order to use the Litestage™ flash system, your camera must have an external flash capability. That means that your camera must have either a PC Socket or a Hot Shoe. (Check your camera manual if you're not sure). If your camera has only a hot shoe, you will need to get an adapter with a PC socket to plug into the hot shoe on your camera. First check with your camera manufacturer to see if they sell an adapter with a PC socket. If they do not, you can always use an off the shelf adapter like the WEIN (part # HSHSB) Hot Shoe to Hot Shoe Safe Sync adapter. It is available through photo supply sources.

• Connection to the Litestage™ Flash System

Each Strobe Lamp comes with a 10' Sync Cord and each Litestage™ dome has a sync cord socket next to the blue face plate. You only need 1 sync cord to connect to the flash system. (Keep the other cords in case you ever need a replacement.) The mini phono plug end of the sync cord plugs into any one of the Litestage™ domes.

(Note: Make sure that it is plugged into a dome that has the strobe switch turned on.) The other end of the sync cord plugs into the PC socket on your camera or into the hot shoe adapter mentioned above.

• Taking a Picture with Strobe Lamps

1. Turn off camera flash.
2. Set White Balance to Daylight (or sun "icon").
3. Turn off Tungsten lamps.
4. Turn on all the green switches. (If you want to use only 1 or 2 of the domes, turn off the green switch(s) of your choice and make sure the sync cord is plugged into a dome switch that is on.)
5. It is recommended to turn off room lights and then take the picture.
6. If your picture is over exposed (too light), make sure the full power/half power switches on the strobe lamps inside the domes are all on half power, and that the F-stop setting on your camera is at the highest setting (largest number).

Digital cameras are much more sensitive to strobe lighting than film cameras. If your picture is still over exposed after step 6, try using a neutral density filter (assuming your camera is able to accept screw-on lenses or an adapter for the lens.) Neutral density filters add additional F-stops without changing the color of your pictures and are available from photo supply sources.

LIGHT CREATES SHAPE

Remember grade school art class? In order to make an apple look "round" we shaded one side darker and made a white highlight on the other side where our imaginary light was emanating.

Basically you can do the same thing. By controlling where the light comes from (light source), you create a lighter area there, and darker areas and shadows on the opposite side.

So, if you remember how light creates shape, you can light the object you want to photograph by using the right, left, top or bottom light or a combination of lights as needed.

VARIABLES THAT AFFECT YOUR FINAL PHOTOS

- Set up: Standard, Translucent Sweep, Fall Off Background, Tent (Tent Cover & Paper Tent)
- Camera—Film or digital
- Type of film and the photo lab used for developing
- Camera settings
- Equipment used with digital cameras—Type of photo editing software, printer, paper or the photo lab used
- Room lighting—Fluorescent, natural (window), incandescent (typical screw-in light bulbs)
- Litestage™ lighting—Equipped with two types: (Note: Litestage™ Model 900 uses Modeling and Tungsten lighting and Models 1100, 1600 and 1600MAX use Tungsten and Strobe lighting.)

- Strobe (synched flash) lighting—strobe lamps (illuminated switches)
- Tungsten lights—250 watt tungsten lamps (black switches)
- Modeling lights—60 watt bulb (illuminated switches)
- Surfaces
 - Reflective—Glass, metal, plastic, smooth paper
 - Absorbent—Fabric, felt, textured paper

EXPERIMENT

With the many variables, there can be multiple solutions to your photographic needs. The goal is to find what works best for your situation so that the Litestage™ can help save you time and achieve professional results. To achieve the best possible results, experiment with the variables that are listed.

Remember: The first rule of experimentation is to change only one variable at a time. Also, document the settings or conditions of each experimental photo so that you can easily duplicate the results.

Example, set your desired object in the Litestage™ following the "Standard" Set Up in the LITESTAGE™ SET UP GUIDE. Take your first photo. In general, this will probably be the best average lighting situation. However, for a more dramatic look, try using just one light or combinations of two lights to see the results. Don't forget to record the changes you are making for each numbered photo so it can be duplicated later if desired. A spread sheet (or hand-written chart) works well! Also, you can place an index card with a different number on it in each shot to identify.

Here are additional things you can experiment with:

- Use the additional light set ups. Tip: If you are getting hot spots (places where you can't see detail because there is too much light on a certain area) you may need to adjust the number of lights being used.
- Room lighting—You may want to move the Litestage™ to a room with different lighting or simply turn off the room lights when taking the shots.
- Photograph objects with different surfaces (reflective or absorbent). Note: Bottom lighting or tenting set up tends to work well with glass objects.
- Depending on the use of the photo, experiment with different printers and papers.
- Try different settings on your camera.
- Try white or another color of background paper instead of the blue used in the "Standard" Set Up.

FAQ

Refer to the website, www.litestage.com for information on "Frequently Asked Questions."

PHOTO STYLING TIPS

- Determine what is most important in the shot. The tendency is to over "decorate" and distract the viewer from the main point.
- Prop ideas—If photographing a group of items, use clear acrylic stands to vary the height of the objects. Drape fabric over the stands if desired. Clear acrylic stands or glass blocks also work well to place behind the objects to hold them in a vertical position.
- Experiment with position of objects and angle of camera to show the best view.
- Use poster mounting putty to temporarily hold objects in place for photo.
- To suspend objects in the Litestage™, insert a small dowel into the metal channels at the top and use a clear monofilament to hang the object from the dowel.
- If working with heavier objects that need to appear to hang on a wall or in a grouping, slide a piece of foam-core board (or something similar) into the back of the Litestage™ and use pins to attach objects.

GENERAL TIPS

- Foreshortening is an illusion that occurs in the shape of an object because of the camera angle. (Like standing at the bottom of a tall building and looking up—the top looks narrower than the bottom.) This illusion is especially noticeable on objects that have parallel lines (such as a picture frame or scrapbook page).

To avoid foreshortening, adjust the height and angle of the lens of the camera so it is exactly parallel with the object, rather than above, below, or at an angle to it.

- To show dimension or depth of an object, as in the case of a decorative box, objects can be placed at a slight angle in the Litestage™, showing the side, front and top of box.
- Use a tripod for steadiness and to shoot a series of photos at a consistent angle or distance.
- Experiment with how far away to stand from the Litestage™. Mark the desired distance on the floor with strips of masking tape for consistent shots.
- If the camera is equipped with a macro setting, use it on small objects and close up shots.
- If photos are appearing dark, keep objects near the center of the Litestage™ for maximum lighting.

TROUBLESHOOTING

Please be sure that you've read the entire guide. Then, if you need help, E-mail us, and one of our technical representatives will call you back to answer your questions.

E-Mail – sales@litestage.com
www.litestage.com

Phone – 800-783-7999 or 630-860-7998
 Fax – 630-860-9181

COMPARISON OF IMAGES



Strobe Lights on White Paper



Strobe Lights & Under Light on Acrylic Sweep



Tungsten Lights on White Paper



Tungsten Lights & Under Light on Acrylic Sweep

COMMON PROBLEMS & SOLUTIONS

(All images were shot using tungsten lights on white paper)



Exposure Value @ 0
(too dark)



Exposure Value @ +1
(problem corrected)



Exposure Value @ +2
(lightened further if desired)






White Balance set to AUTO
(brownish tint)





White Balance set to Tungsten
(problem corrected)

LITESTAGE™ SET UP GUIDE (continued on next page)

	Standard	Translucent Sweep	Fall-Off Background
When to Use:	This set up is for use in most typical photographic situations (i.e. non-reflective surfaces, average colors.)	This technique is ideal for producing photographs where the object appears to "float" in space with a completely shadowless background.	By this method, a graduated background can be developed which gives an increased perception of depth.
Photo of Set Up:			
Description of Set Up:	<ul style="list-style-type: none"> - Pull down background paper (color of your choice) and tuck it under the front of the modeling shelf as shown. Place object(s) on the paper. - For TUNGSTEN lighting, turn on all three tungsten lights and focus. Set camera as shown. - For STROBE lighting, (with strobes set at half power) plug in sync cord to any jack, turn on strobe lights (illuminated switches) and focus. IMPORTANT: TURN OFF tungsten lights and proceed with session. (Tungsten lamps must be turned off before taking strobe-lit photographs.) 	<ul style="list-style-type: none"> - Remove the baseboard and slide in the translucent sweep provided. Place the reflector board in bottom section of stand, at approximately 45 degrees (see photo). Clamp under light onto back of bottom shelf and position as shown. - For TUNGSTEN lighting, turn on all three (or four if under lighting) tungsten lights and focus. Set camera as shown. - For STROBE lighting, (with strobes set at half power) plug in sync cord to any jack, turn on all four strobe lights (illuminated switches) and focus. IMPORTANT: TURN OFF tungsten lights and proceed with session. (Tungsten lamps must be turned off before taking strobe-lit photographs.) 	<ul style="list-style-type: none"> - Pull out the background paper from its stowed position by moving the provided support rods backward (see photo). - For TUNGSTEN lighting, turn on all three tungsten lights and focus. Set camera as shown. - For STROBE lighting, (with strobes set at half power) plug in sync cord to any jack, turn on strobe lights (illuminated switches) and focus. IMPORTANT: TURN OFF tungsten lights and proceed with session. (Tungsten lamps must be turned off before taking strobe-lit photographs.)
Note:	Either Tungsten or Strobe lighting can be used in this set up – depending upon what is required by the subject matter. For example, with heat sensitive objects (such as food) it is better to use strobe lighting rather than to subject the objects to the more intense heat of the tungsten lamps.	Same as "Standard" Set Up. Remember to use the same type of lamps in the under light as in the top – either all tungsten, or all strobe lamps.	Same as "Standard" Set Up

LITESTAGE™ SET UP GUIDE (continued)

	Tent (using Tenting Cover)	Tent (using white background paper)
When to Use:	Shiny, mirror-like objects are challenging to photograph but, by means of this set up, good results are assured.	Shiny, mirror-like objects are challenging to photograph but, by means of this set up, good results are assured.
Photo of Set Up:		 <p>(Note: Cover entire front of Litestage™ with paper as indicated by arrow.)</p>
Description of Set Up:	<p>- To prevent reflections of the surroundings showing in the object being photographed, slide the tenting cover into front frame (with circle at top, bottom or sides) and choose desired opening to photograph through. See example in photo.</p> <p>- For TUNGSTEN lighting, turn on all three tungsten lights and focus. Place camera into the opening as indicated by arrow on photo.</p> <p>- For STROBE lighting, (with strobes set at half power) plug in sync cord to any jack, turn on strobe lights (illuminated switches) and focus. IMPORTANT: TURN OFF tungsten lights and proceed with session. (Tungsten lamps must be turned off before taking strobe-lit photographs.)</p>	<p>- To prevent reflections of the surroundings showing in the object being photographed, pull white paper far enough to make a tent over front opening. Cut a hole just large enough to insert camera lens. See example in photo.</p> <p>- For TUNGSTEN lighting, turn on all three tungsten lights and focus. Place camera into the opening as shown.</p> <p>- For STROBE lighting, (with strobes set at half power) plug in sync cord to any jack, turn on strobe lights (illuminated switches) and focus. IMPORTANT: TURN OFF tungsten lights and proceed with session. (Tungsten lamps must be turned off before taking strobe-lit photographs.)</p>
Note:	Same as "Standard" Set Up	Same as "Standard" Set Up