

# Portable lighting for video applications

**John Black** discovers the different lighting options HOWs can use for shooting video outdoors

## IN THE LIGHTING EDUCATION

series, the majority of topics tend to focus on lighting tips and techniques for the stage, and from the perspective of viewing with the human eye. Just as important, however, are considerations for how a scene or subject looks to the 'eye' of a camera. Video content is everywhere – pre-service announcements, message illustrations, live streaming and more. When incorporating video for image-magnification (IMAG) or live streaming, an incredible amount of coordination between the video and the lighting teams must take place.

In this piece, rather than focusing on lighting for video of the live

## MEET THE AUTHOR

John Black serves as the theatre manager for Seoul Foreign School in Seoul, South Korea. Holding a degree in Theatre Design, he provides technical production support and design in three state-of-the-art performance venues on campus for over 40 major concerts and productions a year in the areas of sound, lighting, video and staging. John especially enjoys sharing his passion for entertainment technology with high-school students each year through his student production team, *Crusader Live!*, giving students the opportunity to learn and work with professional-level technologies in a demanding production environment.



**John Black, theatre manager for Seoul Foreign School**

programme, we'll explore some lighting tips for when you are recording video in the field. Field video may include recording content such as interviews, short skits or announcements to be played during a service. It may be indoors, outdoors, in poorly lit locations, in well-lit locations or anything in between. When you are in the field, you may have a lot of control over the lighting, or you may have very little.

It is my hope that, at the end of this piece, you will have a few tips available to help you achieve the lighting you are looking for to produce video content in the field. Let's get started!

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**Some considerations**

Before investing in high-end portable lighting for video, I encourage you to consider as many possible scenarios that you will be shooting as possible. Remember that in field production, you will need to carry – or cart – all of your equipment with you, so the more equipment you have, or the larger and heavier the equipment is, the more work it will be to set up. This is especially true if you are shooting in multiple locations back-to-back.

Consider whether you will be shooting primarily indoors or outdoors. If you are primarily shooting outdoors, be sure to think first about the times of day and location of the sun when shooting. There is often plenty of light available naturally and, instead of purchasing heavy or expensive lighting fixtures, you can use reflector boards to redirect the existing light to better balance highlights and shadows on the subject in the frame. You can choose to shoot at different

times of the day or orient the shot differently to suit your lighting needs.

If you are shooting primarily indoors in locations that are well-lit, such as a public store or restaurant, you may find that you only need to supplement the lighting available a little

bit. Perhaps the background is well-lit and you only need a bit more key light to brighten up your subject. Alternatively, perhaps your subject is well-lit, but the background in the shot needs more light. If you are shooting indoors in locations

that are not well-lit, such as an abandoned building, you may need to bring in a full lighting package to provide key light, fill light and backlight for the shot. If you know that this may not be a reality for you, then there is no need to purchase a full lighting kit.



**Dracast S Series LED500 front and rear**

and it may also be possible to create your own DIY lighting package. Don't forget that there may be 10 different creative ways of achieving the same effect and, so long as you can achieve what you want in the final product, it really doesn't matter which method you use.

**DIY tips**

Let's first take a look at some inexpensive, do-it-yourself techniques that you can use in the field. As I mentioned earlier, there may be many times – especially outdoors – where the amount

Also, consider your budget. High-end professional lighting equipment can be quite expensive. There are numerous products available on the market geared towards the prosumer or amateur videographer that work quite well,



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of light available is not an issue, but where you need to be able to control how it is hitting your subject. For example, it may be that your subject has bright, direct sunlight hitting them on one side of the face, so you want to diffuse that light to blend more evenly. It may also be that the angle of the light is creating deep shadows under the chin and brow and you want to reflect some of the light back up to fill in those shadows. Both of these situations use the existing daylight and control how it approaches your subject, without the need to supplement with additional lighting fixtures.

Reflector boards are used to redirect light. You can purchase professional reflector boards, but you can also use common, inexpensive materials, including a car windscreen sunshade, aluminium foil on cardboard, a white styrofoam panel or any other light-coloured, reflective surface. As materials differ, the quantity and quality of the light reflecting off of them will also differ, so you will have to experiment with what works best on camera.

Diffusers are used to spread out light and fix a harsh light beam or source. You can create a diffuser with some common materials, such as wax paper, linens such as pillow cases and window shades, frosted shower curtains or any other materials that allow light to pass through, but that are not transparent. Sometimes you can simply reorient or reposition a subject to avoid unwanted harsh light but, if you are unable to, then a diffuser can help.



**Impact's R2522-51 collapsible reflector**

If you are shooting outdoors in low light, or if you are shooting indoors and need additional light, you can easily purchase inexpensive work lights (can lights) from a hardware store and standard light bulbs. When working with DIY lighting, be sure to consider the colour temperature of the bulbs and the features of your camera available for adjusting white balance. Standard halogen or incandescent lamps can appear quite yellow; while fluorescent and white LED lamps can appear quite blue. Try to find a bulb with a colour temperature between 3,200K and 5,600K, which is the colour temperature range of natural daylight typically found between mid-morning and noon.

When using a lighting fixture, keep in mind the basic 3-point lighting method and consider what is needed in your shooting environment. It may be that using a single fixture is all that you need to fix a shot, some dark shadows or the light in the background. Be careful not to overdo it, as adding too much light or placing it at the wrong angle may adversely impact the natural light in the scene.

### Low-cost equipment

If DIY isn't your thing and you would prefer to look at purpose-made products, there are a number of options available on the market at reasonable prices. Again, consider your primary shooting

scenarios and locations before you invest in your own equipment.

When it comes to reflectors, I would recommend collapsible reflector boards as they will be much more portable than larger, heavier-framed versions. Some will come with a stand, but many will come with handles for a crew member to hold during a shoot. Many products will come in a variety of surfaces. For example, you can find sets that include a translucent, white, black, gold and silver surface in the package, and each surface has

find useful. The simplest lighting fixture option includes LED on-camera lights that take advantage of the accessory shoe mount on a camera. Some of these units can be powered directly from the camera, while others require a separate battery for a DC power adapter. Some may also include an attachment arm to a tripod instead of mounting directly to the camera.

If you are needing to completely light a scene from scratch, it's hard to beat the size, weight and portability of LED fixtures. You can find LED lighting kits with two or three fixtures and portable travel cases inexpensively. Be sure that you have scouted out power supplies in your location to power the fixtures, although there are some that will run on batteries.

Many of these fixtures – both on-camera and large stand lights – feature adjustable colour temperature (for example, 3,200K to 5,600K) and may include a diffusion filter or two specifically designed for mounting on the

**There is often plenty of light available naturally and, instead of purchasing heavy or expensive lighting fixtures, you can use reflector boards to redirect the existing light**



**An Airstar Tube lighting an outdoor location**

fixture. They may also include dimming capability specifically configured to avoid flicker and colour temperature changes. This allows you to use the same fixture model for a variety of situations, such as a key light, fill light, backlight or background light. If you're looking for a quick, easy setup in mostly well-lit situations, it's hard to beat the benefits of an on-camera fixture.

As you can see, portable lighting solutions for video work in the field don't have to be complicated or expensive. As always, experiment with your camera in different lighting situations to learn how the sensor captures different types of light. Eventually you will be able to look at a scene, know how your camera is going to react and know exactly what you need to do to fix any lighting issues. This article has just scratched the surface of tools that are available to help you create high-quality videos for your house of worship.



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